## TITLE 16. ECONOMIC REGULATION PART 1. RAILROAD COMMISSION OF TEXAS CHAPTER 14. REGULATIONS FOR LIQUEFIED NATURAL GAS (LNG)

# SUBCHAPTER A. GENERAL APPLICABILITY AND REQUIREMENTS

- §14.2004. Applicability, Severability, and Retroactivity.
- (a) This chapter is intended to apply to the design, installation, and operation of liquefied natural gas (LNG) dispensing systems, the design and installation of LNG engine fuel systems on vehicles of all types and their associated fueling facilities, and the construction and operation of equipment for the storage, handling, and transportation of LNG. This chapter does not apply to locomotives, railcar tenders, marine terminals, or to the transportation, loading, or unloading of LNG on ships, barges, or other types of watercraft, or to any fuel cell approved by the Federal Aviation Administration and intended to be used solely as a fuel cell for aircraft, including hot air balloons, or to an installation or connection that is part of a distribution or pipeline system that is covered by Title 49, Code of Federal Regulations, Part 192. From the point at which LNG in a system has been vaporized and converted to compressed natural gas (CNG), the equipment and components must comply with the Commission's Regulations for Compressed Natural Gas in Chapter 13 of this title (relating to Regulations for Compressed Natural Gas (CNG)).
- (b) If any term, 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.
- (d) Unless otherwise stated, the rules in this chapter are not retroactive; however, the Railroad Commission of Texas has jurisdiction over all LNG installations in Texas and installations placed into operation after October 1, 1996, shall comply with this chapter. All other LNG installations in operation prior to October 1, 1996, shall be maintained and operated in a safe manner as determined by the Railroad Commission of Texas. Persons engaged in LNG activities on the effective date of this chapter shall comply with licensing and examination requirements by February 1, 1997.
- (e) The requirements of 16 TAC Chapter 14 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 57, *Liquefied Natural Gas (LNG) Fuel Systems Code*.
- (f) Vehicles and fuel supply containers excluded from the requirements of this chapter pursuant to subsection (e) of this section shall comply with the requirements of §14.2046 of this title, relating to Filings Required for School Bus, Mass Transit and Special Transit Vehicles.

The provisions of this §14.2004 adopted to be effective July 28, 2003, 28 TexReg 5872; amended to be effective December 24, 2012, 37 TexReg 9921.

- *§14.2007. 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 LNG certification, exempt registration, and training.
- (3) Aggregate water capacity--The sum of all individual container capacities as measured by weight or volume of water when the containers in a battery at an installation are full.
- (4) ANSI--American National Standards Institute.
  - (5) API--American Petroleum Institute.
- (6) ASME--American Society of Mechanical Engineers.
- (7) ASME Code--The American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section I, Section IV, Section VIII, and Section IX.
- (8) Automatic fuel dispenser--A fuel dispenser which requires transaction authorization.
- (9) Branch manager--See "Operations supervisor."
- (10) Certified--Authorized to perform LNG activities under the direction of a licensee as set forth in the Texas Natural Resources Code. Certification alone does not allow an employee to perform those activities which require licensing.
- (11) Combustible material--A solid material which, in the form in which it is used and under the conditions anticipated, can be ignited and will burn, support combustion, or release flammable vapors when subjected to fire or heat.
- (12) Commercial installation--An LNG equipment installation located on premises other than a single-family dwelling used primarily as a residence.
- (13) Commission--The Railroad Commission of Texas.
- (14) Company representative--An owner or employee of a licensee designated by that licensee to

take any required examinations and to actively supervise LNG operations of the licensee.

- (15) Container--Any LNG vessel manufactured to the applicable sections of the API Code, ASME Code, or DOT requirements in effect at the time of manufacture.
- (16) Container appurtenances--Components installed in container openings, including but not limited to pressure relief devices, shutoff valves, backflow check valves, excess flow check valves, internal valves, liquid level gauges, pressure gauges, and plugs.
- (17) Conversion--The changes made to a vehicle to allow it to use LNG as a motor fuel.
- (18) Design pressure--The pressure for which a system or portion of that system is designed.
- (19) Dike--A structure used to establish an impounding area.
- (20) Director--The director of the AED or the director's delegate.
- (21) Dispensing system--That combination of valves, meters, hoses, piping, electrical connections, and fuel connections used to distribute LNG to mobile or motor fuel containers.
- (22) DOT--The United States Department of Transportation.
- (23) Employee--Any individual who renders or performs any services or labor for compensation, including individuals hired on a part-time or temporary basis, full-time or permanent basis; independent contractors; and owner-employees.
- (24) Failsafe--Design features which provide for safe conditions in the event of a malfunction of control devices or an interruption of an energy source or an emergency shutdown.
- (25) Final approval--The authority issued by LP-Gas Operations allowing the introduction of LNG into a container and system.
- (26) Fired equipment--Any equipment in which the combustion of fuels takes place.
- (27) Fixed-length dip tube--A pipe with a fixed open end positioned inside a container at a designated elevation to measure a liquid level.
- (28) Ignition source--Any item, substance, or event having adequate temperature and energy release of the type and magnitude sufficient to ignite any flammable mixture of gases or vapors that could occur at a site.
- (29) Impounding area--An area defined through the use of dikes or the topography at the site for the purpose of containing any accidental spill of LNG.
- (30) Individual--One human being. (See also "Person".)
- (31) Interim approval order--The authority issued by the Railroad Commission of Texas following

- a public hearing allowing construction of an LNG installation.
- (32) Labeled--The attachment to equipment or materials of a label, symbol, or other identifying mark of a nationally recognized testing laboratory or a Category 50 licensee which conducts product evaluation, periodically inspects production of listed equipment or materials, and which publishes its findings in a list indicating that the equipment either meets appropriate standards or has been tested and found suitable for use in a specified manner.
  - (33) LFL--Lower flammability limit.
- (34) Licensed--Authorized to perform LNG activities through the issuance of a valid license by LP-Gas Operations.
- (35) Licensee--An applicant that has been granted an LNG license by LP-Gas Operations.
- (36) Listed--The inclusion of equipment or materials in a list published by a nationally recognized testing laboratory or a Category 50 licensee which conducts product evaluation, periodically inspects production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
- (37) LNG--Natural gas, consisting primarily of methane, that has been condensed to liquid by cooling.
- (38) LNG system--A system of safety devices, containers, and other LNG equipment installed at a facility or on a vehicle and designed for use in the sale, storage, transportation for delivery, or distribution of LNG.
- (39) LNG transport--Any vehicle or combination of vehicles and LNG containers designed or adapted for use or used principally as a means of moving or delivering LNG from one place to another, including but not limited to any truck, trailer, semitrailer, cargo tank, or other vehicle used in the distribution of LNG.
- (40) LP-Gas Operations--The organizational unit of the AED that administers the LNG safety program, including licensing, truck registration, installation approvals, complaint and accident investigations, inspections of stationary installations and vehicles, and code enforcement.
- (41) Mass transit vehicle--Any vehicle which is owned or operated by a political subdivision of a state, city, or county, and which is used primarily in the conveyance of the general public.
- (42) Maximum allowable working pressure— The maximum gauge pressure permissible at the top of completed equipment, containers, or vessels in their operating position for a design temperature.
- (43) Mobile fuel container--An LNG container mounted on a vehicle and used to store LNG as the fuel supply for uses other than motor fuel.

- (44) Mobile fuel system--An LNG system to supply fuel to an auxiliary engine other than the engine used to propel the vehicle or for other uses on the vehicle.
- (45) Motor fuel container--An LNG container mounted on a vehicle and used to store LNG as the fuel supply to an engine used to propel the vehicle.
- (46) Motor fuel system--An LNG system to supply LNG as a fuel for an engine used to propel the vehicle.
- (47) NEC--National Electrical Code (NFPA 70).
- (48) NFPA--National Fire Protection Association.
- (49) Noncombustible material--A solid material which in no conceivable form or combination with other material will ignite.
- (50) Nonlicensee--A person not required to be licensed, but which shall comply with all other applicable rules in this chapter.
- (51) Operations supervisor--An individual who actively supervises LNG operations at an outlet.
- (52) Outlet--A site operated by an LNG licensee at which the business conducted materially duplicates the operation for which the licensee is initially granted a license.
- (53) Person--An individual, sole proprietor, partnership, firm, joint venture, corporation, association, or any other business entity, state agency or institution, county, municipality, school district, or other governmental subdivision.
- (54) Point of transfer--The point at which a connection is made to transfer LNG from one container to another.
- (55) Pressure relief valve--A valve which is designed both to open automatically to prevent a continued rise of internal fluid pressure in excess of a specified value (set pressure) and to close when the internal fluid pressure is reduced below the set pressure.
- (56) Pressure vessel--A container or other component designed in accordance with the ASME Code.
- (57) Property line--That boundary which designates the point at which one real property interest ends and another begins.
  - (58) PSIG--Pounds per square inch gauge.
- (59) Public transportation vehicle--A vehicle for hire or service to the general public including but not limited to taxis, buses, and airport courtesy cars.
- (60) Repair to container--The correction of damage or deterioration to an LNG container, the alteration of the structure of such a container, or the welding on such a container in a manner which causes the temperature of the container to rise above 400 degrees Fahrenheit.

- (61) School--A public or private institution which has been accredited through the Texas Education Agency or the Texas Private School Accreditation Commission.
- (62) School bus--A vehicle that is sold or used for purposes that include carrying students to and from school or related events.
- (63) Special transit vehicle--A vehicle which is primarily used by a school or mass transit authority for special transit purposes such as transport of mobility impaired individuals.
- (64) Temporary installation--A dispensing station, either skid-mounted or on a transport unit, that is intended to be used for a finite period of time.
- (65) Tentative approval--The authority issued by LP-Gas Operations without a hearing allowing construction of an LNG installation.
- (66) Thermal expansion relief valve--A pressure relief valve that is activated by pressure created by a fluid temperature rise.
- (67) Trainee--An individual employed by a licensee for a period not to exceed 45 days without that individual having successfully completed the required examinations for the LNG activities to be performed.
- (68) Transfer area--That portion of an LNG refueling station where LNG is introduced into or dispensed from a stationary installation.
- (69) Transfer system--All piping and equipment used in transferring LNG between containers.
- (70) Transition joint--A connector fabricated of two or more metals used to join piping sections of two different materials.
- (71) Transport--Any bobtail or semi-trailer equipped with one or more containers.
- (72) Transport system--Any and all piping, fittings, valves, and equipment on a transport, excluding the container.
- (73) Ultimate consumer--The person controlling LNG immediately prior to its ignition.
- (74) Vaporizer--A device other than a container that receives LNG in liquid form and adds sufficient heat to convert the liquid to a gaseous state.
- (75) Water capacity--The amount of water in gallons required to fill a container.

The provisions of this §14.2007 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

*§14.2010. LNG Report Forms.* Under the provisions of the Texas Natural Resources Code, Chapter 116, the Commission has designated the following forms for use.

	Railroad Commission of Texas LNG For	rms	
Form Number	Form Title	Creation or Last Revision Date	Applicable Rule Number (16 TAC §) or Other Authority
LNG Form 2001	Application for LNG License or License Renewal	Rev. 7/2012	14.2016(a); 14.2028(b)
LNG Form 2001A	Branch Outlet List	Rev. 7/2012	14.2025(b)
LNG Form 2003	Liquefied Natural Gas License	n/a	14.2013
LNG Form 2004	Liquefied Natural Gas Vehicle Identification	n/a	14.2704(c); 14.2705; 14.2749
LNG Form 2007	Truck Registration/Re-registration/Transfer	Rev. 7/2012	14.2704
LNG Form 2008	Manufacturer's Report of Pressure Vessel Repair, Modification, or Testing	Rev. 7/2012	14.2040(k)(2); 14.2607(c); 14.2640(d); 14.2707(a)(2)
LNG Form 2016	Application for Examination	Rev. 7/2012	14.2019(a)(3); 14.2019(b)(2)
LNG Form 2016A	Certified Employee Transfer Form	Rev. 7/2012	14.2020
LNG Form 2018	Affidavit of Lost or Destroyed License	Rev. 7/2012	n/a
LNG Form 2018B	Statement of Lost or Destroyed LNG Form 2004 Decal	Rev. 7/2012	14.2705
LNG Form 2019	Transfer of LNG Storage Cylinders/Containers	Rev. 7/2012	14.2040(a)
LNG Form 2020	Report of LNG Incident/Accident	Rev. 7/2012	14.2049(e)
LNG Form 2025	Application and Notice of Exception to the Regulations for Liquefied Natural Gas	Rev. 7/2012	14.2052
LNG Form 2027	Application for Qualification as Self-Insurer General Liability	Rev. 7/2012	14.2034(b)
LNG Form 2028	Notice of Election to Self-Insure	Rev. 7/2012	14.2034(h)
LNG Form 2500	Application to Install LNG Facility (Aggregate Water Capacity of 15,540 Gallons or More)	Rev. 7/2012	14.2040(b); 14.2043; 14.2307(c)
LNG Form 2500A	Notice of Proposed LNG Installation	Rev. 7/2012	14.2040

LNG Form 2501	Completion Report for Commercial LNG Installations of Less Than 15,540 Gallons Water Capacity	Rev. 7/2012	14.2040(f); 14.2040(g); 14.2043; 14.2316
LNG Form 2503	Notice of Completed Installation of an LNG System on School Bus, Public Transportation, Mass Transit, or Special Transit Vehicles	Rev. 7/2012	14.2046
LNG Form 2505	Testing Procedures Certification	Rev. 7/2012	14.2016(e)(3)
LNG Form 2995	Certification of Political Subdivision of Self- Insurance for Workers' Compensation, General Liability, and/or Motor Vehicle Liability Insurance	Rev. 7/2012	14.2034(g)
LNG Form 2996B	Statement in Lieu of Insurance Filing Certifying Workers' Compensation Coverage, including Employer's Liability Insurance or Alternative Accident/Health Insurance	Rev. 7/2012	Table 14.2031; 14.2031(d)
LNG Form 2997B	Statement in Lieu of Motor Vehicle Bodily Injury and Property Damage Liability Insurance	Rev. 7/2012	Table 14.2031; 14.2031(e)
LNG Form 2998B	Statement in Lieu of General Liability Insurance and/or Completed Operations or Products Liability Insurance	Rev. 7/2012	Table 14.2031; 14.2031(f); 14.2031(g)
LNG Form 2999	Notice of Insurance Cancellation	Rev. 7/2012	14.2031(c)

The provisions of this §14.2010 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

### §14.2013. Licenses and Related Fees.

- (a) A prospective licensee may apply to LP-Gas Operations for one or more licenses specified in subsection (b)(1) (8) 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.
  - (b) The license categories and fees are as follows:
- (1) A Category 15 license for container manufacturers and/or fabricators authorizes the manufacture, fabrication, assembly, repair, installation, testing, and sale of LNG containers, including LNG motor or mobile fuel containers and systems, and the repair of transport and transfer systems for use in Texas. The original license fee is \$1,000; the renewal fee is \$600.
- (2) A Category 20 license for transport outfitters authorizes the subframing, testing, and sale of LNG transport containers; the testing of LNG storage containers; the installation, testing, and sale of LNG motor or mobile fuel containers and systems; and the installation and repair of transport systems and motor or mobile fuel systems for use in Texas. The original license fee is \$400; the renewal fee is \$200.

- (3) A Category 25 license for carriers authorizes the transportation of LNG by transport, including the loading and unloading of LNG. The original license fee is \$1,000; the renewal fee is \$300.
- (4) A Category 30 license for general installers and repairmen authorizes the sale, repair, service, and installation of stationary containers and LNG systems. The original license fee is \$100; the renewal fee is \$70.
- (5) A Category 35 license for retail and wholesale dealers authorizes the storage, sale, transportation, and distribution of LNG and all other activities included in this section, except the manufacture, fabrication, assembly, repair, subframing, and testing of LNG containers. The original license fee is \$750; the renewal fee is \$300.
- (6) A Category 40 license for general public dispensing stations authorizes the storage, sale, and dispensing of LNG into motor and mobile fuel containers. The original license fee is \$150; the renewal fee is \$70.
- (7) A Category 45 license for motor fuel authorizes the sale and installation of LNG motor or mobile fuel containers, and the sale, repair, and installation of LNG motor or mobile fuel systems. The original license fee is \$100; the renewal fee is \$50.
- (8) A Category 50 license for testing laboratories authorizes the testing of LNG containers, LNG motor fuel systems or mobile fuel systems,

transfer systems, and transport systems for the purpose of determining the safety of the containers or systems for LNG service, including the necessary installation, disconnection, reconnection, testing, and repair of LNG motor fuel systems or mobile fuel systems, transfer systems, and transport systems involved in the testing of containers. The original license fee is \$200; the renewal fee is \$100.

- (c) An original manufacturer of a new motor vehicle powered by LNG, or a subcontractor of a manufacturer who produces a new LNG powered motor vehicle for the manufacturer, is not subject to the licensing requirements of this title, but shall comply with all other rules in this chapter.
- (d) Public or private entities performing LNG activities for their own vehicles are not required to be licensed. Public or private entities performing any LNG activities for the general public are required to be licensed.

