## TEXAS LNG EXAMINATION STUDY GUIDE

# Category 40 General Public Dispensing Station Management Level



#### NOTICE

This publication is intended for use in its entirety as a guide for persons preparing to take Railroad Commission LNG qualifying examinations. Any other use or distribution of this publication or use or distribution of any portion of this publication for any purpose whatsoever is considered by the Railroad Commission of Texas to be misuse of this publication.

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#### **Exam administration**

#### Taking an examination in Austin

You may take any Railroad Commission qualifying examination in Austin without pre-registering ("walk-in") on any business day, excluding holidays, from 8:00 a.m. to 12:00 noon at the Commission's Alternative Fuels Training Center. The training center is located at 6506 Bolm Road, on the northwest corner of the intersection of Bolm Road and U.S. Highway 183.

Tuesdays and Thursdays are the preferred days for walk-in examinations.

(See map to Training Center on page 22.)

#### Taking an examination outside of Austin

You may also take any Railroad Commission qualifying examination at more than two dozen other locations statewide. Exam dates, times and locations are listed three months in advance on the Commission's web site. To view a complete schedule, go to <a href="www.rrc.state.tx.us">www.rrc.state.tx.us</a>. From the drop-down menu under "Education and Training," choose "Training Classes & Qualifying Exams" and click on "Class/Exam Schedule." The online schedule has links to maps showing each class and exam location.

You must register at least two business days in advance to take an examination outside of Austin. To register online, go to <a href="https://www.rrc.state.tx.us">www.rrc.state.tx.us</a>. From the drop-down menu under "Education and Training," choose "Training Classes & Qualifying Exams" and click on "Register Now." The web site allows you to register up to four people for an examination.

When you register online, you will receive a return e-mail confirming the registration and the dates and locations of the exams. Registering online also ensures that you will receive advance notification of any changes in the examination date, time or location.

#### Payment for exams; LNG Form 2016; ID required

The fee is \$40.00 for each employee-level exam and \$70.00 for each management-level exam. Fees are non-refundable by state law, and cash cannot be accepted.

You may pay the required examination fee at any exam location by check or money order payable to the Railroad Commission of Texas. LNG Form 2016, "Application for Examination," may also be completed at the examination site. Examinees must also present an official state-issued driver's license or photo ID at the exam site.

You may also pay your examination fee by credit card in advance online. To pay by credit card, go to <a href="https://www.rrc.state.tx.us">www.rrc.state.tx.us</a>. From the drop-down menu under "Education and Training," choose "Training Classes & Qualifying Exams" and click on "Pay Online." Be sure to print out the confirmation page in Step 6. Make a copy of the confirmation page for your records and bring a copy with you to the examination site.

#### Closed-book examinations

All Railroad Commission management-level qualifying examinations are closed book. This study guide may not be used during any management-level examination.

#### **Examination time limit**

Railroad Commission LNG qualifying examinations must be completed within two hours after the examination is given to you, including any breaks you elect to take. The examination proctor is the official timekeeper. You must submit both the examination itself and your answer sheet to the proctor within the two-hour limit.

#### Grades, reports and retakes

The minimum passing grade is 75 percent on all Railroad Commission qualifying examinations.

Examinations administered at the Training Center in Austin are graded on-site, and examinees are immediately informed of the results. If you fail an examination that you took in Austin, you may retake that same examination only one additional time during a business day. Any subsequent examination must be taken on another business day, unless approved by the Commission.

Exams taken outside of Austin are graded as soon as possible, and the results of the examination are reported within 10 working days.

If you pass an examination, the Railroad Commission will issue you a blue certification card within 10 working days. You will be notified by letter if you fail an examination.

#### **Contacts**

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## TEXAS LNG EXAMINATION STUDY GUIDE MANAGEMENT LEVEL CATEGORY 40 GENERAL PUBLIC DISPENSING STATION

#### Who should use this guide?

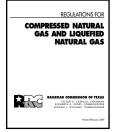
You should use this guide if you plan to take the Railroad Commission's management-level qualifying examination for LNG general public dispensing stations. This certification authorizes the storage, sale, and dispensing of LNG into motor fuel containers and mobile fuel containers.