The provisions of this §14.2013 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2015. Penalty Guidelines for LNG 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 LNG-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 and liquefied natural gas; of rules, orders, licenses, permits, or certificates relating to LNG 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 and liquefied natural gas; of rules, orders, licenses, permits, or certificates relating to LNG 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 and liquefied natural gas; of rules, orders, licenses, permits, or certificates relating to LNG 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. LNG Penalty Schedule Guidelines** 

		Typical Minimum Penalty
LNG Rule/Statute	General Description	Amount/Range
Tex. Nat. Res. Code, Chap. 116	Any violation of Chapter 116, Texas Natural Resources Code	\$1,000-2,500
16 TAC §14.2016	License renewals lapse, 1-2 months	\$500

16 TAC §14.2016	License renewals lapse, 3-4 months	\$750
16 TAC §14.2016	License renewals lapse, 5-6 months	\$1,000
16 TAC §14.2016	License renewals lapse, more than 6 months	\$1,000-2,500
16 TAC §14.2019	Certification requirements	\$500-1,500
16 TAC §14.2020	Employee transfer	\$100
16 TAC §14.2025	Designation of outlet/operations supervisor	\$500
16 TAC §14.2031	Insurance requirements	\$1,000
16 TAC §14.2034	Self-insurance requirements	\$1,000
10 TAC \$14.2034	Components of LNG stationary installations not specifically	Ψ1,000
16 TAC §14.2037	covered	\$1,000-1,500
10 1110 311.2037	Stationary installation notification requirements LNG Form	φ1,000 1,500
16 TAC §14.2040	2019: 1-5 occurrences	\$100
32 112 32 112 11	Stationary installation notification requirements LNG Form	7-00
16 TAC §14.2040	2019: 6-10 occurrences	\$200
	Stationary installation notification requirements LNG Form	'
16 TAC §14.2040	2019: more than 10 occurrences	\$500
0	Stationary installation notification requirements: LNG Form	•
16 TAC §14.2040	2500	\$1,000
16 TAC §14.2043	Temporary installations	\$250
16 TAC §14.2046	Filings for school bus, mass transit and special transit vehicles	\$100-500
16 TAC §14.2049	Accident report	\$1000
16 TAC §14.2101	Uniform protection requirements	\$1,00-750
16 TAC §14.2104	Uniform safety requirements	\$100-750
16 TAC §14.2107	Stationary LNG storage containers	\$1000
16 TAC §14.2110	LNG container installation distance requirements	\$750-1,500
16 TAC §14.2113	Maintenance tanks	\$250-1,000
16 TAC §14.2116	Transfer of LNG	\$250
32.112.0	Transport vehicle loading and unloading facilities and	
16 TAC §14.2119	procedures	\$500-1,500
16 TAC §14.2122	Transfer systems	\$250-1,000
16 TAC §14.2125	Hoses and arms	\$250-750
16 TAC §14.2128	Communications and lighting	\$500-750
16 TAC §14.2131	Fire protection	\$750-1,500
16 TAC §14.2134	Container purging procedures	\$250-1,000
16 TAC §14.2137	Employee safety and training	\$500-1,500
16 TAC §14.2140	Inspection and maintenance	\$250-1,000
16 TAC §14.2304	General facility design	\$1,000
16 TAC §14.2307	Indoors fueling	\$500-1,000
16 TAC §14.2307	Indoor fueling stations notice requirements: LNG Form 2500	\$1,000
16 TAC §14.2310	Emergency refueling	\$1,000
16 TAC §14.2313	Fuel dispensing systems	\$250-1,000
16 TAC §14.2319	Automatic fuel dispenser safety requirements	\$250-1,000
16 TAC §14.2322	Protection of automatic and other dispensers	\$750
16 TAC §14.2325	LNG transport unloading at fuel facilities	\$500-1,500
16 TAC §14.2328	Training, written instructions and procedures	\$100-1,000
16 TAC §14.2401	General provisions for piping systems and components	\$1,000
16 TAC §14.2404	Piping materials	\$250-1,000
16 TAC §14.2407	Fittings used in piping	\$250-1,000
16 TAC §14.2410	Valves	\$250-1,000
16 TAC §14.2413	Installation of piping	\$250-1,000
16 TAC §14.2416	Installation of valves	\$250-1,000
16 TAC §14.2419	Welding at piping installations	\$1,000
16 TAC §14.2422	Pipe marking and identification	\$100-500
		\$100 D00

16 TAC §14.2425	Pipe supports	\$250
16 TAC §14.2428	Inspection and testing of piping	\$1,000
16 TAC §14.2431	Welded pipe tests	\$1,000
16 TAC §14.2434	Purging of piping systems	\$250-750
16 TAC §14.2437	Pressure and relief valves in piping	\$1,000
16 TAC §14.2440	Corrosion control	\$750-1,500
16 TAC §14.2501	Liquid level gauging	\$1,000
16 TAC §14.2504	Pressure gauges	\$250-500
16 TAC §14.2507	Vacuum gauges	\$250-500
16 TAC §14.2510	Emergency failsafe	\$1,000
16 TAC §14.2513	Electrical equipment	\$100-500
16 TAC §14.2516	Electrical grounding and bonding	\$100-500
16 TAC §14.2604	Systems component qualification	\$500
16 TAC §14.2607	Vehicle fuel containers	\$100-1,000
16 TAC §14.2610	Installation of vehicle fuel containers	\$100-750
16 TAC §14.2613	Engine fuel delivery equipment	\$250-1,000
16 TAC §14.2616	Installation of venting systems and monitoring sensors	\$250-750
16 TAC §14.2619	Installation of piping	\$250-500
16 TAC §14.2622	Installation of valves	\$250-500
16 TAC §14.2625	Installation of pressure gauges	\$100-500
16 TAC §14.2628	Installation of pressure regulators	\$500-1,000
16 TAC §14.2631	Wiring	\$100
16 TAC §14.2634	Vehicle fueling connection	\$500
16 TAC §14.2637	Signs and labeling	\$100
16 TAC §14.2640	System testing	\$1,000
16 TAC §14.2643	Maintenance and repair	\$250-1,000
16 TAC §14.2701	DOT requirements	\$1,000
16 TAC §14.2704	Registration and transfer of LNG transports	\$500-1,500
16 TAC §14.2705	Decals or letter of authority and fees	\$100
16 TAC §14.2707	Testing requirements	\$1,000
16 TAC §14.2710	Markings	\$250
16 TAC §14.2713	Pressure gauge	\$100-500
16 TAC §14.2716	Supports	\$1,000
16 TAC §14.2719	Electrical equipment and lighting	\$100-500
16 TAC §14.2722	Liquid level gauging devices	\$1,000
16 TAC §14.2725	Exhaust system	\$100-250
16 TAC §14.2728	Extinguishers required	\$100-250
16 TAC §14.2731	Manifests	\$250
16 TAC §14.2734	Transfer of LNG on public highways, streets or alleys	\$250-1,000
16 TAC §14.2737	Parking of LNG transports and container delivery vehicles	\$250-500
16 TAC §14.2740	Uniform protection standards	\$100-750
16 TAC §14.2746	Delivery of inspection report to licensee	\$100
16 TAC §14.2749	Issuance of LNG Form 2004 decal	\$500-1,500

(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. LNG Penalty Enhancements** 

	Threatened or actual	Severity of violation or
For violations that involve:	safety hazard	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	\$1,000 to \$15,000	
response		
Damage to LNG 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
Over \$100,000	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. LNG Penalty Worksheet** 

Tex. Nat. Res. Code.   Any violation of Chapter 116, Texas Natural Resources   Code   Code   Code   Code   Code   S1,000-2,500   S   Code   Code   Code   S1,000-2,500   S   S   Code   Code   S1,000-2,500   S   S   S   S   S   S   S   S   S		LNG Rule/Statute	General Description	Typical Minimum Penalty Amount/Range	Penalty Tally
2			Any violation of Chapter 116, Texas Natural Resources		
3	1			\$1,000-2,500	
4			*		
16 TAC §14.2016   License renewals lapse, >6 months   \$1,000-2,500   \$					
6         16 TAC §14.2019         Certification requirements         \$500-1,500         \$           7         16 TAC §14.2025         Employee transfer         \$100         \$           8         16 TAC §14.2031         Insurance requirements         \$1,000         \$           9         16 TAC §14.2034         Insurance requirements         \$1,000         \$           10         16 TAC §14.2034         Self-insurance requirements         \$1,000         \$           11         16 TAC §14.2037         Components of LNG stationary installations not specifically covered         \$1,000-1,500         \$           12         16 TAC §14.2040         2019 − 1-5 occurrences         \$100         \$           13         16 TAC §14.2040         2019 − 10 occurrences         \$200         \$           14         16 TAC §14.2040         2019 − 5-10 occurrences         \$500         \$           15         16 TAC §14.2040         2500         \$100         \$           16         16 TAC §14.2040         2500         \$1,000         \$           16         16 TAC §14.2043         Temporary installation notification requirements: LNG Form         \$100         \$           15         16 TAC §14.2044         Temporary installation notification requirements: LNG Form			•		
Table					
8	6				
9					
10					
Components of LNG stationary installations not specifically covered   \$1,000-1,500   \$					
11	10	16 TAC §14.2034		\$1,000	\$
12	11	16 TAC §14.2037	covered	\$1,000-1,500	\$
13	12	16 TAC §14.2040	2019 1-5 occurrences	\$100	\$
14         16 TAC §14.2040         2019> 10 occurrences         \$500         \$           15         16 TAC §14.2040         2500         \$1,000         \$           16         16 TAC §14.2043         Temporary installations         \$250         \$           17         16 TAC §14.2043         Temporary installations         \$100-500         \$           18         16 TAC §14.2049         Accident report         \$1000         \$           19         16 TAC §14.2101         Uniform protection requirements         \$1,00-750         \$           20         16 TAC §14.2104         Uniform safety requirements         \$100-750         \$           21         16 TAC §14.2107         Stationary LNG storage containers         \$1000         \$           22         16 TAC §14.2110         LNG container installation distance requirements         \$750-1,500         \$           23         16 TAC §14.2113         Maintenance tanks         \$250-1,000         \$           24         16 TAC §14.2116         Transfer of LNG         \$250         \$           25         16 TAC §14.2119         procedures         \$500-1,500         \$           26         16 TAC §14.2125         Hoses and arms         \$250-1,000         \$	13	16 TAC §14.2040		\$200	\$
15	14	16 TAC §14.2040	2019 >10 occurrences	\$500	\$
Filings for school bus, mass transit and special transit   \$100-500 \$	15	16 TAC §14.2040	· · · · · · · · · · · · · · · · · · ·	\$1,000	
17       16 TAC §14.2046       vehicles       \$100-500       \$         18       16 TAC §14.2049       Accident report       \$1000       \$         19       16 TAC §14.2101       Uniform protection requirements       \$1,00-750       \$         20       16 TAC §14.2104       Uniform safety requirements       \$100-750       \$         21       16 TAC §14.2107       Stationary LNG storage containers       \$1000       \$         22       16 TAC §14.2110       LNG container installation distance requirements       \$750-1,500       \$         23       16 TAC §14.2113       Maintenance tanks       \$250-1,000       \$         24       16 TAC §14.2116       Transfer of LNG       \$250       \$         25       16 TAC §14.2119       procedures       \$500-1,500       \$         26       16 TAC §14.2122       Transfer systems       \$250-1,000       \$         27       16 TAC §14.2125       Hoses and arms       \$250-1,000       \$         28       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500	16	16 TAC §14.2043	Temporary installations	\$250	\$
18         16 TAC §14.2049         Accident report         \$1000         \$           19         16 TAC §14.2101         Uniform protection requirements         \$1,00-750         \$           20         16 TAC §14.2104         Uniform safety requirements         \$1000-750         \$           21         16 TAC §14.2107         Stationary LNG storage containers         \$1000         \$           22         16 TAC §14.2110         LNG container installation distance requirements         \$750-1,500         \$           23         16 TAC §14.2113         Maintenance tanks         \$250-1,000         \$           24         16 TAC §14.2116         Transfer of LNG         \$250         \$           25         16 TAC §14.2119         procedures         \$500-1,500         \$           26         16 TAC §14.2122         Transfer systems         \$250-1,000         \$           27         16 TAC §14.2125         Hoses and arms         \$250-1,000         \$           28         16 TAC §14.2134         Communications and lighting         \$500-750         \$           29         16 TAC §14.2134         Container purging procedures         \$250-1,000         \$           31         16 TAC §14.2137         Employee safety and training         \$500-1,500					
19	17			\$100-500	
20         16 TAC §14.2104         Uniform safety requirements         \$100-750         \$           21         16 TAC §14.2107         Stationary LNG storage containers         \$1000         \$           22         16 TAC §14.2110         LNG container installation distance requirements         \$750-1,500         \$           23         16 TAC §14.2113         Maintenance tanks         \$250-1,000         \$           24         16 TAC §14.2116         Transfer of LNG         \$250         \$           25         16 TAC §14.2119         procedures         \$500-1,500         \$           26         16 TAC §14.2122         Transfer systems         \$250-1,000         \$           27         16 TAC §14.2125         Hoses and arms         \$250-7,50         \$           28         16 TAC §14.2128         Communications and lighting         \$500-7,50         \$           29         16 TAC §14.2131         Fire protection         \$750-1,500         \$           30         16 TAC §14.2134         Container purging procedures         \$250-1,000         \$           31         16 TAC §14.2137         Employee safety and training         \$500-1,500         \$           32         16 TAC §14.2304         General facility design         \$1,000 <t< td=""><td>18</td><td>16 TAC §14.2049</td><td>Accident report</td><td>\$1000</td><td>\$</td></t<>	18	16 TAC §14.2049	Accident report	\$1000	\$
21       16 TAC §14.2107       Stationary LNG storage containers       \$1000         22       16 TAC §14.2110       LNG container installation distance requirements       \$750-1,500         23       16 TAC §14.2113       Maintenance tanks       \$250-1,000         24       16 TAC §14.2116       Transfer of LNG       \$250         25       16 TAC §14.2119       procedures       \$500-1,500         26       16 TAC §14.2122       Transfer systems       \$250-1,000         27       16 TAC §14.2125       Hoses and arms       \$250-750         28       16 TAC §14.2128       Communications and lighting       \$500-750         29       16 TAC §14.2131       Fire protection       \$750-1,500         30       16 TAC §14.2134       Container purging procedures       \$250-1,000         31       16 TAC §14.2137       Employee safety and training       \$500-1,500         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000         33       16 TAC §14.2304       General facility design       \$1,000	19	16 TAC §14.2101	Uniform protection requirements	\$1,00-750	\$
22         16 TAC §14.2110         LNG container installation distance requirements         \$750-1,500         \$           23         16 TAC §14.2113         Maintenance tanks         \$250-1,000         \$           24         16 TAC §14.2116         Transfer of LNG         \$250         \$           25         16 TAC §14.2119         procedures         \$500-1,500         \$           26         16 TAC §14.2122         Transfer systems         \$250-1,000         \$           27         16 TAC §14.2125         Hoses and arms         \$250-750         \$           28         16 TAC §14.2128         Communications and lighting         \$500-750         \$           29         16 TAC §14.2131         Fire protection         \$750-1,500         \$           30         16 TAC §14.2134         Container purging procedures         \$250-1,000         \$           31         16 TAC §14.2137         Employee safety and training         \$500-1,500         \$           32         16 TAC §14.2140         Inspection and maintenance         \$250-1,000         \$           33         16 TAC §14.2304         General facility design         \$1,000         \$	20	16 TAC §14.2104	Uniform safety requirements	\$100-750	\$
23       16 TAC §14.2113       Maintenance tanks       \$250-1,000       \$         24       16 TAC §14.2116       Transfer of LNG       \$250       \$         25       16 TAC §14.2119       procedures       \$500-1,500       \$         26       16 TAC §14.2122       Transfer systems       \$250-1,000       \$         27       16 TAC §14.2125       Hoses and arms       \$250-750       \$         28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$	21				\$
24       16 TAC §14.2116       Transfer of LNG       \$250       \$         25       16 TAC §14.2119       procedures       \$500-1,500       \$         26       16 TAC §14.2122       Transfer systems       \$250-1,000       \$         27       16 TAC §14.2125       Hoses and arms       \$250-750       \$         28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$			^	\$750-1,500	
25       16 TAC §14.2119       Transport vehicle loading and unloading facilities and procedures       \$500-1,500 \$         26       16 TAC §14.2122       Transfer systems       \$250-1,000 \$         27       16 TAC §14.2125       Hoses and arms       \$250-750 \$         28       16 TAC §14.2128       Communications and lighting       \$500-750 \$         29       16 TAC §14.2131       Fire protection       \$750-1,500 \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000 \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500 \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000 \$         33       16 TAC §14.2304       General facility design       \$1,000 \$					
25       16 TAC §14.2119       procedures       \$500-1,500       \$         26       16 TAC §14.2122       Transfer systems       \$250-1,000       \$         27       16 TAC §14.2125       Hoses and arms       \$250-750       \$         28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$	24	16 TAC §14.2116	Transfer of LNG	\$250	\$
26       16 TAC §14.2122       Transfer systems       \$250-1,000       \$         27       16 TAC §14.2125       Hoses and arms       \$250-750       \$         28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$	25	16 TAC 814 2119		\$500-1 500	\$
27       16 TAC §14.2125       Hoses and arms       \$250-750       \$         28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$					
28       16 TAC §14.2128       Communications and lighting       \$500-750       \$         29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$		_	· ·		
29       16 TAC §14.2131       Fire protection       \$750-1,500       \$         30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$					
30       16 TAC §14.2134       Container purging procedures       \$250-1,000       \$         31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$			Ü		
31       16 TAC §14.2137       Employee safety and training       \$500-1,500       \$         32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$			*		
32       16 TAC §14.2140       Inspection and maintenance       \$250-1,000       \$         33       16 TAC §14.2304       General facility design       \$1,000       \$					
33 16 TAC §14.2304 General facility design \$1,000 \$			1 1 1		
					· ·
	34	16 TAC §14.2307	Indoors fueling	\$500-1,000	\$

35	16 TAC §14.2307	Indoor fueling stations notice requirements: LNG Form 2500	\$1,000	\$
36	16 TAC §14.2310	Emergency refueling	\$1,000	\$
37	16 TAC §14.2313	Fuel dispensing systems	\$250-1,000	\$
38	16 TAC §14.2319	Automatic fuel dispenser safety requirements	\$250-1,000	\$
39	16 TAC §14.2322	Protection of automatic and other dispensers	\$750	\$
40	16 TAC §14.2325	LNG transport unloading at fuel facilities	\$500-1,500	\$
41	16 TAC §14.2328	Training, written instructions and procedures	\$100-1,000	\$
42	16 TAC §14.2401	General provisions for piping systems and components	\$1,000	\$
43	16 TAC §14.2404	Piping materials	\$250-1,000	\$
44	16 TAC §14.2407	Fittings used in piping	\$250-1,000	\$
45	16 TAC §14.2410	Valves	\$250-1,000	\$
46	16 TAC §14.2413	Installation of piping	\$250-1,000	\$
47	16 TAC §14.2416	Installation of valves	\$250-1,000	\$
48	16 TAC §14.2419	Welding at piping installations	\$1,000	\$
49	16 TAC §14.2422	Pipe marking and identification	\$100-500	\$
50	16 TAC §14.2425	Pipe supports	\$250	\$
51	16 TAC §14.2428	Inspection and testing of piping	\$1,000	\$
52	16 TAC §14.2431	Welded pipe tests	\$1,000	\$
53	16 TAC §14.2434	Purging of piping systems	\$250-750	\$
54	16 TAC §14.2437	Pressure and relief valves in piping	\$1,000	\$
55	16 TAC §14.2440	Corrosion control	\$750-1,500	\$
56	16 TAC §14.2501	Liquid level gauging	\$1,000	\$
57	16 TAC §14.2504	Pressure gauges	\$250-500	\$
58	16 TAC §14.2507	Vacuum gauges	\$250-500	\$
59	16 TAC §14.2510	Emergency failsafe	\$1,000	\$
60	16 TAC §14.2513	Electrical equipment	\$100-500	\$
61	16 TAC §14.2516	Electrical grounding and bonding	\$100-500	\$
62	16 TAC §14.2604	Systems component qualification	\$500	\$
63	16 TAC §14.2607	Vehicle fuel containers	\$100-1,000	\$
64	16 TAC §14.2610	Installation of vehicle fuel containers	\$100-750	\$
65	16 TAC §14.2613	Engine fuel delivery equipment	\$250-1,000	\$
66	16 TAC §14.2616	Installation of venting systems and monitoring sensors	\$250-750	\$
67	16 TAC §14.2619	Installation of piping	\$250-500	\$
68	16 TAC §14.2622	Installation of valves	\$250-500	\$
69	16 TAC §14.2625	Installation of pressure gauges	\$100-500	\$
70	16 TAC §14.2628	Installation of pressure regulators	\$500-1,000	\$
71	16 TAC §14.2631	Wiring	\$100	\$
72	16 TAC §14.2634	Vehicle fueling connection	\$500	\$
73	16 TAC §14.2637	Signs and labeling	\$100	\$
74	16 TAC §14.2640	System testing	\$1,000	\$
75	16 TAC §14.2643	Maintenance and repair	\$250-1,000	\$
76	16 TAC §14.2701	DOT requirements	\$1,000	\$
77	16 TAC §14.2704	Registration and transfer of LNG transports	\$500-1,500	\$
78	16 TAC §14.2705	Decals or letter of authority and fees	\$100	\$
79	16 TAC §14.2707	Testing requirements	\$1,000	\$
80	16 TAC §14.2710	Markings	\$250	\$
81	16 TAC §14.2710	Pressure gauge	\$100-500	\$
82	16 TAC §14.2716	Supports	\$1,000	\$
83	16 TAC §14.2719	Electrical equipment and lighting	\$1,000	\$
84	16 TAC §14.2719 16 TAC §14.2722	Liquid level gauging devices	\$1,000	\$
85	16 TAC §14.2725	Exhaust system	\$1,000	\$
86	16 TAC §14.2728	Extinguishers required	\$100-250	\$

87	16 TAC §14.2731	Manifests	\$250	\$
88	16 TAC §14.2734	Transfer of LNG on public highways, streets or alleys	\$250-1,000	\$
89	16 TAC §14.2737	Parking of LNG transports and container delivery vehicles	\$250-500	\$
90	16 TAC §14.2740	Uniform protection standards	\$100-750	\$
91	16 TAC §14.2746	Delivery of inspection report to licensee	\$100	\$
92	16 TAC §14.2749	Issuance of LNG Form 2004 decal	\$500-1,500	\$
93		enalty amounts from Table 1 (lines 1-92, inclusive)	<u> </u>	\$
94		nent before hearing: up to 50% of line 92 amt.		\$
95	Subtotal: amount she	own on line 93 less applicable settlement reduction on line 9	4	\$
	Penalty enl	nancement amounts for threatened or actual safety hazard	from Table 2	
96	Death or personal inju	ry	\$5,000-20,000	\$
97	Taking facility out of		\$1,000-5,000	\$
98	Gas ignition or release	e requiring emergency response	\$1,000-15,000	\$
99	Damage to LNG insta		\$1,000-5,000	\$
100	Property damage exce	eding \$5,000	\$1,000-\$15,000	\$
101		evacuation of premises	\$1,000-5,000	\$
		Penalty enhancement for severity of violation from Table 2	2	
102	Time out of complian		\$100-2,000/mo.	\$
103 Subtotal: amount shown on line 95 plus all amounts on lines 96 through 102, inclusive				\$
	Pena	alty enhancements for culpability of person charged from T		
			Up to double line	
104	Reckless conduct of p	erson charged	103	\$
			Up to triple line	
105	Intentional conduct of		103	\$
		ements for number of prior violations within past seven year		1 .
106	One		\$1,000	\$
107	Two		\$2,000	\$
108	Three		\$3,000	\$
109	Four		\$4,000	\$
110	Five or more		\$5,000	\$
		ancements for amount of penalties within past seven years		I .
111	Less than \$10,000		\$1,000	\$
112	Between \$10,000 and		\$2,500	\$
113	Between \$25,000 and		\$5,000	\$
114	Between \$50,000 and		\$10,000	\$
115	Over \$100,000	10% of total amt	\$	1
		mt. plus amt. on line 104 and/or 105 plus the amt. shown on	any line from 106-	
116				\$
117	8 1		\$	
118	TOTAL PENALTY AMOUNT: amount on line 116 less any amount shown on line 117			\$

The provisions of this §14.2015 adopted to be effective August 27, 2012, 37 TexReg 6574.

#### §14.2016. Licensing Requirements.

(a) Applicants for a license or license renewal shall file with LP-Gas Operations LNG Form 2001 designating a company representative who shall be an owner or employee of the licensee, and shall be directly responsible for actively supervising LNG operations of the licensee. A licensee may have more than one company representative.

- (1) An applicant for license shall not engage in LNG activities 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 and shall at the same time designate a replacement by submitting a new LNG Form 2001.
- (3) The licensee shall cease LNG activities if, at the termination of its company representative, there is no other qualified company representative of the

licensee acknowledged and recorded by LP-Gas Operations. The licensee shall not resume operation until such time as it has a qualified company representative, unless it has been granted an extension of time in which to comply as specified in §14.2052 of this title (relating to Application for an Exception to a Safety Rule).

- (b) Licenses issued under this chapter expire one year after issuance at midnight on the last day of the month prior to the month in which they are issued.
- (c) Persons engaged in LNG activities, including licensees and non-licensees, shall maintain a copy of the current version of the rules in this chapter adopted by the Commission and shall provide at least one copy to each company representative and operations supervisor. The copies shall be available to employees during business hours.
- (d) Licensees and operations supervisors at each outlet shall have all current licenses and certificates available for inspection during regular business hours.
- (e) In addition to complying with other licensing requirements set out in the Texas Natural Resources Code and the rules in this chapter, applicants for license or license renewal in the following categories shall comply with the specified additional requirements:
- (1) A Category 15 licensee shall file with LP-Gas Operations for each of its outlets legible copies of:
- (A) its current DOT authorization. A licensee may not continue to operate after the expiration date of the DOT authorization; and
- (B) its current ASME Code, Section VIII certificate of authorization. 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 from LP-Gas Operations 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 and shall include a letter or statement from ASME that ASME 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 extension.
- (2) A Category 15 or 20 licensee making repairs on ASME containers shall file with LP-Gas Operations a legible copy of its current "U" certificate of authorization for the repair of ASME containers by the National Board of Boiler and Pressure Vessel Inspectors.
- (3) A Category 15, 20, or 50 licensee shall file a properly completed LNG Form 2505 with LP-Gas Operations, certifying that the applicant will follow the

testing procedures indicated. The LNG Form 2505 shall be signed by the company representative designated on LNG Form 2001.

- (f) 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 prior to the expiration date. Renewals shall be submitted to LP-Gas Operations along with the license renewal fee specified in §14.2013 of this title (relating to Licenses and Related Fees) on or before the last day of the month in which the license expires renewal date in order for the licensee to continue LNG activities. Failure to meet the renewal deadline shall result in expiration of the license. If a person's license expires, that person shall immediately cease performance of any LNG activities authorized by that license.
- (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 §14.2013 of this title. 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 LNG activities authorized by the license.
- (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 §14.2013 of this title. 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 person has met all other requirements for licensing, LP-Gas Operations shall renew the license, and the person may resume LNG activities authorized by the license.
- (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 §14.2013 of this title.
- (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 §14.2031 of this title (relating to Insurance Requirements).

The provisions of this §14.2016 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2019. Certification Requirements.

(a) This section applies to all licensees and their employees who perform LNG activities, and to any ultimate consumer who has purchased, leased, or obtained other rights in any vessel defined by this chapter as an LNG transport, including any employee of such ultimate consumer if that employee drives or in any way operates such an LNG transport. Only paragraph (2) of this subsection applies to an employee of a state agency or institution, county, municipality, school district, or other governmental subdivision. Driving a motor vehicle powered by LNG or fueling of motor vehicles for an ultimate consumer by the ultimate consumer or its employees do not in themselves constitute LNG activities.

- (1) No individual may work or be employed in any capacity which requires contact with LNG or LNG systems until that individual has submitted to and passed an examination measuring the competence of that individual to perform the LNG activities anticipated and the individual's working knowledge of the Texas Natural Resources Code and the rules in this chapter related to the type of LNG work anticipated. Table 1 of this section specifies which requirements, indicated with an asterisk, apply to each category of license.
- (2) Each individual who performs LNG 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 LNG activities shall be properly trained by a competent person in the safe performance of such LNG activities.
- (3) An individual wishing to submit to examination shall file LNG Form 2016 along with the appropriate fee listed in subsection (c) of this section with AFRED.

# EXAMINATION AND COURSE OF INSTRUCTION TABLE 1

#### **Categories of Licenses**

	15	20	25	30	35	40	45	50
Company Representative Management Exam	*	*	*	*	*	*	*	*
Operations Supervisor (Branch Manager) Management Exam	*	*	*	*	*	*	*	*
Employee Level - Service & Installation (including Transport Driver and Motor Fuel Dispenser) Exam			*	*	*	*		
Employee Level - Transport Driver Exam			*		*			
Employee Level - Engine Fuel Exam					*		*	*
Employee Level - Service & Installation Exam				*	*			
Employee Level Motor/Mobile Fuel Dispenser Exam					*	*	*	
File LNG Form 2016	*	*	*	*	*	*	*	*

(4) An individual who has filed LNG Form 2016 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 LNG 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. The individual shall pass the rules examination with a score of at least 75%.
- (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 the individual. An individual who has been issued a certification card shall make the card readily available and shall present the card to any Commission employee or agent who requests proof of certification.
- (C) Any individual who fails an examination shall be immediately disqualified from performing any LNG activities covered by that examination. 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. Any individual who fails an examination administered by AFRED at the Austin location only may retake the same examination one additional time during a business day. Any subsequent examination shall be taken on another business day, unless approved by the AFRED director.

#### (6) Time limits.

- (A) Effective June 1, 2008, an applicant shall complete the employee-level LNG Delivery Truck Driver examination and the management-level Category 35 Retail and Wholesale Dealers examination within three hours and shall complete all other examinations 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) A licensee or ultimate consumer other than a political subdivision 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:
- (1) The trainee shall be directly and individually supervised at all times by an individual who has successfully completed the rules examination for those areas of work being performed by the trainee.
- (2) The licensee or ultimate consumer other than a political subdivision shall ensure that LNG Form 2016 is on file with AFRED for each trainee at the time the trainee begins supervised LNG activities. The trainee shall then have 45 calendar days to pass the applicable rules examination.
- (3) A trainee who fails the rules examination shall cease to perform any LNG activities covered by the examination failed.
- (4) A trainee who has been in training for a total of 45 days in any combination and with any number of employers shall cease to perform any LNG activities for which the trainee is not currently certified.
- (5) Once a trainee has taken the rules examination, the training period shall cease and the individual shall perform no LNG activities which require certification until the individual is notified by AFRED that the individual passed the examination.
- (c) The applicant shall pay to AFRED a \$70 examination fee for each management-level examination and a \$40 fee for each employee-level examination in advance of each required examination. Examination fees are nonrefundable. An applicant who fails an examination shall pay the full examination fee for each subsequent examination.
- (d) 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. To maintain active status, a certificate holder shall pay the \$25 annual 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.
- (1) Failure to pay the annual renewal fee by the renewal deadline shall result in a lapse of certification unless the late filing fee in paragraph (2) 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 LNG activities that require

certification. An individual may regain certified status only by successfully completing the examination required for the certification and meeting the requirements of paragraph (2) of this section.

- (2) Any lapsed or expired renewals submitted after May 31 of each year shall include a \$20 late-filing fee in addition to the renewal fee and proof of successful completion of the examination required for the certification 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. Upon receipt of the renewal fee, late-filing penalty, and proof of successful completion of the examination required for the certification, 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 LNG activities.
- (e) Expired certifications. 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 certificate has not been suspended, revoked, or expired for one year or longer, AFRED shall renew the individual's certification and the individual may resume LNG activities.

The provisions of this §14.2019 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective October 29, 2007, 32 TexReg 7677; amended to be effective February 1, 2008, 33 TexReg 142; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2020. Employee Transfers. When a previously certified individual is hired, the licensee, ultimate consumer, or state agency, county, municipality, school district, or other governmental subdivision shall notify AFRED by filing a properly completed and signed LNG Form 2016A along with a \$10 filing fee. Notice shall 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 LNG related 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 LNG activities.

The provisions of this §14.2020 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to

be effective June 5, 2006, 31 TexReg 4607; amended to be effective February 1, 2008, 33 TexReg 142.

\$14.2021. Requests for LNG Classes. Requests for Commission Staff to conduct an LNG training class for LNG 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 an LNG training class is \$250 if no overnight expenses are incurred by AFRED, 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 §14.2021 adopted to be effective June 5, 2006, 31 TexReg 4607.

- §14.2022. Denial, Suspension, or Revocation of Licenses or Certifications, and Hearing Procedure.
- (a) The Commission may deny, suspend, or revoke a license or certificate for any individual who fails to comply with the requirements of this chapter. If LP-Gas Operations determines that an applicant for a new license or certificate, or renewal of a license or certificate 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:
- (1) that the application may be resubmitted within 30 calendar days of receipt of the denial, with all cited deficiencies corrected. If an applicant resubmits the application for a new license or certificate, or renewal of a license or certificate within 30 calendar days of receipt of the denial with all deficiencies corrected, LP-Gas Operations shall issue the new license or certificate, or the renewal of the license or certificate; or
- (2) if the applicant disagrees with LP-Gas Operations' determination, the applicant may request a hearing in writing within 30 calendar days of receiving the notice of denial.
- (b) An applicant receiving a notice of denial of a license, certificate, or license or certificate 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 or certification sought.
- (1) Upon receipt of a written request for hearing, 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 or certification requirements for each category of license or certification sought. The Commission shall conduct the hearing in compliance

with the Texas Government Code, Chapter 2001, Chapter 1 of this title (relating to Practice and Procedure), and any other applicable rules.

- (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 (relating to Practice and Procedure), and any other applicable rules.
- (c) If LP-Gas Operations finds through means including but not limited to inspection, review of documents, or complaint by a member of the general public or any other person, that a license or certificate shall be suspended or revoked because of a probable or actual violation of or noncompliance with Chapter 116 of the Texas Natural Resources Code or the rules in this chapter, LP-Gas Operations shall notify the licensee or certified individual in writing of the alleged violation or noncompliance.
- (1) The notice shall specify the acts, omissions, or conduct constituting the alleged violation or noncompliance, and shall designate a date at least 30 days but less than 45 days after the licensee or certified individual receives the notice by which the violation or noncompliance shall 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 individual 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 days after the oral notice.
- (2) The licensee or certified individual shall either report the correction or discontinuance of the violation or noncompliance within the time frame specified in the notice or request in writing an extension of time in which to comply. The request for extension of the time to comply shall be received by LP-Gas Operations within the same time frame specified in the notice for correction or discontinuance.

The provisions of this §14.2022 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2025. Designation of Outlet and 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 include but are not limited to:

- (1) distance from other LNG activities operated by the licensee;
- (2) whether the operation duplicates the primary LNG operation; and
- (3) whether the operation is directly supervised on a routine basis.
- (b) A licensee maintaining more than one outlet shall file LNG Form 2001A with LP-Gas Operations designating an operations supervisor (branch manager) at each outlet. The operations supervisor shall pass the management examination administered by AFRED before commencing or continuing the licensee's operations at the outlet.
- (c) An operations supervisor may be a company representative of the licensee; however, an individual may be designated as an operations supervisor at only one outlet unless approved by LP-Gas Operations.
- (d) The operations supervisor shall be directly responsible for actively supervising LNG operations of the licensee at the designated outlet.

The provisions of this §14.2025 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2028. Franchise Tax Certification and Assumed Name Certificates.

- (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 of the State of Texas. 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 shall list all names on LNG Form 2001 under which LNG activities requiring licensing are to be conducted. Any company performing LNG activities under an assumed ("doing business as" or "DBA") name shall 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 Secretary of State's office.

The provisions of this §14.2028 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2031. Insurance Requirements.

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

# §14.2031. 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 <sub>TM</sub> 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	LNG Form 2996B
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 \$100,000; loss of income based on at least 60% of employee's preinjury income for not less than 52 weeks, subject to a maximum weekly wage calculated annually by the Texas Workforce Commission	The Acord <sup>TM</sup> 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
30, 40, 45	General liability coverage including: premises and operations in an amount of at least \$25,000 per occurrence and \$50,000 aggregate	The Acord <sub>TM</sub> 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	LNG Form 2998B
20, 25, 35, 50	Completed operations in an amount of at least \$300,000 aggregate	The Acord <sub>TM</sub> 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	LNG Form 2998B
15, 25, 35	Product liability in an amount of at least \$300,000 aggregate	The Acord <sub>TM</sub> 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	LNG Form 2998B
15, 20, 25, 35, 50	General liability coverage: premises and operations including completed operations in an amount of at least \$300,000 per occurrence with a \$300,000 policy aggregate	The Acord <sub>TM</sub> 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	LNG Form 2998B
25, 35, Ultimate Consumer	Motor vehicle coverage: minimum \$5,000,000 (\$300,000 for state agencies) combined single limit for bodily injuries to or death of all individuals injured or killed in any one accident, and loss or damage to property of others in any one accident.	The AcordTM 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	LNG Form 2997B

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

(1) an insurance Acord<sup>TM</sup> form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance

carrier and contains 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 §14.2034 of this title (relating to Self-Insurance Requirements).
- (3) Certificates of insurance shall be continuous in duration and shall remain on file with LP-Gas Operations during the entire period that the license is in effect.
- (4) Documentation other than a certificate of insurance may be accepted by LP-Gas Operations as evidence of required insurance provided that the documentation contains the same information as required on a certificate of insurance. The alternative documentation may be accepted for a period not to exceed 45 days. During the temporary period, a licensee shall file with LP-Gas Operations an amended certificate of insurance which complies with the requirements of this section.
- (c) Each licensee shall file LNG Form 2999 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.
- (d) A licensee or applicant for a license that does not employ or contemplate employing any employees to be engaged in LNG-related activities in Texas shall file LNG Form 2996B in lieu of filing a workers' compensation insurance form, including employers' liability insurance, or alternative accident and health insurance coverage. The licensee or applicant for a license shall file the required forms with LP-Gas Operations before hiring any person as an employee engaged in LNG-related work.
- (e) A Category 25 or 35 licensee, applicant for a license, or an ultimate consumer that does not operate or contemplate operating a motor vehicle equipped with an LNG cargo container or does not transport or contemplate transporting LNG by vehicle in any manner shall file LNG Form 2997B in lieu of a motor vehicle bodily injury and property damage insurance form, if this certificate is not otherwise required. The licensee or applicant for a license shall file the required forms with LP-Gas Operations before operating a motor vehicle equipped with an LNG cargo container or transporting LNG by vehicle in any manner.
- (f) A Category 15 licensee or applicant for a license that does not engage in or contemplate engaging in any LNG-related operations in Texas that would be covered by completed operations and product liability insurance shall file LNG Form 2998B in lieu of filing a completed operations and product liability insurance form. The licensee or applicant for a license shall file the required forms with LP-Gas Operations before

engaging in any operations that require completed operations and product liability insurance.