#### What books do I need?

This examination tests your knowledge of the laws and standards that apply to the storage, sale, and dispensing of LNG into motor and mobile fuel containers in Texas.

These laws and standards are found in the Railroad Commission's *Regulations for Compressed Natural Gas and Liquefied Natural Gas* (16 *Texas Administrative Code*, Chapter 14), known informally as the Commission's LNG Safety Rules.

#### Where do I get the book?



You may download the current edition of the Railroad Commission's *Regulations for Compressed Natural Gas and Liquefied Natural Gas* free online. Go to the Commission's home page at <a href="https://www.rrc.state.tx.us">www.rrc.state.tx.us</a>. From the drop-down menu under "Education and Training," choose "Training Classes & Qualifying Exams" and click on "CNG/LNG Safety Rules (PDF)." You may also buy a printed copy of the book for \$10.00, tax included, by calling the Railroad Commission's publications office at (512) 463-7309.

#### **Sections and topics**

Before you take this examination you should know the definitions on pp. 8-10 of this study guide and the contents of the sections of the codes and standards listed below. The actual examination may not include questions on all of the listed sections and topics. The questions on the examination are not organized by topic as they are in this study guide.

#### Regulations for Compressed Natural Gas and Liquefied Natural Gas

§14.2016	Licensing Requirements
§14.2019	Certification Requirements
§14.2049	Report of LNG Incident/Accident
§14.2101	Uniform Protection Requirements
§14.2104	Uniform Safety Requirements
§14.2107	Stationary LNG Storage Containers

§14.2110	LNG Container Installation Distance Requirements
§14.2116	Transfer of LNG
§14.2304	General Facility Design
§14.2313	Fuel Dispensing Systems
§14.2319	Automatic Fuel Dispenser Safety Requirements
§14.2610	Installation of Vehicle Fuel Containers
§14.2616	Installation of Venting Systems and Monitoring Sensors
§14.2634	Vehicle Fueling Connection
§14.2637	Signs and Labels

#### Texas Natural Resources Code

§116.031	License Requirement
§116.032	License and Registration Fees
§116.033	Application and Renewal Procedures
§116.034	<b>Examination And Seminar Requirements</b>
§116.0345	License or Registration by Endorsement
§116.0346	Provisional License Or Registration
§116.035	Denial of License
§116.036	Insurance Requirement
§116.037	Disciplinary Action
§116.038	Staggered Renewal of Licenses
§116.072	Registration
§116.141	Injunctive Relief
§116.142	Criminal Penalty
§116.143	Administrative Penalty
§116.144	Penalty Assessment Procedure

#### **Terms and definitions**

NOTE: The list below is not exhaustive. You are responsible for knowing all the terms and definitions that apply to the LNG activities you will perform.

#### Regulations for Compressed Natural Gas and Liquefied Natural Gas

**Aggregate water capacity** is 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.

LNG Safety Rules, §14.2007(2)

**ASME** means the American Society of Mechanical Engineers.

LNG Safety Rules, §14.2007(6)

An **automatic fuel dispenser** is a fuel dispenser which requires transaction authorization. *LNG Safety Rules, §14.2007(8)* 

**Certified** means authorized to perform LNG activities under the direction of a licensee; however, certification alone does not allow an individual to perform LNG activities that require licensing.

*LNG Safety Rules*, §14.2007(10)

**Combustible material** is 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.

LNG Safety Rules, §14.2007(11)

A **commercial installation** is an LNG equipment installation located on premises other than a single-family dwelling used primarily as a residence.

LNG Safety Rules, §14.2007(12)

A **container** is any LNG vessel manufactured to the applicable sections of the API Code, ASME Code, or DOT requirements in effect at the time of manufacture.

*LNG Safety Rules*, §14.2007(15)

**Container appurtenances** are 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.

LNG Safety Rules, §14.2007(16)

A **conversion** is the changes made to a vehicle to allow it to use LNG as a motor fuel.