- (g) A licensee or applicant for a license that does not engage in or contemplate engaging in any LNG-related operations that would be covered by general liability insurance shall file LNG Form 2998B in lieu of a general liability insurance form. The licensee or applicant for a license shall file the required forms with LP-Gas Operations before engaging in any operations that require general liability insurance.
- (h) Notwithstanding the requirements specified in Table 1 of subsection (a) of this section that each licensee carry a policy of workers' compensation insurance, the licensee may protect its employees by obtaining accident and health insurance coverage from an insurance company authorized to write such policies in Texas as an alternative to workers' compensation coverage. The alternative coverage shall be in the amounts specified in Table 1 of subsection (a) of this section.
- (i) Each licensee shall promptly notify LP-Gas Operations of any change in insurance coverage or insurance carrier by filing a properly completed revised certificate of insurance; insurance Acord<sup>TM</sup>; form; other form prepared and signed by the insurance carrier that contains all the information required by the certificate of insurance; or documents demonstrating the applicant's compliance with the self-insurance requirements set forth in §14.2034 of this title (relating to Self-Insurance Requirements). 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 §14.2031 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective November 12, 2007, 32 TexReg 8128; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2034. Self-Insurance Requirements.

- (a) This section applies to a licensee's general liability insurance, including premises and operations coverage. This section shall not apply to worker's compensation insurance, including employer's liability coverage.
- (b) A licensee applying for self-insurance shall file LNG Form 2027 with LP-Gas Operations, along with materials which 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 shall demonstrate that it will maintain a net worth sufficient to ensure that it will meet its statutory obligations to the public to pay all claims relating to

general liability, including premises and operations coverage; and

- (2) the applicant has a sound self-insurance program. The applicant shall demonstrate that it has established and shall maintain an insurance program that will protect the public against all claims involving LNG activities to the same extent as the minimum limits specified in Table 1 of §14.2031 of this title (relating to Insurance Requirements). Such a program may include but not be limited to one or more of the following: reserves; irrevocable letter of credit, as specified in subsection (h) of this section; sinking funds; third-party financial guarantees; parent company or affiliate sureties; excess insurance coverage; or other similar arrangements.
- (c) LP-Gas Operations may consider applications for approval of other securities or agreements, or may require any other information which may be necessary to ensure the application satisfies that the security or agreement offered will afford adequate security for protection of the public.
- (d) LP-Gas Operations may approve a licensee's application for self-insurance if the licensee demonstrates to LP-Gas Operations its ability to satisfy its obligations for the minimum insurance requirements specified in §14.2031 of this title (relating to Insurance Requirements). LP-Gas Operations may approve the licensee as a self-insurer for a specific time period or for an indefinite period until further action is taken by LP-Gas Operations.
- (e) The applicant shall file semi-annual reports and annual statements with the applicant's financial status and status of its self-insurance program with LP-Gas Operations during the period of its self-insurer status by March 10 and September 10 of each year.
- (f) After ten days' notice to the applicant, LP-Gas Operations may 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 do so, LP-Gas Operations shall revoke its self-insurer status and may order that the licensee is 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 workers' compensation coverage or general liability and/or motor vehicle liability insurance if permitted by the Texas Workers' Compensation Act, Texas Labor Code, Title 5, Subtitle A; and Texas Natural Resources Code, §116.036, by submitting LNG Form 2995 to LP-Gas Operations.
- (h) Letters of credit filed with LNG Form 2028 shall:

- (1) be issued by a federally chartered and federally insured bank authorized to do business in the United States:
  - (2) be irrevocable during their terms;
- (3) be payable to the Commission in part or in full upon demand and receipt from the Commission of a notice of forfeiture; and
- (4) not apply to the licensing requirements for worker's compensation insurance, including employer's liability coverage.

The provisions of this §14.2034 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2037. Components of LNG Stationary Installations Not Specifically Covered. Components of LNG stationary installations which are not specifically covered by the rules in this chapter shall not be placed into LNG service until LP-Gas Operations has determined the installation complies with the rules in this chapter. LP-Gas Operations may require any change to a proposed stationary installation which the Commission may consider necessary to ensure the LNG installation is safe for LNG service. If the affected party disagrees with LP-Gas Operations' determination, the party may request a hearing as described in §14.2022 of this title (relating to Denial, Suspension, or Revocation of Licenses or Certifications, and Hearing Procedure). However, the installation shall not be placed into LNG operation until LP-Gas Operations has determined the installation complies with the rules in this chapter.

The provisions of this §14.2037 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2040. Filings and Notice Requirements for Stationary LNG Installations.

- (a) No LNG container shall be placed into LNG service or an installation operated or used in LNG service until the requirements of this section, as applicable, are met and the facility is in compliance with all applicable rules in this chapter and all statutes, in addition to any applicable requirements of the municipality or the county where an installation is or will be located. A person who purchases an existing LNG installation shall file LNG Form 2019 with LP-Gas Operations within 10 calendar days of the purchase in order for the installation to remain in LNG service.
- (b) Prior to the construction of a stationary installation which would result in an aggregate water capacity of 15,540 gallons or more, the applicant shall submit LNG Form 2500 and a non-refundable \$50 application fee to LP-Gas Operations including site plans and plans and specifications for the installation at least 30 calendar days prior to construction.

- (1) Plans and specifications shall be sealed by a registered professional engineer licensed and in good standing to practice in the State of Texas and who is qualified in the area of the design and construction of LNG facilities.
- (2) Plans and specifications shall include fire protection which complies with §14.2131 of this title (relating to Fire Protection).
- (3) If the applicant modifies the plans and specifications before tentative or interim approval is granted by LP-Gas Operations or the Commission, respectively, the plans and specifications shall be resealed by a registered professional engineer licensed to practice in the State of Texas and resubmitted to LP-Gas Operations. A non-refundable fee of \$30 shall be required for any resubmission.
- (c) Prior to the installation of an LNG container resulting in an aggregate water capacity of 15,540 gallons or more, the applicant or licensee shall send a copy of LNG Form 2500, LNG Form 2500A, and a plat by certified mail, return receipt requested, to all owners of real property situated within 500 feet of the proposed container location(s). The applicant or licensee shall submit LNG Form 2500 to LP-Gas Operations at the same time LNG Form 2500 and LNG Form 2500A are mailed to the real property owners.
- (1) Notice shall be considered sufficient when the applicant or licensee has provided evidence that a complete LNG Form 2500, LNG Form 2500A, and a plat have been sent to all real property owners. The applicant or licensee may obtained names and addresses of owners from current county tax rolls.
- (2) The applicant or licensee shall notify owners of real property situated within 500 feet of the proposed container location(s) if the current aggregate water capacity of the installation is more than doubled in a 12-month period or if the resulting aggregate water capacity of the installation will be more than 214,348 gallons.
- (3) The applicant or licensee shall retain the return receipts for Commission review, if requested.
- (4) The site plan or drawing shall describe the facility's property or a 250-foot diameter (measured from the proposed container's location on the site), whichever is smaller, and include all containers, buildings, structures, geographical or topographical features, or any other features or activities relating to LNG which could affect the health, safety and welfare of the general public. The site plan or drawing shall include a scale or legend to indicate the distances or measurements described.
- (5) Objections shall be filed with LP-Gas Operations within 18 days of the postmarked date on the notice letter. If LP-Gas Operations finds that the objection is not proper, LP-Gas Operations shall notify the property owner and the property owner shall have

- ten days from the date of LP-Gas Operations' postmarked letter to correct the objection. If one or more of the adjoining property owners files an objection and a written request with LP-Gas Operations for a hearing, the hearing shall be conducted as soon as possible and a recommendation presented to the Railroad Commission within 90 days following the hearing. When possible, the hearing shall be held in a location near the proposed site.
- (A) LP-Gas Operations shall review all objections within 10 business days of receipt. An objection shall be in writing and shall include a statement of facts showing that the proposed installation:
- (i) does not comply with the rules in this chapter, specifying which rules are violated;
- (ii) does not comply with the statutes of the State of Texas, specifying which statutes are violated; or
- (iii) constitutes a danger to the public health, safety, and welfare, specifying the exact nature of the danger. For purposes of this section, "danger" means an imminent threat or an unreasonable risk of bodily harm, but does not mean diminished property or esthetic values in the area. The Railroad Commission does not consider public health, safety, and welfare to include such factors as the value of property adjacent to the installation, the esthetics of the proposed installation, or similar considerations.
- (B) Upon review of the objection, LP-Gas Operations shall either:
- (i) schedule a public hearing as specified in §14.2022 of this title (relating to Denial, Suspension, or Revocation of Licenses or Certifications, and Hearing Procedure); or
- (ii) notify the objecting party in writing within 10 business days of receipt requesting further information for clarification and stating why the objection is being returned. The objecting entity shall have 10 calendar days from the postmark of LP-Gas Operations' letter to file its corrected objection. Clarification of incomplete or non-substantive objections shall be limited to two opportunities. If new objections are raised in the objecting party's clarification, the new objections shall be limited to one notice of correction.
- (6) Temporary installations which are used during peak demand times such as during cold weather or emergencies are not required to comply with these notice requirements. However, a sign shall be installed at the site and brochures or other similar means of notification shall be available at the site to advise the public of the need and use for the temporary installation.
- (d) Unless considered to be in the public interest by LP-Gas Operations, the applicant or licensee does not

need to notify owners of real property situated within 500 feet of the proposed container location(s) of an addition to an existing LNG facility provided the current aggregate water capacity is not more than doubled in a 12-month period; however, if the resulting aggregate water capacity will exceed 214,348 gallons, the applicant or licensee shall provide notice as specified in subsection (c) of this section.

- (e) LP-Gas Operations shall grant tentative or the Commission shall grant interim approval prior to the setting of the LNG container and construction of the LNG installation.
- (f) When an LNG container is replaced with a container of the same or less overall diameter and length or height, and installed in the identical location of the existing container at an LNG storage installation of 15,540 gallons aggregate water capacity or more, the applicant shall file LNG Form 2501 with LP-Gas Operations.
- (1) LNG Form 2500, LNG Form 2500A, and LNG Form 2501, including site plans and plans and specifications, are not required to be filed prior to installation of pull-away devices, or emergency shutoff valves (ESV's), or when maintenance and improvements are being performed to the piping system at existing previously approved LNG installations having an aggregate water capacity of 15,540 gallons or more.
- (2) A nonrefundable fee of \$50 shall be submitted with each LNG Form 2500. A nonrefundable resubmission fee of \$30 shall be included with each incomplete or revised set of plans and specifications resubmitted.
- (3) The proposed installation shall not be operated or used in LNG service until approved by LP-Gas Operations.
- (g) Upon completion of a commercial installation having an aggregate water capacity of less than 15,540 gallons, the applicant shall submit LNG Form 2501, postmarked or physically delivered to LP-Gas Operations, within ten calendar days after completion of such installation. LNG Form 2501 shall state that:
- (1) the installation complies with the statutes and the rules in this chapter;
- (2) any necessary LNG licenses have been issued; and
- (3) the installation has been placed in LNG service.
- (h) A nonrefundable fee of \$10 for each LNG container listed on LNG Form 2501 shall be submitted with each LNG Form 2501 required to be filed by the applicable subsections of this section. A nonrefundable resubmission fee of \$20 shall be included for each LNG Form 2501 resubmitted.

- (i) LP-Gas Operations shall review all applications within 21 business days of the receipt of all required information and shall notify the applicant as follows:
- (1) If LP-Gas Operations administratively approves the installation, LP-Gas Operations shall notify the applicant in writing within 21 business days.
- (2) If LP-Gas Operations declines to administratively approve the installation, LP-Gas Operations shall notify the applicant in writing, specifying the deficiencies, within 21 business days. The applicant may modify the submission and resubmit it for approval, or may request a hearing on the matter in accordance with Chapter 1 of this title (relating to Practice and Procedure).
- (j) When LP-Gas Operations notifies an applicant of an incomplete LNG Form 2500 or LNG Form 2500A, 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, the applicant shall file a new application to reactivate LP-Gas Operations' review of the proposed installation.
- (1) The applicant may request in writing an extension of the 120-day time period. The request shall be postmarked or physically delivered to LP-Gas Operations before the expiration date. LP-Gas Operations may extend the application period for up to an additional 90 days.
- (2) If the tentatively approved installation is not completed within one year from the date tentative approval was granted, the application will expire. Prior to the date of expiration, the applicant may request in writing an extension of time of up to 90 days to complete the installation. If the applicant fails to request an extension of time within the time period prescribed in this subsection, the applicant will be required to submit a new application before the original installation can be completed.
- (3) Prior to the installation of an LNG container referenced in this section in a heavily populated or congested area, LP-Gas Operations shall determine whether the proposed installation poses a threat to the health, safety, and welfare of the general public. LP-Gas Operations shall determine restrictions on LNG container capacities in accordance with the following:
- (A) density of the population within 500 feet of the LNG installation;
- (B) nature of the land use on those pieces of property located within 500 feet of the LNG installation:
  - (C) vehicular traffic in the area;
  - (D) types and numbers of roadways in the

area;

- (E) type of operations on the premises;
- (F) potential ignition sources in the area;

- (G) existence of dangerous or combustible materials in the area that might be affected in an emergency situation;
- (H) the number of members of the general public who are concentrated in the area; and
- (I) other factors related to the public health, safety, and welfare.
- (k) LP-Gas Operations shall examine plans and specifications to ensure that they have been sealed by a qualified professional engineer licensed to practice in the State of Texas. LP-Gas Operations shall review site plans to determine whether the installation complies with the distance requirements in this chapter. LP-Gas Operations shall determine whether the subject of the submission poses a threat to the health, safety, and welfare of the general public.
- (1) If LP-Gas Operations declines to approve administratively the submission, LP-Gas Operations shall notify the applicant of this decision in writing within 21 calendar days. The applicant may modify the submission and resubmit it for approval within 21 calendar days after receiving the notice, or may request a hearing to be conducted in accordance with Chapter 1 of this title. The subject of the submission shall not be operated or used in LNG service in this state until approved by the Commission following a hearing.
- (2) LNG Form 2008 or the Manufacturer's Data Report, and any other documentation pertinent to the installation, may be requested by LP-Gas Operations in order to further determine compliance with the rules in this chapter.
  - (l) Physical inspection of stationary installations.
- (1) Aggregate water capacity 15,540 gallons or more. 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 LNG operations until the applicant corrects the violations.
- (2) Aggregate water capacity of less than 15,540 gallons. After receipt of LNG Form 2501, 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 LNG 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, appliances, including any piping, appurtenances, or equipment connected to it from LNG service until the applicant corrects the violations.

- (m) 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 LNG 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.
- (n) 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.
- (o) 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.

The provisions of this §14.2040 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

### §14.2043. Temporary Installations.

- (a) Temporary installations shall comply with the following requirements:
- (1) Prior to the completion of a temporary installation with an individual or aggregate water capacity of 15,540 gallons or less, the licensee or nonlicensee shall file LNG Form 2501 with LP-Gas Operations, including proof of the local fire marshal's approval if the installation is within such jurisdiction.
- (2) Prior to the completion of a temporary installation with an individual or aggregate water capacity of 15,541 gallons or more, the licensee or nonlicensee shall file LNG Form 2500, including plans and specifications, and proof of the local fire marshal's approval if the installation is with such jurisdiction.
- (b) Temporary installations shall be limited to one year. If the temporary installation needs to remain in service for more than one year, the licensee or

nonlicensee responsible for the temporary installation shall inform LP-Gas Operations of this extension of time at least 30 days prior to the expiration of the oneyear period.

- (c) Temporary installations shall be protected by guardrailing as specified in §14.2101(f) of this title (relating to Uniform Protection Requirements) unless otherwise approved by LP-Gas Operations.
- (d) Temporary installations shall comply with the electrical requirements specified in Subchapter F of this chapter (relating to Instrumentation and Electrical Services).
- (e) Temporary installations shall be mounted on a secure surface, not to include bare earth.
- (f) Temporary installations are not required to have impounding areas.
- (g) LP-Gas Operations may inspect temporary installations for compliance with this section.
- (h) Any temporary installation subject to the jurisdiction of United States Department of Transportation under 49 Code of Federal Regulations, Part 193, shall comply with the applicable DOT rules and any requirements of LP-Gas Operations.

The provisions of this §14.2043 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

### §14.2046. Filings Required for School Bus, Mass Transit, and Special Transit Vehicles.

- (a) After the manufacture of or the conversion to an LNG 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 LNG Form 2503 that the applicable LNG-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 LNG 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 LNG service and the manufacturer, licensee, or ultimate consumer making the installation or conversion shall correct the violations. The manufacturer, licensee, or ultimate with LP-Gas consumer shall file 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 LNG 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 §14.2046 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2049. Report of LNG Incident/Accident.

- (a) If an incident or accident occurs during transport, as a result of a pullaway, or where LNG is or is suspected to be the cause, the licensee or nonlicensee owning, operating, or servicing the installation shall notify LP-Gas Operations by telephone within two hours of discovery after the licensee or nonlicensee has knowledge of the incident or accident if any of the following occurs:
  - (1) a spill of 25 gallons or more of LNG;
  - (2) property damage of \$1,000 or greater; or
- (3) an injury requiring transport to a medical facility.
- (b) Any transport unit required to be registered with LP-Gas Operations in accordance with §14.2704 of this title (relating to Registration and Transfer of LNG Transports) which is involved in an accident where there is damage to the tank, piping appurtenances, or any release of LNG resulting from the accident shall be reported to LP-Gas Operations, regardless of the accident location. Any LNG-powered motor vehicle used for school transportation or mass transit, including any state-owned vehicle, which is involved in an accident resulting in a release of LNG or damage to LNG equipment shall be reported to LP-Gas Operations, regardless of the accident location.
- (c) 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) the 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 and type of injuries or fatalities;

- (6) whether fire, explosion, or leak has occurred;
  - (7) whether LNG is currently leaking; and
- (8) whether immediate assistance from LP-Gas Operations is requested.
- (d) The individual making the telephone notification shall leave his or her name and telephone number
- (e) Following the initial telephone report of any of the incidents or accidents described in this section, the licensee shall file LNG Form 2020 with LP-Gas Operations. The form shall be postmarked within 14 calendar days of the date of initial notification to LP-Gas Operations.

The provisions of this §14.2049 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

- §14.2052. Application for an Exception to a Safety Rule.
- (a) Any person may apply for an exception to the provisions of this chapter by filing LNG Form 2025 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 for which the exception is being requested;
- (2) the type of relief desired, including the exception requested and information which may assist LP-Gas Operations in comprehending the requested exception;
- (3) a concise statement of facts which support the applicant's request for the exception, such as the reason for the exception, the safety aspects of the exception, and the social or economic impact of the exception;
- (4) for 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 can 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 applicant filing the application or by the applicant's authorized representative; and

- (7) a list of the names and addresses of all interested entities as defined in subsection (d) of this section.
- (c) Notice of the application for an exception to a safety rule shall include the following items and procedures:
- (1) The applicant shall send a copy of LNG Form 2025 by certified mail, return receipt requested, to all affected entities 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 postmark. The applicant shall file all return receipts with LP-Gas Operations as proof of notice.
- (2) If an exception is requested for 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 for a nonstationary installation, affected entities to whom the applicant shall give notice shall include but not be limited to:
- $\hbox{ (A) the Texas Department of Public Safety; and } \\$
- (B) all processed gas loading and unloading facilities used 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 at 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 grant administratively 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 applicant, in writing, of 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 in accordance with Chapter 1 of this title (relating to Practice and Procedure). 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, and the rules in this chapter.
- (g) Applicants intentionally submitting incorrect or misleading information are subject to penalties as set out in Texas Natural Resources Code, §§91.143, and the filing of incorrect or misleading information shall be grounds for the Commission to dismiss an application with prejudice.
- (h) After hearing, the Commission may grant exceptions to this chapter if the Commission finds that granting the exception will not adversely affect the safety of the public.
- (i) For good cause shown, LP-Gas Operations may grant a temporary exception of 30 days or less to the examination requirements for company representatives and operations supervisors. Good cause includes but is not limited to death of a sole proprietor or partner. Applicants for temporary exceptions shall comply with 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 three months after the date of the letter in which the applicant was notified by LP-Gas Operations of an incomplete request.

The provisions of this §14.2052 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

# SUBCHAPTER B. GENERAL RULES FOR ALL STATIONARY LNG INSTALLATIONS

- §14.2101. Uniform Protection Requirements.
- (a) This section applies to the protection from tampering and damage of stationary LNG installations, including LNG transfer systems, dispensing systems, and storage containers.
- (b) Protection shall be maintained in good condition at all times in accordance with the standards set forth in this section. LP-Gas Operations may impose additional requirements to ensure the safety of personnel and the general public.
- (c) Stationary LNG installations shall be protected from tampering and damage by either fencing or guardrails, or a combination of both as specified in this section. The operating end of the container, including the material handling equipment and the entire dispensing system, and any part of the LNG transfer system, dispensing system, or storage container which is exposed to vehicular traffic shall be protected from damage by the vehicular traffic to which it is normally exposed. The protection shall extend at least 24 inches beyond any part of the LNG transfer system, dispensing system, or storage container.
- (d) Stationary LNG installations may use fencing which is located more than 25 feet from any point of the LNG transfer system, dispensing system, or storage containers. If such perimeter fencing is used, the LNG transfer system, dispensing system, or storage containers shall also be protected from the normal vehicular traffic to which they are subjected by guardrails at the operating end of the equipment, including all material handling equipment. Guardrails shall be located at least 24 inches beyond any part of the protected equipment which is exposed to vehicular traffic.
- (e) Fencing at LNG stationary installations shall comply with the following:
- (1) Fencing material shall be solid construction of noncombustible material or chain link with wire at least 12 1/2 American wire gauge in size.
- (2) Fencing shall be at least 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 four inches apart.
- (3) Uprights, braces, and cornerposts shall be composed of noncombustible material if located within the minimum distances specified for ignition sources or combustible materials set forth in §14.2110 of this title (relating to LNG Container Installation Distance Requirements) for the enclosed LNG transfer system, dispensing system, or LNG containers.
- (4) A minimum clearance of 24 inches shall be maintained between the fencing and any part of an LNG transfer system, dispensing system, or storage container that is part of a stationary installation.
- (f) Guardrails at LNG stationary installations shall comply with the following:

- (1) Vertical supports for guardrails shall be at least four-inch concrete-filled schedule 40 steel pipe or material of equal or greater strength. The vertical supports shall be capped on top, anchored in concrete at least 36 inches below the ground, and rise at least 30 inches above the ground. Supports shall be spaced four feet apart or less.
- (2) The top of the horizontal guardrailing shall be secured to the vertical supports at least 30 inches above the ground. The horizontal guardrailing shall be at least three-inch schedule 40 steel pipe or other 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 damage to the protected equipment under normal conditions including the nature of the traffic to which the protected equipment is exposed.
- (3) Openings in the horizontal guardrailing shall not exceed 36 inches. A means of temporarily removing the horizontal guardrailing and vertical supports to facilitate the handling of heavy equipment may be incorporated into the horizontal guardrailing and vertical supports. In no case shall the protection provided by the horizontal guardrailing and vertical

- supports be decreased. Transfer hoses from the bulkhead shall be routed only over the horizontal guardrailing or through the 45-degree opening in front of the bulkhead.
- (4) A minimum clearance of 24 inches shall be maintained between the railing and any part of an LNG transfer system, dispensing system, or storage container.
- (g) Stationary LNG installations shall comply with the sign and lettering requirements specified in Table 1 of this section and the following:
- (1) Unless colors are specified, lettering shall be a color in sharp contrast to the background color of the sign and shall be easily readable.
- (2) Signs shall be visible from each point of transfer:
- (3) Signs on emergency shutdown devices shall be permanently affixed;
- (4) Signs bearing the words, "NATURAL GAS," shall be located on all operating sides of dispensers; and
- (5) Signs indicating the licensee's name shall be located at either the vehicle dispenser or refueling area, or at the loading or unloading area.

Table 1

Requirements for Signs	LNG Vehicle Dispenser/Refueling Area	Emergency Shutdown Devices	LNG Loading or Unloading Area
Red capital letters at least 2" high on white background: NO SMOKING OR OPEN FLAMES	*		*
Red capital letters at least 4" high on white background: FLAMMABLE GAS			*
Black capital letters at least 4" high on white background: NO TRESPASSING AUTHORIZED PERSONNEL ONLY			*
Capital letters at least 2" high FLAMMABLE GAS	*		*
White capital letters at least 2" high on red background:		*	

EMERGENCY SHUTDOWN			
White capital letters at least 2" high on red background: EMERGENCY PUMP/COMPRESSOR SHUTDOWN		*	
Letters at least 2" high: PRESSURE RELIEF DEVICE SET AT			*
Letters at least 4" high: Name of Licensee	*		*

(h) At least two monitoring sensors shall be installed at all stationary installations to detect hazardous levels of LNG. Sensors shall activate at not more than 25% of the lower flammability limit of LNG. If the level exceeds one-fourth of the LFL, the sensor shall either shut the system down or activate an audible and visual alarm. The number of sensors to be installed shall comply with the area of coverage for each sensor and the size of the installation. The sensors shall be installed and maintained in accordance with the manufacturer's instructions.

The provisions of this §14.2101 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

### §14.2104. Uniform Safety Requirements.

- (a) In order to determine the safety of a container, LP-Gas Operations may request the manufacturer's data report on that container. LP-Gas Operations may also request that containers and assemblies be examined by a Category 15, 20, or 50 licensee equipped for and experienced in the testing of LNG containers and equipment. The Category 15, 20, or 50 licensee shall file a comprehensive report on its findings with LP-Gas Operations. This requirement may be applied even though an acceptable LNG Form 2023 is on file with LP-Gas Operations.
- (b) Any stationary LNG container previously in LNG service which has not been subject to continuous LNG pressure or inert gas pressure shall be inspected by a currently licensed Category 15, 20, or 50 licensee to determine if the container shall be leak-tested or recertified. A copy of the inspector's written report shall be filed with LP-Gas Operations. The container shall not be used until LP-Gas Operations grants approval.
- (c) Any stationary LNG container which has been subject to continuous LNG or inert gas pressure need not be tested prior to installation provided an acceptable

LNG Form 2023 is filed with LP-Gas Operations when LNG Form 2500 is submitted for any facility requiring submission of plans and specifications.

(d) When installed for use, containers shall not be stacked one upon another except when designed by the manufacturer for stacking.

The provisions of this §14.2104 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2107. Stationary LNG Storage Containers.

- (a) Used LNG containers shall meet the requirements of §14.2104 of this title (relating to Uniform Safety Requirements) and any other applicable rules prior to being reused in LNG service.
- (b) ASME, DOT and API containers shall be identified by attachment of a stainless steel nameplate in a location that will remain visible after the container is installed and by a method which will minimize corrosion of the nameplate, its means of attachment, and the container. The nameplate shall be marked with the following information:
- (1) manufacturer's name and date of construction of container;
- (2) nominal liquid capacity (in barrels or gallons);
- (3) design pressure (in psig) for methane gas at the top of the container;
- (4) maximum permissible density of liquid to be stored;
- (5) maximum level to which container may be filled with stored liquid;
- (6) maximum level to which container may be filled with water for test, if applicable; and
- (7) minimum temperature in degrees Fahrenheit for which the container was designed.
- (c) Openings on storage containers shall be marked with a sign or tag showing the function of the opening.

The markings shall remain readable during all operating conditions and shall be located to minimize the effects of possible frosting.

(d) Shop-fabricated and shop-tested LNG containers shall be leak-tested to 90% of the pressure relief valve setting after being installed and filled with LNG.

The provisions of this §14.2107 adopted to be effective May 26, 2003, 28 TexReg 4100.

# §14.2110. LNG Container Installation Distance Requirements.

- (a) LNG containers shall be installed in accordance with the following minimum distance requirements:
- (1) Containers with aggregate water capacities up to 15,540 gallons shall be located at least 25 feet from any building, property line, stationary ignition sources, or other aboveground flammable liquids;
- (2) Containers with aggregate water capacities from 15,541 to 93,240 gallons shall be located at least 50 feet from any building, property line, stationary ignition sources, or other aboveground flammable liquids;
- (3) Containers with aggregate water capacities of 93,241 gallons or more shall be located at least 100 feet from any building, property line, stationary ignition sources, or other aboveground flammable liquids.
- (4) Underground LNG containers shall be located at least 15 feet apart, regardless of size.
- (5) LNG dispensers or points or transfer shall be located at least 25 feet from the nearest building not associated with the LNG facility and from any line of adjoining property that can be built upon.
- (b) Operating industrial trucks with only one container mounted on each truck may be stored inside buildings. Extra containers shall not be stored inside buildings. Operating industrial trucks shall be stored in an area that will reduce the likelihood of an accident. Service valves shall be closed whenever a truck with a mounted container is stored. A venting system shall be used any time a vehicle not in operation is inside a building to allow safe relief valve venting.
- (c) Stationary LNG containers and piping shall not be placed in the area directly beneath or above an electric transmission, distribution, or customer service line and the area six feet to either side of that line. If this distance is not adequate to prevent the line and the associated voltage from contacting the LNG container in the event of breakage of any conductor, then other suitable means of protection designed and constructed to prevent such contact with the container may be used if approval is received from LP-Gas Operations. The request for approval shall be in writing and shall specify the manner in which the container will be protected from contact, including specifications for the materials to be used. If LP-Gas Operations does not

approve the proposed protection, then the container shall be located a sufficient distance from the line to prevent such contact.

The provisions of this §14.2110 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2113. Maintenance Tanks.

- (a) Stationary installations which include vehicle maintenance areas may have a container permanently installed outside the maintenance area to remove LNG from a vehicle if the removal of the LNG is necessary to perform maintenance or repairs. The container shall comply with the following requirements:
- (1) The container shall have a maximum water capacity of 200 gallons; and
- (2) The transfer of LNG from the vehicle into the maintenance container shall take place outside any building.
- (b) The container mounted on the mobile refueling vehicle described in §14.2307 of this title (relating to Indoor Fueling) may be used to store fuel from a vehicle requiring maintenance provided both the mobile refueling vehicle and the vehicle requiring maintenance are outside any building during the transfer of fuel.

The provisions of this \$14.2113 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2116. Transfer of LNG.

- (a) Venting of LNG is prohibited as part of routine activities, except for the following:
- (1) as provided for in §14.2119 of this title (relating to Transport Vehicle Loading and Unloading Facilities and Procedures); and
- (2) through a trycock installed on a stationary storage tank during filling of the tank.
- (b) LNG being transferred into stationary storage containers shall be compatible in composition or temperature and density with the LNG already in the container. When making transfers into fueling facility containers, the LNG shall be transferred at a pressure that will not exceed the set pressure of the pressure relief device.
- (c) When the composition or temperature and density are not compatible, measures shall be taken to prevent an excessive rate of vapor evolution.
- (d) At least one licensed or certified individual shall be in attendance while unloading is in progress.
- (e) Ignition sources shall not be permitted within 25 feet of the transfer area or within the distances specified as classified areas in Table 1 of §14.2513 of this title (relating to Electrical Equipment) while transfer of LNG is in progress.
- (f) Measuring instruments shall be provided to determine that containers are not overfilled.

The provisions of this §14.2116 adopted to be effective May 26, 2003, 28 TexReg 4100.

- §14.2119. Transport Vehicle Loading and Unloading Facilities and Procedures.
- (a) Transport vehicle loading and unloading facilities shall meet the following requirements:
- (1) Rack structures shall be constructed of noncombustible material such as steel or concrete.
- (2) Transfer piping, pumps, and compressors shall be installed with the following protective measures:
- (A) protection from damage from vehicle movements in compliance with the guardrail and fencing requirements of §14.2101 of this title (relating to Uniform Protection Requirements);
- (B) isolation valves at both ends of containers with less than 2,000 gallon capacity, and a remote operating valve, automatic closure, or check valve to prevent backflow on containers of 2,000 gallons or more capacity;
- (C) isolation valving and bleed connections to depressurize hoses and arms and minimize venting before disconnecting;
- (D) hoses and arms equipped with a shutoff valve at the free end;
- (E) a check valve on piping for liquid transfer to minimize accidental release; and
- (F) a line relief valve between every pair of isolation valves.
- (3) Where multiple products are loaded or unloaded at the same location, loading arms, hoses, and manifolds shall be marked to indicate the product or products handled by each system.
- (4) Operating status indicators shall be provided in the transfer area.
- (b) Written procedures covering normal transfer and emergency operating procedures shall be available for all transfer operations. The procedures shall be kept current and available to all employees engaged in transfer operations.
- (c) Prior to beginning transfer operations, the following checks shall be made:
- (1) Gauge readings shall be obtained or inventory established to prevent overfilling of the receiving vessel.
- (2) Transfer connections shall be checked to ensure they are gastight and liquidtight.
- (3) Unless required for transfer operations, LNG or flammable liquid transport vehicle engines shall be turned off. Brakes shall be set and wheels chocked to prevent movement of the vehicle prior to connecting for transfer. The engine shall not be started until the transport vehicle has been disconnected and any released vapors have dissipated.

- (4) Prior to loading LNG into a transport vehicle tank which does not have a positive pressure or is not in exclusive LNG service, a test shall be made to determine the oxygen content in the receiving container. If the oxygen content in either case exceeds 1.0% by volume, the container shall not be loaded until suitably purged.
- (5) An LNG transport vehicle shall be positioned prior to transfer so that it can exit the area without backing when the transfer operation is complete.
- (d) During transfer operations, the following checks shall be made:
- (1) Levels shall be checked during the transfer operations.
- (2) Pressure and temperature conditions shall be observed during the transfer operations. If any unusual variance in pressure occurs, transfer shall be stopped until the cause has been determined and corrected.
- (e) No repair shall be performed on the transfer system while transfer is taking place.

The provisions of this §14.2119 adopted to be effective May 26, 2003, 28 TexReg 4100.

- §14.2122. Transfer Systems, Including Piping, Pumps, and Compressors, Used for LNG and Refrigerants.
- (a) Transfer systems and pumps used for transfer of LNG and refrigerants shall be provided with means for precooling to reduce the effect of thermal shock and overpressure.
- (b) Check valves shall be provided as required to prevent backflow in transfer systems and shall be located as close as practicable to the point of connection to any system from which backflow might occur.
- (c) In addition to a locally mounted device to shut down the pump or compressor drive, a readily accessible, remotely located device shall be provided at least 25 feet away from the equipment to shut down the pump or compressor in case of emergency. The device shall be marked in accordance with the table in §14.2101 of this title (relating to Uniform Protection Requirements). Remotely located pumps and compressors used for loading or unloading tank vehicles shall be provided with shut-down controls at the transfer area and at the pump or compressor site.
- (d) Pressure gauges shall be installed on each pump and compressor discharge.
- (e) Valves shall be installed so that each pump or compressor can be isolated for maintenance. Where pumps or centrifugal compressors are installed for operation in parallel, each discharge line shall be equipped with a check valve.

(f) Pumps and compressors shall be provided with pressure relief devices to limit the discharge pressure to their maximum allowable working pressure.

The provisions of this §14.2122 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2125. Hoses and Arms.

- (a) Hoses and arms used for transfer shall be suitable for the temperature and pressure of the operating conditions. Hoses shall be designed to have a bursting pressure of at least five times the maximum allowable working pressure of the equipment to which it is attached.
- (b) Loading hoses or arms shall be supported to prevent displacement of the hoses and arms that results in greater stresses than those allowed in Appendix A of ANSI B31.3.
- (c) Couplings used for connection of a hose or arm shall be suitable for operating conditions and shall be designed for frequent coupling and uncoupling.
- (d) Hoses shall be tested at least annually to the setting of the relief valve that protects the hose.
- (e) Hoses shall be visually inspected for damage or defects before each use and shall not be used if any damage or defect is found.

The provisions of this §14.2125 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2128. Communications and Lighting.

- (a) Emergency communications shall be provided near transfer locations so that the operator can contact remotely located personnel who are associated with the transfer operations.
- (b) Transfer areas shall be illuminated during hours of darkness.

The provisions of this §14.2128 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2131. Fire Protection.

- (a) Fire protection shall be provided for all LNG facilities, as determined by sound fire protection engineering principles, analysis of local conditions, hazards within the facility, and exposure to or from other property. The evaluation shall determine at a minimum type, quantity, and location of:
- (1) equipment necessary for the detection and control of fires, leaks, and spills of LNG, flammable refrigerants, or flammable gases;
- (2) equipment necessary for the detection and control of potential non-process and electrical fires;
- (3) the methods necessary for protection of the equipment and structures from the effects of fire;
  - (4) fire protection water systems;
- (5) fire extinguishing and other fire control equipment;

- (6) the availability and duties of employees and the availability of local emergency response organizations during an emergency; and
- (7) the protective equipment and special training needed by employees for their emergency duties.
- (b) A detailed emergency response manual shall be prepared for potential emergency conditions. The procedures shall include but not be limited to:
- (1) shut-down or isolation of all or part of the equipment to ensure that the escape of gas or liquid is promptly stopped or reduced as much as possible;
  - (2) use of fire protection equipment;
- (3) notification of emergency response organizations and public authorities;
  - (4) first aid; and
  - (5) duties of employees.
- (c) The emergency procedure manual shall be available in the operating area and shall be updated as required by changes in equipment or procedures.
- (d) Employees engaged in LNG activities shall be trained in emergency duties and procedures. Refresher training shall be conducted at least once every two years.
- (e) Fire control measures shall be coordinated with the local fire and emergency response organizations.
- (f) Safety and fire protection equipment shall be visually inspected at least once a month and tested at least once a year. Documentation shall be maintained on inspections and tests for at least two years or consistent with other safety record retention schedules, whichever is greater.
- (g) Maintenance on fire control equipment shall be scheduled so that a minimum of equipment is out of service at any one time and fire protection safety is not compromised. Access routes for movement of fire control equipment to an LNG fueling facility shall be maintained at all times.
- (h) Fire extinguishing and other fire control systems shall follow the local fire marshal's requirements and recommendations for the protection of specific hazards.
- (i) Dry chemical fire extinguishers suitable for extinguishing gas fires shall be provided at each stationary LNG installation.

The provisions of this §14.2131 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2134. Container Purging Procedures.

- (a) Only experienced and qualified personnel shall be responsible for container purging procedures.
- (b) Prior to placing an LNG container into service, the air shall be displaced by an acceptable inerting procedure as described in American Gas Association Purging Principles and Practice, 1975 edition.