LNG Safety Rules, §14.2007(17)

**Design pressure** is the pressure at which a system or portion of that system is designed to operate.

*LNG Safety Rules*, §14.2007(18)

A **dispensing system** is that combination of valves, meters, hoses, piping, electrical connections, and fuel connections used to distribute LNG to mobile or motor fuel containers.

LNG Safety Rules, §14.2007(20)

**DOT** means the United States Department of Transportation.

*LNG Safety Rules*, § 14.2007(21)

A **fixed-length dip tube** is a pipe with a fixed open end positioned inside a container at a designated elevation to measure a liquid level.

LNG Safety Rules, §14.2007(26)

**Ignition source** means 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.

LNG Safety Rules, §14.2007(28)

**LNG** is natural gas, consisting primarily of methane that has been condensed to liquid by cooling.

LNG Safety Rules, §14.2007(37)

An **LNG system** is 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.

LNG Safety Rules, §14.2007(38)

An **LNG transport** is 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, semi-trailer, cargo tank, or other vehicle used in the distribution of LNG.

LNG Safety Rules, §14.2007(39)

A **mass transit vehicle** is 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.

LNG Safety Rules, §14.2007(40)

The **maximum allowable working pressure** is the maximum gauge pressure permissible at the top of completed equipment, containers, or vessels in their operating position for a design temperature.

*LNG Safety Rules*, § 14.2007(41)

A **mobile fuel container** is an LNG container mounted on a vehicle and used to store LNG as the fuel supply for uses other than motor fuel.

*LNG Safety Rules*, §14.2007(42)

**Motor fuel system** means an LNG system to supply LNG as a fuel for an engine used to propel the vehicle. *LNG Safety Rules, §14.2007(45)* 

The **point of transfer** is the point at which a connection is made to transfer LNG from one container to another. *LNG Safety Rules*, *§14.2007(53)* 

A **trainee** is 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.

LNG Safety Rules, §14.2007(67)

**Transfer area** means that portion of an LNG refueling station where LNG is introduced into or dispensed from a stationary installation.

LNG Safety Rules, §14.2007(68)

A **transfer system** is all piping and equipment used in transferring LNG between containers.

LNG Safety Rules, §14.2007(69)

An **ultimate consumer** is the person controlling LNG immediately prior to its ignition.

LNG Safety Rules, §14.2007(73)

**Water capacity** is the amount of water in gallons required to fill a container.

*LNG Safety Rules*, § 14.2007(75)

#### **Key topics**

NOTE: The list below is not exhaustive. You are responsible for knowing all the facts, rules, standards and procedures that apply to the LNG activities you will perform, as well as the rules and standards highlighted in this guide.

As you study the applicable codes and standards, pay special attention to the facts, rules and procedures related to the following key topics. Then, when you take the examination, read each question very carefully.

### GENERAL RULES FOR ALL STATIONARY LNG INSTALLATIONS

#### **Uniform Protection Requirements**

(c) The operating end of the container at a stationary LNG installation, including the material handling equipment, the entire dispensing system and any part of the LNG transfer system, dispensing system or storage container which is exposed to vehicular traffic must be protected from damage by the vehicular traffic.

The fencing or guardrails installed to protect a stationary LNG installation must extend at least 24 inches beyond any part of the LNG transfer system, dispensing system, or storage container.

- (e) Fencing at LNG stationary installations must comply with the following:
  - (1) Fencing material must be solid construction of noncombustible material or chain link with wire at least 12 ½ American Wire Gauge (AWG) in size.
  - (2) Fencing must 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.
- (g) Stationary LNG installations must comply with the sign and lettering requirements as follows:
  - (1) Unless colors are specified, lettering must be a color in sharp contrast to the background color of the sign and must be easily readable.
  - (2) Signs must be visible from each point of transfer;
  - (3) Signs on emergency shutdown devices must be permanently affixed;
  - (4) Signs bearing the words "NATURAL GAS" must be located on all operating sides of dispensers; and
  - (5) Signs indicating the licensee's name must be located at either the vehicle dispenser or refueling area, or at the loading or unloading area.
- (h) At least two monitoring sensors must be installed at all LNG stationary installations to detect hazardous levels of LNG.

Monitoring sensors at stationary LNG installations must activate at not more than 25 percent of the lower flammability limit of LNG.