- (c) Prior to taking a container out of service, the natural gas in the container shall be purged by an acceptable inerting procedure.
- (d) The oxygen content of the container during purging operations shall be determined by an acceptable oxygen analyzer.

The provisions of this §14.2134 adopted to be effective May 26, 2003, 28 TexReg 4100.

### §14.2137. Employee Safety and Training.

- (a) Employees shall be advised of the hazards relative to LNG facility operations.
- (b) Protective clothing and equipment shall be provided to employees for both normal operations and emergency response.
- (c) Employees who handle and dispense LNG shall be trained in proper handling, operating duties, and procedures.
- (d) Employees shall be trained upon employment and as needed thereafter, but no less than every two years. Training shall include the following:
- (1) information on the nature, properties, and hazards of LNG in both the liquid and gaseous phases;
- (2) specific instructions on the facility equipment to be used;
- (3) use and care of protective equipment and clothing;
  - (4) standard first aid;
- (5) response to emergency situations such as fire, leaks, and spills;
  - (6) good housekeeping practices;
  - (7) the emergency response plan; and
  - (8) evacuation and fire drills.
- (e) Licensees or ultimate consumers shall retain employee safety training records for the past four years.

The provisions of this §14.2137 adopted to be effective May 26, 2003, 28 TexReg 4100.

### §14.2140. Inspection and Maintenance.

- (a) Licensees shall have a preventive maintenance program in place which includes a schedule of written procedures for regular testing and inspection of facility systems and equipment.
- (b) Components and their related support systems shall be maintained in a condition that is compatible with their operation or safety purpose by repair, replacement, or other means.
- (c) If a safety device is taken out of service for maintenance, the component served by the device shall also be taken out of service unless the same safety function is provided by an alternate means.
- (d) If the inadvertent operation of a component taken out of service could cause a hazardous condition, that component shall have a weather-resistant tag attached to the controls with the words, "DO NOT OPERATE," or similar notice.

- (e) The operations supervisor shall retain permanent records of dates and maintenance activities performed.
- (f) Welding, cutting, and similar operations shall be prohibited within 25 feet of the container and the transfer area during transfer operations and shall be conducted only as specifically authorized in a manner to prevent accidental ignition of LNG or flammable fluids.

The provisions of this §14.2140 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### SUBCHAPTER D. GENERAL RULES FOR LNG FUELING FACILITIES

§14.2301. Applicability. This subchapter applies to the design, construction, installation, and operation of containers, pressure vessels, pumps, vaporization equipment, buildings, structures, and associated equipment used for the storage and dispensing of LNG as an engine fuel for vehicles of all types.

The provisions of this §14.2301 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2304. General Facility Design.

- (a) LNG fueling facilities shall be designed with provisions for securing all equipment in accordance with §14.2101 of this title (relating to Uniform Protection Requirements).
- (b) Structures and support of LNG fueling facility equipment, piping, controls, and tanks shall be constructed of noncombustible material.
- (c) Dikes, grading, or diversion curbs shall be provided to prevent combustible or hazardous liquids from encroaching on the LNG refueling facility.
- (d) LNG shall not be vented to the atmosphere under normal operations unless the vent leads to a safe point of discharge. Vent pipes or stacks shall have the open end suitably protected to prevent entrance of rain, snow, and other foreign material. Vent stacks shall have provision for drainage.
- (e) Instructions identifying the location and operation of emergency controls shall be conspicuously posted in the facility area.
- (f) LNG fueling facility containers, liquid impoundment areas, and points of transfer shall be located according to the distances specified in §14.2110 of this title (relating to LNG Container Installation Distance Requirements).
- (g) LNG fueling facility containers may be sited above or below grade. Soil susceptible to freezing from contact with containers shall be heated directly or protected with an air space.
- (h) Containers having outer jackets made of materials subject to corrosion shall be protected against corrosion.

- (i) Vehicles delivering LNG to a facility or vehicles being fueled from a facility shall not be considered ignition sources. Vehicles containing fuel-fired equipment, such as recreational vehicles and catering trucks, shall be considered ignition sources unless the fuel-fired equipment is shut off completely before the vehicle enters an area in which ignition sources are prohibited.
- (j) LNG fueling facilities which transfer LNG at night shall have permanent lighting at points of transfer and operation, including at least two lights with a total of at least two footcandles of power.
- (k) Temperature monitoring systems shall be provided where the foundations supporting cryogenic containers and equipment could be adversely affected by freezing or frost heaving of the ground.

The provisions of this §14.2304 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2307. Indoor Fueling.

- (a) Buildings reserved exclusively for LNG fueling shall be constructed of noncombustible or limited combustible material. Windows and doors shall be located to permit ready egress in case of emergency.
- (b) Buildings used for indoor fueling shall meet the following requirements:
- (1) Indoor fueling facilities that are within a local fire marshal's jurisdiction shall obtain written approval from the local fire marshal, either by signature, seal, or stamp on LNG Form 2500 or on a separate letter.
- (2) Indoor fueling facilities that are outside a local fire department's jurisdiction shall comply with the requirements of the Uniform Building Code.
- (c) LNG Form 2500, including plans and specifications, shall be filed with LP-Gas Operations, as specified in §14.2040 of this title (relating to Filings and Notice Requirements for Stationary LNG Installations).

The provisions of this §14.2307 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2310. Emergency Refueling.

- (a) Licensees and nonlicensees, such as mass transit authorities, may use a mobile refueling vehicle for emergency refueling provided it complies with the following requirements:
- (1) The gross vehicle weight (GVW) shall not exceed the GVW rating. Installation of the container shall not adversely affect the vehicle.
- (2) The vehicle used to transport the container shall comply with all DOT and Texas placarding requirements.
- (3) The LNG cargo container shall have a maximum water capacity of 200 gallons.

- (4) The container, fittings, and transfer equipment shall be properly secured against displacement.
- (b) The individual performing the transfer of LNG shall be properly trained in all aspects of LNG transfer.
- (c) Prior to the mobile refueling vehicle being placed into service, the licensee or non-licensee shall file with LP-Gas Operations a drawing showing the mounting, type of container, water capacity of the container, type of vehicle to be used, and the method of mounting. The vehicle shall not be placed into service until LP-Gas Operations ensures that it complies with the applicable rules.
- (d) Emergency refueling vehicles are not required to be registered with LP-Gas Operations.

The provisions of this §14.2310 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective June 5, 2006, 31 TexReg 4607; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2313. Fuel Dispensing Systems.

- (a) Compliance with this section does not ensure conformity with other state and federal regulations, such as those of the Texas Commission on Environmental Quality or the United States Environmental Protection Agency. Retail LNG dispensers shall comply with the applicable weights and measures requirements of the Texas Department of Agriculture relating to dispensing accuracy.
- (b) Appurtenances and equipment placed into LNG service shall be listed by a Category 15, 20, or 50 licensee unless:
- (1) the appurtenances or equipment are specifically prohibited for use by another section of the rules in this chapter; or
- (2) there is no test specification or procedure developed by a testing laboratory for the appurtenances or equipment.
- (c) Appurtenances and equipment that are labeled but not listed and are not prohibited for use by the rules in this chapter shall be acceptable and safe for LNG service over the full range of pressures and temperatures to which they will be subjected under normal operating conditions.
- (d) LP-Gas Operations may require any documentation sufficient to substantiate any claims made regarding the safety of any valves, fittings, and equipment.
  - (e) Drive-away protection shall be provided.
- (f) Emergency shut-down devices shall be distinctly marked for easy recognition according to the requirements of Table 1 of §14.2101 of this title (relating to Uniform Protection Requirements) and shall activate a valve installed at the dispensing area that shuts off the power and gas supply to the dispensers. ESD devices shall be located as follows:

- (1) For containers with water capacity of 93,240 gallons or less, an ESD device shall be located between 35 and 50 feet from the container.
- (2) For containers with water capacity of 93,241 gallons or more, an ESD device shall be located between 60 and 75 feet from the container.
- (g) Manually operated container valves shall be provided for each container.
- (h) Manually operated shutoff valves shall be installed in manifolds as close as practicable to a container or group of containers.
- (i) The use of hoses or arms in a fueling installation is limited to:
  - (1) a vehicle fueling hose;
- (2) an inlet connection to compression equipment; or
- (3) a section of metallic hose not exceeding 36 inches in length in a pipeline to provide flexibility where necessary. Metallic hose shall be installed so that it will be protected against damage and be readily visible for inspection. The manufacturer's identification shall be retained for each section of metallic hose used.
- (j) When a hose or arm of nominal three-inch diameter or larger is used for liquid transfer, or nominal four-inch diameter or larger is used for vapor transfer, an emergency shutoff valve shall be installed in the piping of the transfer system less than ten feet from the nearest end of the hose or arm. If the flow is away from the hose, a check valve may be used as the shutoff valve. If a liquid or vapor line has two or more legs, an emergency shutoff valve shall be installed in each leg.
- (k) The fill line on storage containers shall be equipped with a backflow check valve to prevent discharge of LNG from the container in case of line, hose, or fitting rupture.
- (l) A fueling connection and mating vehicle receptacle shall be used to transfer LNG or gas vapor to or from the vehicle.
- (m) An interlock device shall be provided so that the hose coupling cannot be released while the transfer line is open. Interlock devices are not required for transports when transferring fuel to a stationary tank.
- (n) The maximum delivery pressure shall not exceed the maximum allowable working pressure of the vehicle and fuel tanks.
- (o) Where excess flow check valves are used, the closing flow shall be less than the flow rating of the piping system that would result from a pipeline rupture between the excess flow valve and the equipment downstream of the excess flow check valve.

The provisions of this §14.2313 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2316. Filings Required for Installation of Fuel Dispensers. After the installation of a fuel dispenser,

LNG Form 2501 shall be filed with LP-Gas Operations along with the required fees set forth in §14.2040 of this title (relating to Filings and Notice Requirements for Stationary LNG Installations). Site plans shall detail the area within 150 feet of the dispenser and the fuel storage container or to the facility's property line, whichever is less. Tentative approval shall be granted if the site plans indicate the installation will meet the requirements of the rules in this chapter and the Texas Natural Resources Code. Final approval shall be issued only after a field inspection confirms that the installed dispenser meets all the requirements of the rules in this chapter.

The provisions of this §14.2316 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2319. Automatic Fuel Dispenser Safety Requirements.

- (a) Automatic fuel dispensers shall be fabricated of material suitable for LNG and resistant to the action of LNG under service conditions. Pressure containing parts shall be stainless steel, brass, or other equivalent cryogenic material. Aluminum may be used for approved meters.
- (b) Electric installations within dispenser enclosures and the entire pit or open space beneath dispensers shall comply with NEC, Class 1, Group D, Division 1, except for dispenser components located at least 48 inches above the dispenser base which NEC states are intrinsically safe.
- (c) Valves, metering equipment, and other related equipment installed on automatic dispensers shall meet all applicable requirements of the rules in this chapter.
- (d) Automatic dispensers shall be protected from damage by vehicle collision by fencing and guardrails installed in accordance with §14.2101 of this title (relating to Uniform Protection Requirements).
- (e) A device shall be installed in the liquid piping so that displacement of an automatic dispenser will result in the displacement of such piping on the downstream side of the device.
- (f) The fueling nozzle shall prevent LNG from being discharged unless the nozzle is connected to the vehicle.
- (g) A key, card, or code system shall be used to activate the automatic dispenser.
- (h) Automatic dispensers shall incorporate cutoff valves with opening and closing devices which ensure the valves are in a closed position when dispensers are deactivated.
- (i) LNG fuel storage installations which include automatic dispensers shall be equipped with an emergency shut-down device for the entire LNG installation located at least 20 feet from the nearest dispenser or storage area. The emergency shut-down

device shall be distinctly marked for easy recognition in compliance with the requirements of §14.2101 of this title (relating to Uniform Protection Requirements).

(j) If automatic dispensers are to be used during hours of darkness, permanent adequate lighting shall be provided to facilitate proper operations.

The provisions of this §14.2319 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

# §14.2322. Protection of Automatic and Other Dispensers.

- (a) Dispensers shall be secured to a concrete island at least six inches above the normal grade and two inches above the grade of any other liquid fuel dispenser.
- (b) Dispensers shall be protected against collision damage by support columns or other such protection installed at the approach ends of the concrete island.
- (c) If the protection described in subsections (a) and (b) of this section cannot be provided, the dispensers shall be protected as specified in §14.2101 of this title (relating to Uniform Protection Requirements).

The provisions of this §14.2322 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2325. LNG Transport Unloading at Fueling Facilities. Procedures and requirements for LNG transport unloading at fueling facilities shall be as specified in §14.2119 of this title (relating to Transport Vehicle Loading and Unloading Facilities and Procedures) of this chapter.

The provisions of this §14.2325 adopted to be effective May 26, 2003, 28 TexReg 4100.

# §14.2328. Training, Written Instructions, and Procedures Required.

- (a) Dispensers may be operated only by an individual who has been properly trained in all aspects of the operation and safety procedures.
- (b) Any individual who operates a dispenser shall be provided with written instructions and safe operating procedures by the licensee. Step-by-step operating instructions provided by the manufacturer shall be posted at or on each dispenser and shall be readily visible to the operator during transfer operations. The instructions shall describe each action necessary to operate the dispenser.
- (c) Licensees or ultimate consumers shall maintain a current list of all individuals trained in the safe operation of dispensers.

The provisions of this §14.2328 adopted to be effective May 26, 2003, 28 TexReg 4100.

# SUBCHAPTER E. PIPING SYSTEMS AND COMPONENTS FOR ALL STATIONARY LNG INSTALLATIONS

§14.2401. General Provisions for Piping Systems and Components. Piping systems shall comply with ANSI B31.3, Chemical Plant and Petroleum Refinery Piping. The additional provisions of this subchapter apply only to pressurized piping systems and components for LNG, flammable refrigerants, flammable liquids, and flammable gases, and unpressurized or low pressure piping systems, including vent lines and drain lines which handle LNG, flammable refrigerants, flammable liquids, and flammable gases with service temperatures below -20 degrees Fahrenheit.

The provisions of this §14.2401 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2404. Piping Materials.

- (a) Piping materials, including gaskets and thread compounds, shall be suitable for use with LNG throughout the range of temperatures to which they will be subjected. The temperature limitations for pipe materials shall be as specified in ANSI B31.3.
- (b) Piping which would be exposed during an emergency to the cold of an LNG or refrigerant spill or the heat of an ignited spill when either exposure could result in a failure of the piping which would significantly increase the emergency shall be:
- (1) made of material that is suitable for both its normal operating temperature and the extreme temperatures to which it might be subjected during an emergency;
- (2) protected by insulation or other means to delay failure due to such extreme temperatures until corrective action may be taken by the operator; or
- (3) capable of being isolated and having the flow stopped in piping that would be exposed only to the heat of an ignited spill during the emergency.
- (c) Piping insulation used in areas where the mitigation of fire exposure is necessary shall be made of material which will not propagate fire and shall maintain any properties which are necessary during an emergency when exposed to fire, heat, cold, or water.
- (d) Furnace lap-weld, furnace butt-weld, cast iron, malleable iron, and ductile iron pipe shall be prohibited.
- (e) When longitudinal or spiral weld pipe is used (welded with or without filler metal), the weld and heat-affected zone shall comply with ANSI B31.3, 323.2.2, and §14.2419 of this title (relating to Welding at Piping Installations).
  - (f) Threaded pipe shall be at least schedule 80.
- (g) A liquid line, excluding loading arms or hoses, on a storage container, cold box, or other major item of insulated equipment external to the outer shell or jacket whose failure can release a significant quantity of flammable fluid shall not be made of aluminum,

copper, or copper alloy, or other material which has low resistance to flame temperatures unless such material is protected against fire exposure. Transition joints may be used if they are protected against fire exposure.

The provisions of this \$14.2404 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2407. Fittings Used in Piping.

- (a) Cast iron, malleable iron, and ductile iron shall not be used in fittings.
  - (b) Threaded nipples shall be at least schedule 80.
- (c) Bends are permitted only in accordance with ANSI B31.3, 329.
- (d) Solid plugs or bull plugs made of at least schedule 80 shall be used for threaded plugs.
- (e) Compression-type couplings shall not be used where they will be subjected to temperatures below -20 degrees Fahrenheit unless such couplings meet the requirements of ANSI B31.3, 318.

The provisions of this \$14.2407 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### §14.2410. Valves.

- (a) Cast iron, malleable iron, and ductile iron shall not be used in valves in piping.
- (b) Extended bonnet valves with or without bellows seals should be used for service temperatures below -50 degrees Fahrenheit.

The provisions of this §14.2410 adopted to be effective May 26, 2003, 28 TexReg 4100.

### §14.2413. Installation of Piping.

- (a) Bolted connections shall be designed to withstand thermal contraction and expansion.
- (b) Pipe joints larger than two-inch nominal diameter shall be welded or flanged. Joints of four-inch nominal diameter or less may be threaded where necessary for special connections to equipment provided that the special connection is not subject to fatigue-producing stresses. The number of threaded or flanged joints shall be kept to a minimum. Dissimilar metals shall only be joined by flanges or transition joint techniques which will not be adversely affected by LNG.
- (c) Gasket material shall withstand as much as practicable exposure to fire.
- (d) Piping and tubing shall be installed as directly as possible with provisions for expansion, contraction, jarring, vibration, and settling. Underground piping shall be buried at least 18 inches below the ground surface unless otherwise protected. Refrigerated piping shall not be buried unless the surrounding soil is heated.

The provisions of this §14.2413 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2416. Installation of Valves.

- (a) Valves shall be installed to prevent leaking or malfunction due to freezing. Cryogenic liquid valves shall be installed at an angle greater than 45 degrees from horizontal.
- (b) Isolation valves shall be provided on container, tank, and vessel connections, except for connections:
- (1) for relief valves. Shutoff valves are only permitted at connections for relief valves in accordance with ASME Code, Section VIII, Division 1, Paragraphs UG-125(d) and Appendix M, Paragraphs M-5 and M-6;
- (2) for liquid level alarms required by §14.2501 of this title (relating to Liquid Level Gauging); or
  - (3) that are blind-flanged or plugged.
- (c) Shutoff valves shall be located inside the impounding area as close as practicable to the containers, tanks, and vessels.
- (d) Internal valves shall be designed and installed so that any failure of the nozzle will be downstream of the seat of the internal valve itself.
- (e) The number of shutoff valves installed shall be kept to the minimum required for efficient and safe operation of each facility.
- (f) Piping systems shall be designed to limit the contained volume that could be discharged in the event of a piping system failure. Sufficient valves which can be operated both at the installed location and from a remote location to shut down the process and transfer systems in the event of an emergency shall be installed.
- (g) Container connections larger than one-inch pipe size through which liquid can escape shall be equipped with:
- (1) a valve which closes automatically if exposed to fire; or
- (2) a remotely controlled, quick-closing valve which shall remain closed except during the operating period;
  - (3) a fail-closed valve; or
  - (4) a check valve on filling connections.
  - (h) ESD valves shall be single-purpose valves.
- (i) Valves and valve controls shall be designed to permit operation under icing conditions, if such conditions are possible.
- (j) Powered controls shall be provided for emergency shutoff valves that would require excessive time to manually operate during an emergency or if the valve is eight inches or larger in size. A means for manual operation shall also be provided.

The provisions of this §14.2416 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2419. Welding at Piping Installations. Qualification and performance of welders shall comply with ANSI B31.3. Oxygen-fuel gas welding is prohibited on piping for service temperatures below -20

degrees Fahrenheit. Electric arc or inert gas-shielded welding are permissible.

The provisions of this \$14.2419 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2422. Pipe Marking and Identification.

- (a) Markings on pipe shall be made with a material compatible with the basic material or with a round-bottom, low-stress die. Materials less than 1/4 inch in thickness shall not be die-stamped.
- (b) Marking materials that are corrosive to the pipe material shall not be used.
- (c) Piping shall be identified by color-coding, painting, or labeling so as to be readily readable.

The provisions of this §14.2422 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2425. Pipe Supports.

- (a) Pipe supports, including insulation systems used to support pipe whose integrity is essential to facility safety, shall be resistant to or protected from fire exposure, escaping cold liquid, or both, if such exposure is possible.
- (b) Pipe supports for cold lines shall be designed to prevent excessive heat transfer which can result in piping restraints caused by ice formations or embrittlement of supporting steel. Design of supporting elements shall conform with ANSI B31.3, 321.

The provisions of this §14.2425 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2428. Inspection and Testing of Piping.

- (a) Pressure tests shall be conducted in accordance with ANSI B31.3, 337.
- (b) Pressure, test medium temperature, and ambient temperature shall be recorded for the duration of each test and these records shall be maintained for the life of the facility or until such time as a retest is conducted.

The provisions of this §14.2428 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2431. Welded Pipe Tests.

- (a) Longitudinal or spiral welded pipe which will be subjected to service temperatures below -20 degrees Fahrenheit shall have a design pressure of less than 2/3 of the mill proof test pressure or subsequent shop or field hydrostatic test pressure, except for pipe which has been subjected to 100% radiographic or ultrasonic inspection of the longitudinal or spiral weld.
- (b) Circumferential butt-welds shall be fully examined by radiographic or ultrasonic inspection. Piping with an operating pressure that produces a hoop stress of less than 20% specified minimum yield stress need not be nondestructively tested provided it has been visually inspected in accordance with ANSI B31.3, 336.4.2.

- (c) Socket welds and fillet welds shall be fully examined by liquid penetrant.
- (d) Fully penetrated groove welds for branch connections required by ANSI B31.3, 327.4.4 shall be fully examined by inprocess examination in accordance with ANSI B31.3, 336.4.7, and shall also be examined by liquid penetrant after the final pass of the weld. If specified in the engineering design or specifically authorized by the inspector, examination by radiographic or ultrasonic techniques may be substituted for the examinations required by this paragraph.
- (e) Nondestructive examination methods, limitations on defects, qualifications of the authorized inspector, and personnel performing the examination shall meet the requirements of ANSI B31.3, 336.
- (f) Test records and written procedures required when conducting nondestructive examinations shall be maintained for the life of the piping system or until such time as a reexamination is conducted.
- (g) Records and certifications pertaining to materials, components, and heat treatment as required by ANSI B31.3, 336.5.1(c) and 336.5.3(d) shall be maintained for the life of the system.

The provisions of this §14.2431 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2434. Purging of Piping Systems. Piping systems shall be purged of air or gas in a safe manner. Blowdown and purge connections shall be provided to facilitate purging of all process and flammable gas piping. Such connections shall be installed to eliminate all hazards to a safe operating condition.

The provisions of this §14.2434 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2437. Pressure and Relief Valves in Piping.

- (a) Pressure relieving safety devices shall be installed to minimize damage to equipment and personnel. The means for adjusting relief valve set pressure shall be sealed.
- (b) Thermal expansion relief valves shall be installed to prevent overpressure in any section of cold liquid or cold vapor piping which can be isolated by valves.
- (c) Thermal expansion relief valves shall be set to discharge above the maximum pressure normally expected in the line but less than the rated test pressure of the line they protect.
- (d) Discharge from the valves shall be directed to minimize hazard to personnel or equipment and the discharge location shall be approved by LP-Gas Operations.

The provisions of this §14.2437 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

#### §14.2440. Corrosion Control.

- (a) Underground and submerged piping shall be protected and maintained in accordance with the National Association of Corrosion Engineers Standard RP-01-69M, Control of External Corrosion of Underground or Submerged Metallic Piping Systems.
- (b) Austenitic stainless steels and aluminum alloys shall be protected to minimize corrosion and pitting from corrosive atmospheric and industrial substances during storage, construction, fabrication, testing, and service.

The provisions of this §14.2440 adopted to be effective May 26, 2003, 28 TexReg 4100.

# SUBCHAPTER F. INSTRUMENTATION AND ELECTRICAL SERVICES

§14.2501. Liquid Level Gauging.

- (a) LNG containers shall be equipped with liquid level gauging devices. Density variations shall be considered in the selection of the gauging device. Consideration shall be given to a secondary or backup gauge. At least one of these gauges shall be replaceable without taking the container out of operations.
- (b) When the container filling rate is greater than 1.0% per day, the container shall be provided with a high-liquid-level alarm which shall be separate from the liquid level gauging device. The alarm shall be set so that the operator will have sufficient time to stop the flow without exceeding the maximum permissible filling height, and shall be located so that it is visible and audible to personnel controlling the filling. A high-liquid-level flow cutoff device, if used, shall not substitute for the alarm.
- (c) Containers with a capacity of 93,240 gallons or less which are continuously attended during the filling operation may be equipped with trycocks in lieu of the high-liquid-level alarm.

The provisions of this §14.2501 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2504. Pressure Gauges. LNG containers shall be equipped with a pressure gauge connected to the container at the point above the maximum intended liquid level.

The provisions of this §14.2504 adopted to be effective May 26, 2003, 28 TexReg 4100.

*§14.2507.* Vacuum Gauges. Vacuum-jacketed containers shall be equipped with instruments or connections for checking the absolute pressure in the annular space.

The provisions of this §14.2507 adopted to be effective May 26, 2003, 28 TexReg 4100.

*§14.2510. Emergency Failsafe.* Facilities shall be designed so that if power or instrument air fails, the system will go into a failsafe condition that will be maintained until the operator can take appropriate action to either reactivate or secure the system.

The provisions of this §14.2510 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2513. Electrical Equipment.

- (a) Electrical equipment and wiring shall be installed in accordance with the applicable sections of NEC.
- (b) Fixed electrical equipment and wiring installed within the areas specified in Table 1 of subsection (h) of this section shall comply with the requirements specified.
- (c) Seals, barriers, or other means used to comply with this section shall be designed to prevent the passage of flammable fluids through the conduit, stranded conductors, and cables. Such means may include but not be limited to:
- (1) a physical interruption of the conduit run and of the stranded conductors through the use of an adequately vented junction box containing terminal strip or busbar connections;
- (2) an exposed section of MI cable using suitable fittings; or
- (3) an exposed section of single conductor which is incapable of transmitting gases or vapors.
- (d) A primary seal shall be provided between the flammable fluid system and the electrical conduit wiring system. If the failure of the primary seal would allow the passage of flammable fluids to another portion of the conduit or wiring system, an additional seal shall be provided to prevent the passage of the flammable fluid beyond the additional device or means.
- (e) Unless specifically designed and approved for the purpose, the seals specified in this section are not intended to replace the conduit seals required in NEC.
- (f) Where primary seals are installed, drains, vents, or other devices shall be provided for monitoring purposes to detect flammable fluids and leaking.
- (g) Primary seals shall be designed to withstand the service conditions to which they may be exposed. Additional seals or barriers and interconnecting enclosures shall meet the pressure and temperature requirements of the condition to which they could be exposed in the event of failure of the primary seal, unless other approved means are provided to accomplish this purpose.
- (h) The classified areas described in Table 1 of this section shall not extend beyond an unpierced wall, roof, or solid vaportight partition.

Table 1

LOCATION	GROUP D, DIVISION	EXTENT OF CLASSIFIED AREA	
LNG Storage Container Area			
Indoors	1	Open area between a high-type dike and container wall where dike wall height exceeds distance between dike and container walls.	
Outdoors, aboveground containers (other than small containers that are portable and less than 200 gallons aggregate water capacity)	1	Within 15 feet in all directions from container walls and roof, plus area inside a low-type diked or impounding area up to the height of the dike impoundment.	
Pits, Trenches or Sumps Located in or Adjacent to Division 1 or 2 Areas	1	Entire pit, trench or sump.	
Transport Vehicle and Container Loading and Unloading			
Outdoors in open air at or above grade	2	Within 5 feet in all directions from connections regularly made or disconnected for product transfer.  Between 5 and 15 feet in all directions from a point where connections are regularly made or disconnected, and within the cylindrical volume between the horizontal equator of the sphere and the grade.	
Electrical Seals and Vents Specified in Subchapter F of this Title (relating to Instrumentation and Electrical Services)	2	Within 15 feet in all directions from the equipment, and within the cylindrical volume between the horizontal equator and grade.	

The provisions of this §14.2513 adopted to be effective May 26, 2003, 28 TexReg 4100.

# §14.2516. Electrical Grounding and Bonding.

- (a) Electrical grounding and bonding shall be provided as recommended by NFPA 77, Static Electricity, Sections 5.4 and 6.1.3, and as required by the NEC.
- (b) Static protection is not required when container vehicles are loaded or unloaded by conductive or nonconductive hose, flexible metallic tubing, or pipe connections through or from tight top or bottom outlets where both halves of metallic couplings are in contact.
- (c) If stray currents may be present or if impressed currents are used on loading and unloading systems such as for cathodic protection, protective measures to

prevent ignition shall be taken in accordance with API RP 2003, Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents.

(d) Grounding shall be provided for tanks supported on nonconductive foundations. Metal storage containers and tanks do not require lightning protection.

The provisions of this §14.2516 adopted to be effective May 26, 2003, 28 TexReg 4100.

# SUBCHAPTER G. ENGINE FUEL SYSTEMS

§14.2601. Applicability. This subchapter applies to the design, installation, inspection, and testing of LNG fuel supply systems for vehicle engines and other engines installed on a vehicle.

The provisions of this \$14.2601 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2604. System Component Qualification.

- (a) Components in the engine compartment normally in contact with LNG shall be suitable for service over a range of temperatures of -260 degrees Fahrenheit to +250 degrees Fahrenheit. Other components not normally in contact with LNG shall be suitable for service over a range of -40 degrees Fahrenheit to +250 degrees Fahrenheit.
- (b) Components outside the engine compartment normally in contact with LNG shall be suitable for service over a range of temperatures from -260 degrees Fahrenheit to +180 degrees Fahrenheit. Other components not normally in contact with LNG shall be suitable for service over a range from -40 degrees Fahrenheit to +180 degrees Fahrenheit.
- (c) Fuel-carrying components (excluding service valves, tubing, and fittings) shall be labeled or stamped with the following:
  - (1) the manufacturer's name or symbol;
  - (2) the model designation;
- (3) the maximum allowable maximum allowable working pressure;
  - (4) the design temperature range;
- (5) direction of flow of fuel when necessary for correct installation; and
- (6) capacity or electrical rating as applicable. The provisions of this §14.2604 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2607. Vehicle Fuel Containers.

- (a) Containers shall be designed, tested, and marked or stamped in accordance with DOT Specification 4L or ASME Code, "Rules for the Construction of Pressure Vessels," Section VIII, Division 1, applicable on the date of manufacture.
- (b) The owner of a container shall be responsible for its suitability for continued service.
- (c) Repair or alteration of containers shall comply with the Code under which that container was fabricated. Licensees making repairs or alterations shall file LNG Form 2008 with LP-Gas Operations.
- (d) Containers shall be equipped with a dip tube or other device so that the maximum filling volume of the container complies with §14.2107 of this title (relating to Stationary LNG Storage Containers).
- (e) Containers shall be constructed so that the unrelieved pressure inside the container shall not exceed the maximum allowable working pressure of the container within a 72-hour period at an ambient temperature of 70 degrees Fahrenheit after the container has been filled with LNG stabilized at the maximum allowable working pressure and temperature equilibrium has been established.
- (f) Connections for pressure relief valves shall be located and installed to communicate directly with the vapor space.

- (g) Containers shall have permanent identification markings, decals, or stencils to identify:
- (1) the total volumetric capacity of the container in gallons;
- (2) the words, "FOR LNG ONLY," in capital letters at least one inch high in a location that is visible after installation; and
- (3) all inlets and outlets, except relief valves and gauging devices, designating whether they communicate with vapor or liquid space.
- (h) Container appurtenances shall be fabricated of materials suitable for LNG service. Pressure containing metal parts of appurtenances, except fusible elements, shall have a minimum melting point of +1,500 degrees Fahrenheit. Container appurtenances shall have a rated maximum allowable working pressure not less than the maximum allowable working pressure of the container.
- (i) Containers shall be equipped with the pressure relief devices and pressure control valves required by the code or regulations under which the containers were designed. The pressure relief devices and pressure control valves shall communicate directly with the vapor space of the container, and shall be designed to minimize the possibility of tampering. Externally set or adjusted valves shall be provided with a means of sealing the adjustment.
- (j) Valves shall be readily accessible and operable without the use of tools. A shutoff valve shall be installed directly on the container vapor outlet with no intervening fitting other than pressure relief devices and shall be marked with the words, "VAPOR SHUTOFF VALVE." Another shutoff valve shall be installed directly on the container liquid outlet and shall be marked with the words, "LIQUID SHUTOFF VALVE." The markings shall be in capital letters. Decals or stencils are acceptable. Normally closed automatic shutoff valves that are held open by electric current or manually operated shutoff valves may be used.

The provisions of this §14.2607 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

## §14.2610. Installation of Vehicle Fuel Containers.

- (a) Vehicle fuel containers shall comply with the following specifications:
- (1) Fuel containers 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 compartments, provided all connections to the containers are external to or sealed and vented from those compartments. The motor fuel containers installed on a special transit vehicle may be installed in the passenger compartment, provided all connections to the containers are external to or sealed and vented from those compartments.

- (2) Fuel supply components and containers shall be mounted in a location to minimize damage from collision. No part of a container or its appurtenances shall protrude beyond any part of the vehicle at the point of installation.
- (3) Fuel systems shall be installed with as much road or ground clearance as practicable, but not less than the minimum road or ground clearance of the vehicle when loaded to its gross vehicle weight rating. The minimum distance shall be measured from the lowest part of the fuel system.
- (4) No portion of a fuel supply container or container appurtenance shall be located ahead of the front axle or behind the rear bumper mounting face of a vehicle. Fuel container valves shall be protected from physical damage using the vehicle structure, valve protectors, or a suitable metal shield.
- (5) Fuel supply containers located less than eight inches from the exhaust system shall be shielded from direct heat.
- (6) Mountings shall minimize fretting corrosion between the fuel container and the mounting system by means of rubber insulators or other suitable means.
- (7) Fuel containers shall not be installed where they would adversely affect the driving characteristics of the vehicle.
- (8) Fuel containers on school buses or mass transit vehicles shall be installed on the underside of the vehicle, except as specified in subsection (c) of this section. Fuel containers on special transit vehicles shall be installed in a location which will not interfere with vehicle operation.
- (9) Fuel containers, appurtenances, and connections may be enclosed in a shroud-type structure, provided it is securely attached to the container and liquid-tight. The shroud access doors shall be secured in place by fasteners such as wing nuts or spring-loaded latches and shall not require the use of tools for removal. The use of locks on shroud access doors is prohibited.
- (b) Fuel supply containers shall be connected or mounted to comply with the following specifications:
- (1) Fuel supply container connections shall be external to or sealed and vented from the driver and passenger compartments or any space containing radio transmitters or other spark-producing equipment.
- (2) Container brackets 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 full container for vehicles with gross vehicle weights of 19,500 pounds or less, and four times the weight of a full container for vehicles with gross vehicle weights of 19,501 pounds or more. Mounting brackets shall be marked with the

- manufacturer's name or logo. If self-locking nuts are installed, they shall not be reused once they are removed. Container mounting brackets shall prevent the container from jarring loose, slipping or rotating.
- (3) Fuel supply containers 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 full container for vehicles with gross vehicle weights of 19,500 pounds or less, and four times the weight of a full container for vehicles with gross vehicle weights of 19,501 pounds or more. If self-locking nuts are installed, the nuts shall not be reused once they are removed.
- (4) The weight of the fuel container shall not be supported by the outlet, service valves, manifolds, or other fuel connections.
- (5) Containers shall be secured to a school bus, mass transit, or special transit vehicle frame excluding the floor by container fastenings or mounting brackets described in subsection (b) of this section. The fastenings or brackets shall be secured to the frame, backing plates, or other supporting structure without compromising the strength of that structure.
- (c) Roof-mounted containers are allowed if the vehicle was originally designed and manufactured to have roof-mounted containers or if the original manufacturer approves the design of the structure mounting. Vehicles shall not be modified to have roof-mounted containers.
- (d) Container markings shall be readable after a container is permanently installed on a vehicle. A portable lamp or mirror may be used to read markings.
- (e) Where an LNG container is substituted for the fuel container installed by the original manufacturer of the vehicle, whether or not that fuel container was for LNG, the LNG container shall either fit within the space in which the original fuel container was installed or comply with subsection (a) of this section.
- (f) If necessary, a plumbing chamber door shall be provided in the sidewall of the school bus, mass transit, or special transit vehicle to allow for 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 \$14.2610 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2613. Engine Fuel Delivery Equipment.

(a) Vaporizers shall completely vaporize the LNG and heat the vapor to the appropriate temperature prior to the vapor entering the pressure regulator when the vaporizer is subjected to the maximum fuel flow rate. Vaporizers shall be permanently marked at a readily visible point with the maximum allowable working pressure of the fuel-containing portion of the vaporizer.

Engine exhaust gases may be used as a direct source of heat to vaporize the fuel if the materials of construction of those parts of the vaporizer in contact with the exhaust gases are resistant to corrosion from those gases.

- (b) Pressure regulator inlets and chambers shall have a maximum allowable working pressure of at least the maximum allowable working pressure of the container.
- (c) Pressure gauges shall be designed for the pressure and temperature conditions to which they may be subjected with a burst pressure safety factor of at least four. Dials shall be graduated to read at least 1.2 times the pressure at which a pressure relief device is set to function. Gauges shall have an opening not to exceed 0.055 inches (Number 54 drill size) at the inlet connection.
- (d) Pipe, tubing, and fittings between the vehicular fuel container and the pressure regulator shall be designed to withstand a pressure of at least two times the maximum allowable working pressure of the container.
- (1) Gaskets and packing material shall be suitable for the intended service.
- (2) Pipe shall be stainless steel, brass, or copper, and shall comply with the following:
- (A) stainless steel pipe: ANSI B36.19, Specification for Stainless Steel Pipe (ASTM A 312);
- (B) brass pipe: ANSI H27.1, Specification for Seamless Red Brass Pipe, Standard Size (ASTM B 43);
- (C) copper pipe: ANSI H26.1, Specification for Seamless Copper Pipe, Standard Sizes (ASTM B 42).
- (3) Tubing shall be stainless steel, brass, or copper, and shall comply with the following:
- (A) stainless steel tubing: ANSI B31.3, Specification for Seamless and Welded Austenitic Steel Tubing for General Service (ASTM A 269);
- (B) copper tubing: Type K or L, ANSI H23.1, Specification for Seamless Copper Water Tube (ASTM B 88);
- (C) copper tubing: ANSI H23.5, Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service (ASTM B 280); or
- (D) brass tubing: ANSI H36.1 Specification for Seamless Brass Tube (ASTM B 135).
- (4) Pipe and tube fittings shall be stainless steel, brass, or copper. Pipe joints shall be threaded, welded, or brazed. Tubing joints shall be flared, welded, brazed, or made with tube fittings.