All monitoring sensors must be installed and maintained in accordance with the manufacturer's instructions. *LNG Safety Rules*, §14.2101

#### **Stationary LNG Storage Containers**

(b) ASME, DOT and API containers must 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 that will minimize corrosion of the nameplate, its means of attachment, and the container.

LNG Safety Rules, §14.2107

#### **Container Installation Distance Requirements**

- (a) LNG containers must be installed in accordance with the following minimum distance requirements:
  - (1) Containers with aggregate water capacities up to 15,540 gallons must be located at least 25 feet from any building, property line, stationary ignition sources, or other aboveground flammable liquids.
  - (5) LNG dispensers or points or transfer must 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.

LNG Safety Rules, §14.2110

#### **Transfer of LNG**

- (a)(2) Venting of LNG is prohibited as part of routine activities, except through a trycock installed on a stationary storage tank during filling of the tank.
- (f) Measuring instruments shall be provided to determine that containers are not overfilled.

LNG Safety Rules, §14.2116

SAM	APLE QUESTION
Mon	itoring sensors at stationary LNG installations must activate at not more than percent of the flammability limit of LNG.
A.	25 / lower
В.	35 / lower
C.	25 / upper
D.	35 / upper
	Answer: A

#### **GENERAL RULES FOR LNG FUELING FACILITIES**

#### **General Facility Design**

(d) LNG must not be vented to the atmosphere under normal operations unless the vent leads to a safe point of discharge at an LNG fueling facility.

Vent pipes or stacks must have the open end suitably protected to prevent entrance of rain, snow, and other foreign material at an LNG fueling facility.

Vent stacks must have provision for drainage at an LNG fueling facility.

- (e) Instructions identifying the location and operation of emergency controls must be conspicuously posted in the facility area.
- (i) Vehicles containing fuel-fired equipment, such as recreational vehicles and catering trucks, are considered ignition sources and must not enter an area in which ignition sources are prohibited unless the fuel-fired equipment is shut off completely before the vehicle enters.
- (j) LNG fueling facilities which transfer LNG at night must have permanent lighting at points of transfer and operation, including at least two lights with a total of at least two foot-candles of power.

LNG Safety Rules, §14.2304

#### **Emergency Refueling**

(b) The individual performing the transfer of LNG must be certified by the Texas Railroad Commission and properly trained in all aspects of LNG transfer.

LNG Safety Rules, §14.2310

#### **Fuel Dispensing Systems**

- (g) Manually operated container valves must be provided for each container.
- (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 in a fueling installation must be installed so that it will be protected against damage and be readily visible for inspection. The manufacturer's identification must be retained for each section of metallic hose used.

LNG Safety Rules, §14.2313

#### **Automatic Fuel Dispensing Systems**

- (e) A device must be installed in the liquid piping at LNG fueling facilities 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 of an LNG dispenser must prevent LNG from being discharged unless the nozzle is connected to a vehicle.
- (g) A key, card, or code system must be used to activate an automatic LNG dispenser.
- (h) Automatic dispensers must incorporate cutoff valves with opening and closing devices that ensure the valves are in a closed position when dispensers are deactivated.
- (i) LNG fuel storage installations that include automatic dispensers must be equipped with an emergency shutdown device for the entire LNG installation located at least 20 feet from the nearest dispenser or storage area.

The emergency shutdown device at an LNG fuel storage installation that includes an automatic dispenser must be distinctly marked for easy recognition.

LNG Safety Rules, §14.2319

#### **Protection of Automatic and Other Dispensers**

(b) Dispensers must be protected against collision damage by support columns or other such protection installed at the approach ends of the concrete island.

LNG Safety Rules, §14.2322

#### SAMPLE QUESTION

Fire extinguishers on a transport power unit must be mounted so that a visual inspection can determine whether the extinguisher is fully charged.