The provisions of this §14.2613 adopted to be effective May 26, 2003, 28 TexReg 4100.

- §14.2616. Installation of Venting Systems and Monitoring Sensors.
- (a) 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) Vents shall not exit into a wheel well.
- (c) Vents shall not restrict the operation of a fuel container pressure relief device or pressure relief device channel. Vent lines shall be located and secured to permit the required relief discharge capacity and to minimize the possibility of physical damage.
- (d) Vent lines shall be equipped with a means to minimize the possibility of water or other foreign material from entering the relief device or vent line. Such means shall remain in place except when the relief device operates and shall permit the relief device to operate at the required capacity.
- (e) Escaping gas shall not impinge on fuel supply containers and shall not be directed into wheel wells, at individuals or other vehicles in traffic, at the engine air intake, or in a manner that would create a hazard.
- (f) Safety relief valve discharge shall be directed or vented so that any gas released will not directly impinge upon containers, any part of the vehicle, adjacent individuals or vehicles, or the inside of the passenger or luggage compartment.
- (g) At least two monitoring sensors shall be installed on all LNG-fueled vehicles to detect hazardous levels of LNG. Sensors shall activate at not more than 20% of the lower flammable limit of LNG. If the level exceeds one-fifth of the LFL, the sensor shall either shut the system down or activate an audible and visual alarm. The number of sensors to be installed shall comply with the area of coverage for each sensor and the size of the vehicle. The sensors shall be installed and maintained in accordance with the manufacturer's instructions.

The provisions of this §14.2616 adopted to be effective May 26, 2003, 28 TexReg 4100.

# §14.2619. Installation of Piping.

- (a) Piping that carries fuel shall be fabricated to minimize vibration and shall be shielded or installed in a protected location to prevent damage from unsecured objects.
- (b) Fuel lines shall be mounted, braced, and supported to minimize vibration and protected against damage, corrosion, or breaking due to strain or wear. Fuel lines shall be supported at least every 21 to 27 inches.
- (c) Fuel lines passing through a panel shall be protected against abrasion by grommets or similar devices such as fittings, which shall snugly fit both the supply lines and the holes in the panel.

- (d) Fuel lines shall have a minimum clearance of eight inches from the engine exhaust system or shall be shielded against direct heat.
- (e) Piping or tubing shall pass through the floor of a vehicle directly beneath or adjacent to the container. If a branch line is required, the tee connection shall be in the main fuel line under the floor and outside the vehicle.
- (f) Hydrostatic relief valves shall be installed in each section of piping or tubing in which LNG can be isolated between shutoff valves to relieve to a safe atmosphere the pressure which could develop from the trapped fuel. The pressure relief valve shall have a pressure not greater than the maximum allowable working pressure of the line it protects.
- (g) Joint compound or tape acceptable for use with LNG shall be applied to all male pipe threads prior to assembly.
- (h) Piping and fittings shall be clean and free from cutting or threading burrs and scaling. The ends of all piping shall be reamed.
- (i) Bends in piping or tubing are prohibited if the bend weakens the pipe or tubing. Bends shall be made by bending tools designated for this purpose.
- (j) Joints or connections shall be located only in an accessible location.
- (k) Fuel connections between a tractor and trailer or other vehicle units are prohibited.

The provisions of this §14.2619 adopted to be effective May 26, 2003, 28 TexReg 4100.

# $\S 14.2622.$ Installation of Valves.

- (a) Valves, valve packings, gaskets, and seats shall be suitable for the intended service and shall comply with the following:
- (1) Shutoff valves shall have a maximum allowable working pressure of at least the maximum allowable working pressure of the container. Leakage shall not occur at less than 1 1/2 times the maximum allowable working pressure of the valve.
- (2) Valve parts, except gaskets, packing, and seats that come in contact with the fuel shall be stainless steel, brass, or copper.
- (b) Valves shall be securely mounted and shielded or installed in a protected location to minimize damage from vibration and unsecured objects.
- (c) In vehicles whose engines do not incorporate an automatic shutoff in the engine fuel system, a positive shutoff valve shall be installed in the fuel supply line at the inlet to the pressure regulator. The shutoff valve shall automatically close and prevent the flow of fuel to the engine when the ignition switch is off or in the accessory position, or when the engine is not running and the ignition switch is on.

- (d) When multiple fuel systems are installed on the vehicle, automatic valves shall be provided as necessary to shut off the fuel not being used.
- (e) Fueling systems shall be equipped with a backflow check valve which will prevent the return of gas from the container to the filling connection.
- (f) Valves shall be installed so that their weight is not placed on or supported by the attached lines.

The provisions of this §14.2622 adopted to be effective May 26, 2003, 28 TexReg 4100.

### §14.2625. Installation of Pressure Gauges.

- (a) Pressure gauges located within driver or passenger compartments shall be installed so that no gas will flow through the gauge in the event of failure. Installed gauges shall be readily visible by the driver.
- (b) Pressure gauges installed outside driver or passenger compartments 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 §14.2625 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2628. Installation of Pressure Regulators.

- (a) Automatic pressure reducing regulators shall be installed to reduce the fuel container pressure to a level consistent with the maximum allowable working pressure required by the engine fuel system, if the primary relief valve setting to the fuel container exceeds the maximum allowable engine inlet fuel pressure, and automatic pressure reducing regulator.
- (b) Means shall be provided to prevent regulator malfunctions due to low temperatures.
- (c) Regulators shall be installed so that their weight is not placed on or supported by the attached gas lines.

The provisions of this §14.2628 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2631. Wiring.

- (a) Wiring shall be installed, supported, and secured in a manner to prevent damage due to vibration, shock, strains, wear, or corrosion.
- (b) Wiring shall be sized and fuse-protected with the size and fuse rating adequate for the current draw.

The provisions of this §14.2631 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2634. Vehicle Fueling Connection.

(a) Vehicle fueling connections shall provide for the reliable and secure connection of the fuel system containers to a source of LNG.

- (b) Fueling connections shall be designed for the pressure expected under normal conditions and corrosive conditions which might occur.
- (c) Fueling connections shall prevent escape of gas when the connector is not properly engaged or becomes separated.
- (d) Refueling receptacles on engine fuel systems shall be firmly supported and shall:
- (1) receive the fueling connector and accommodate the maximum allowable working 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; and

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

The provisions of this §14.2634 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2637. Signs and Labeling.

(a) Signs or labels shall be readily visible before and during transfer operations, shall be weather-resistant, and shall be located as specified in Table 1 of this section.

### Table 1

Requirements for Signs or Labels	Fueling Connection Receptacle	Engine Compartment
Capital letters at least 2" high (any color letters with contrasting background): LNG FUELED VEHICLE	*	*
Any color letters with contrasting background: Name of Licensee and License Number (not required for systems installed by OEM or OEM's subcontractor)		Nr.
Any color letters and numbers with contrasting background:  Maximum allowable working pressure	*	
Any color letters with contrasting background: Container Capacity Gallons	*	

- (b) Vehicles 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 (excluding the bumper) inboard of any other markings. The label shall be at least 4 3/4 inches by 3 1/4 inches. The marking shall consist of a border and the capital letters, "LNG"; the letters shall be at least one inch tall, and be silver or white reflective luminous material on a blue or black background.
- (c) Upon completion of a vehicle conversion, the licensee making the conversion shall affix to the vehicle an identification tag or decal in a location that is easily

readable. The tag or decal shall contain letters that indicate the licensee's name, current license number, and the year and month the conversion was made.

The provisions of this \$14.2637 adopted to be effective May 26, 2003, 28 TexReg 4100.

## §14.2640. System Testing.

- (a) The complete LNG engine fuel system shall be leak tested.
- (b) After installation, the piping and connections that are subject to container pressure shall be checked with a non-ammonia soap solution or a leak detector

instrument after the equipment is connected and pressurized to its 90% of the maximum allowable working pressure of the container.

- (c) If the completed LNG engine fuel system is leak tested with natural gas, the testing shall be done under adequately ventilated conditions.
- (d) If an LNG container is involved in an accident or fire causing damage to the container, the container shall be replaced or removed and returned to a currently licensed Category 15, 20, or 50 licensee to be inspected and retested in accordance with the original manufacturer's specifications. The licensee who performs any repair, modification, or testing of a container shall file LNG Form 2008 with LP-Gas Operations before the container is returned to service.
- (e) If a vehicle is involved in an accident or fire causing damage to any part of the LNG engine fuel system, the system shall be replaced or repaired as provided in these regulations and retested before it is returned to service.

The provisions of this §14.2640 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

## §14.2643. Maintenance and Repair.

- (a) The owner or user or both shall maintain containers, container appurtenances, piping systems, venting systems, and other components in a safe condition.
- (b) Repair or alteration of pressure relief devices and fuel lines is prohibited. Damaged pressure relief devices and fuel lines shall be replaced.

The provisions of this §14.2643 adopted to be effective May 26, 2003, 28 TexReg 4100.

#### SUBCHAPTER H. LNG TRANSPORTS

§14.2701. DOT Requirements.

- (a) This subchapter applies to transport containers used in the transportation and distribution of LNG.
- (b) LNG transports shall comply with the requirements of DOT specification MC-338 and the applicable parts of Title 49, Code of Federal Regulations, Parts 171 180.

The provisions of this §14.2701 adopted to be effective May 26, 2003, 28 TexReg 4100.

# §14.2704. Registration and Transfer of LNG Transports.

- (a) A person who operates an LNG transport as defined in this chapter, regardless of who owns the transport, shall register the transport with LP-Gas Operations in the name or names under which the operator conducts business in Texas prior to the transport being used in LNG service in Texas.
- (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 transport truck, semi-trailer, or other motor vehicle equipped with an LNG cargo tank; and
- (B) file a properly completed LNG Form 2007.
- (2) To register a 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 LNG Form 2007:
- (C) file a copy of the latest test results if an expired unit has not been used in the transportation of LNG 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 LNG Form 2007.
- (b) LP-Gas Operations may also request an operator registering or transferring any unit to file a copy of the Manufacturer's Data Report or a copy of the DOT certification issued by the manufacturer and/or subframer who prepared the unit for road use, or any other documentation to show the container complies with MC-338.
- (c) When all registration or transfer requirements have been met, LP-Gas Operations shall issue LNG Form 2004 or letter of authority which shall be properly affixed as instructed on the decal or letter or maintained on the bobtail or transport trailer. LNG Form 2004 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 LNG and to fill the transport containers.
- (1) A person shall not operate an LNG transport unit or introduce LNG into a transport container in Texas unless the LNG Form 2004 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) LNG Form 2004 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 LNG service.
  - (3) This section shall not apply to:
- (A) a container manufacturer/fabricator from introducing a reasonable amount of LNG 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 LNG shall be removed from the transport container prior to the transport leaving the manufacturer's or fabricator's premises; or

- (B) a person introducing a maximum of 150 gallons 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 an LNG Form 2004 or letter of authority if LP-Gas Operations or a Category 15 or 50 licensee determines that the transport is unsafe for LNG service.

The provisions of this §14.2704 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

\$14.2705. Decals or Letters of Authority and Fees. If an LNG Form 2004 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 decal or letter of authority by filing LNG Form 2018B and a \$50 replacement fee with LP-Gas Operations.

The provisions of this §14.2705 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

### §14.2707. Testing Requirements.

- (a) Transport container units required to be registered with LP-Gas Operations shall be tested at least once every five years by a Category 15, 20, or 50 licensee.
- (1) Documentation of the required testing shall be filed by the Category 15, 20, or 50 licensee.
- (2) The results of any test required under this section shall clearly indicate whether the transport container unit is safe for LNG service. The Category 15, 20, or 50 licensee shall mail LNG Form 2008 to LP-Gas Operations within 30 calendar days of the due date of any tests required under this section.
- (3) If evidence of any unsafe condition is discovered as a result of any tests performed under this section, the transport container unit shall be immediately removed from LNG service and shall not be returned to LNG service until LP-Gas Operations notifies the licensee in writing that the transport container unit may be returned to LNG service.
- (b) Containers shall be tested in accordance with 49 CFR §338.
- (c) Containers shall be inspected for corroded areas, dents, or other conditions (including leakage under test pressure) which could render the container unsafe for LNG service.

The provisions of this §14.2707 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

§14.2710. Markings.

- (a) LNG transports and container delivery units in LNG service shall be marked with the name of the licensee or the ultimate consumer operating the unit. The name shall be in letters at least two inches in height and in sharp color contrast to the background. LP-Gas Operations will determine whether the marking is sufficient to properly identify the operator.
- (b) Other markings shall comply with other DOT marking requirements.
- (c) If a transport unit is loaned or leased for a period of time not to exceed 30 days, the unit may have painted or permanently affixed thereon, in lieu of the name of the licensee operating the transport unit, the name of the owner of the transport unit in letters at least two inches in height.

The provisions of this §14.2710 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

*§14.2713. Pressure Gauge.* Transport containers shall be equipped with a pressure gauge for LNG service which shall be maintained in good operating condition at all times. An isolation valve shall be installed between the container and the pressure gauge.

The provisions of this §14.2713 adopted to be effective May 26, 2003, 28 TexReg 4100.

*§14.2716. Supports.* Transport containers shall be supported as required by DOT Regulations, 49 CFR *§178.337-13.* 

The provisions of this \$14.2716 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2719. Electrical Equipment and Lighting. LNG transports and container delivery units shall not be equipped with an artificial light other than electrical. Lighting circuits shall have suitable overcurrent protection (fuses or automatic circuit breakers). Wiring shall have sufficient current capacity and mechanical strength, and shall be secured, insulated, and protected against physical damage.

The provisions of this §14.2719 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2722. Liquid Level Gauging Devices. Truck and trailer containers shall be equipped with a liquid level gauging device of approved design, such as a fixed tube device. Fixed tube devices shall be arranged so that the maximum liquid level to which the container may be filled is set at the maximum permitted for the container based on an initial liquid temperature not to exceed 40 degrees Fahrenheit. An isolation valve shall be installed between the container and the liquid level gauging device.

The provisions of this §14.2722 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2725. Exhaust System. No part of the exhaust system on any LNG transport or container delivery unit shall be located less than six inches unless shielded from any piping, pump, and/or compressor. The exhaust system discharge shall not impinge on the containers, piping, or related appurtenances.

The provisions of this §14.2725 adopted to be effective May 26, 2003, 28 TexReg 4100.

### §14.2728. Extinguishers Required.

- (a) Transport power units shall be equipped with at least one fire extinguisher having a UL rating of 10 B:C or more, and shall be labeled or marked with that rating.
- (b) Fire extinguishers shall be fully charged, in good mechanical condition, and accessible for use. Fire extinguishers shall be mounted with a mounting bracket which will allow visual determination of being fully charged.

The provisions of this §14.2728 adopted to be effective May 26, 2003, 28 TexReg 4100.

*§14.2731. Manifests.* Manifests or bills or lading shall be covered by permanent shipping papers authorized by the DOT.

The provisions of this \$14.2731 adopted to be effective May 26, 2003, 28 TexReg 4100.

§14.2734. Transfer of LNG on Public Highways, Streets, or Alleys. Transferring LNG on public highways, streets, or alleys is prohibited except in an emergency or where the containers are on machinery being used for the construction or maintenance of such public highways, streets, or alleys.

The provisions of this §14.2734 adopted to be effective May 26, 2003, 28 TexReg 4100.

- §14.2737. Parking of LNG Transports and Container Delivery Units, and Use of Chock Blocks.
- (a) LNG transport or container delivery units shall not be parked on any public street, highway, or alley, except in an emergency, or when in connection with normal duties, meals, or rest stops. Such units shall not be parked in a congested area and shall be parked a minimum distance of 50 feet from any building, except buildings devoted exclusively to LNG operations.
- (b) LNG transports shall carry at least two chock blocks designed to effectively prevent the movement 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.

The provisions of this §14.2737 adopted to be effective May 26, 2003, 28 TexReg 4100.

- §14.2740. Uniform Protection Standards.
- (a) LNG transport units and container delivery units, including appurtenances, shall be maintained in a safe operating condition at all times.
- (b) Any transport unit or container delivery unit discovered to be in an unsafe condition while being operated on a public roadway may be continued in operation only to the nearest place where repairs can safely be made. Such operation shall be conducted only if it is less hazardous to the public than to permit the transport unit or container delivery unit to remain on the public roadway.

The provisions of this §14.2740 adopted to be effective May 26, 2003, 28 TexReg 4100.

*§14.2746. Delivery of Inspection Report to Licensee.* The transport driver of any transport unit receiving an inspection report from LP-Gas Operations shall deliver that report to the licensee in whose name the transport unit is registered.

The provisions of this §14.2746 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.

## §14.2749. Issuance of LNG Form 2004 Decal.

- (a) An LNG Form 2004 decal or letter of authority shall not be issued to any transport that has not been tested as required by §14.2707 of this title (relating to Testing Requirements) at least once in the preceding five years. An LNG Form 2004 decal or letter of authority shall not be issued to any transport that has been determined to be unsafe for LNG service by LP-Gas Operations or a Category 15, 20, or 50 licensee in accordance with §14.2707 of this title.
- (b) An LNG Form 2004 decal or letter of authority, when issued by LP-Gas Operations and properly affixed as instructed by the decal or letter, or maintained on the bobtail or transport trailer, shall authorize the person to whom it has been issued to operate such unit in the transportation of LNG and to fill the transport containers.
- (c) No person or ultimate consumer shall operate an LNG transport or introduce LNG into such unit in this state unless an LNG Form 2004 decal or letter of authority authorizing its operation has been affixed in accordance with placement instructions on the decal or letter, or maintained in readable condition, or unless such operation has been specifically approved by LP-Gas Operations.
- (d) The LNG Form 2004 decal or letter of authority is not transferable by the person to whom it has been issued, but shall be registered by any subsequent person or ultimate consumer prior to the vehicle being placed into LNG service.
- (e) This subsection shall not prevent a container manufacturer/fabricator from introducing a reasonable

amount of LNG 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 LNG shall be removed from the transport container prior to the unit leaving the container manufacturer/fabricator's premises.

(f) A maximum of 150 gallons of LNG may be introduced into a newly constructed transport container when such container will provide the motor fuel to the chassis engine for the purpose of providing sufficient fuel to allow the unit to reach its destination.

The provisions of this §14.2749 adopted to be effective May 26, 2003, 28 TexReg 4100; amended to be effective December 24, 2012, 37 TexReg 9921.