- A. True
- B. False

Answer: A

#### **ENGINE FUEL SYSTEMS**

#### **Vehicle Fuel Containers**

- (a) Containers must 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 LNG engine fuel system container must be responsible for its suitability for continued service.
- (d) LNG engine fuel systems' containers must be equipped with a dip tube or other device so that the maximum filling volume of the container complies with the Railroad Commission's Regulations for LNG.
- (h) LNG engine fuel systems' container appurtenances must have a rated maximum allowable working pressure not less than the maximum allowable working pressure of the container.
- (j) LNG engine fuel systems' valves must be readily accessible and operable without the use of tools. *LNG Safety Rules, §14.2607*

#### Installation of Vehicle Fuel Containers

- (a) Vehicle fuel containers must 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.

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 must be mounted in a location to minimize damage from collision.

No part of a container or its appurtenances must protrude beyond any part of the vehicle at the point of installation.

(3) Fuel systems must 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 must be measured from the lowest part of the fuel system.

(4) No portion of a fuel supply container or container appurtenance must be located ahead of the front axle or behind the rear bumper mounting face of a vehicle.

Fuel container valves must 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 must be shielded from direct heat.
- (6) Mountings must minimize fretting corrosion between the fuel container and the mounting system by means of rubber insulators or other suitable means.
- (7) Fuel containers must not be installed where they would adversely affect the driving characteristics of the vehicle.
- (8) Fuel containers on school buses or mass transit vehicles must be installed on the underside of the vehicle, except as specified in the Railroad Commission's Regulations for LNG.

Fuel containers on special transit vehicles must 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 must be secured in place by fasteners such as wing nuts or spring-loaded latches and must not require the use of tools for removal.

The use of locks on shroud access doors is prohibited.

- (b) Fuel supply containers must be connected or mounted to comply with the following specifications:
  - (1) Fuel supply container connections must 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) Fuel supply container mounting brackets must prevent the container from jarring loose, slipping or rotating.
- (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.
- (d) Container markings must be readable after a container is permanently installed on a vehicle.

LNG Safety Rules, §14.2610

#### Installation of Venting Systems and Monitoring Sensors

(a) Pressure relief devices and pressure-carrying components installed within a closed compartment must be vented to the outside of the vehicle in a suitable location for engine fuel systems.

LNG Safety Rules, §14.2616

#### **Vehicle Fueling Connection**

- (c) Fueling connections must prevent escape of gas when the connector is not properly engaged or becomes separated.
- (d) Refueling receptacles on engine fuel systems must be firmly supported and must:
  - (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 must be capable of being depressurized before removal; and
  - (3) have a different fueling connection for each pressure base vehicle fuel system.

LNG Safety Rules, §14.2634

#### Signs and Labeling

(a) Fueling connection receptacles on an engine fuel system are required to have a sign or label reading LNG FUELED VEHICLE with any color capital letters at least 2 inches high with contrasting background.

LNG Safety Rules, §14.2637, Table 1

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The emergency shutdown device at an LNG fuel storage installation that includes an automatic dispenser must be distinctly marked for easy \_\_\_\_\_\_.

- A. Maintenance
- B. Recognition
- C. Actuation
- D. Inspection

Answer: B

#### **GENERAL REQUIREMENTS (ADMINISTRATIVE)**

#### Licenses, Related Fees

(B)(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.

LNG Safety Rules, §14.2013

#### **License Requirements**

- (c) Licensees must maintain a copy of the current version of the Regulations for Liquefied Natural Gas adopted by the Commission and must provide at least one copy to each company representative and operations supervisor.
- (d) Licensees and operations supervisors at each outlet must have all current licenses and certificates available for inspection during regular business hours.
- (f)(2) If a person's license has been expired for more than 90 calendar days but less than one year, the person must submit a renewal fee that is equal to two times the renewal fee.
- (f)(3) If a person's license has been expired for one year or longer, that person may not renew, but must comply with the requirements for issuance of an original license.

LNG Safety Rules, §14.2016

#### **Certification Requirements**

- (a)(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 a commission examination
- (a)(5)(B) Successful completion of any required examination must be credited to the individual.

An individual who has been issued a certification card must make the card readily available and must present the card to any Commission employee or agent who requests proof of certification.

- (a)(5)(C) Any individual who fails an examination must be immediately disqualified from performing any LNG activities covered by that examination.
- (d) To maintain active status, a certificate holder must pay the \$25 annual renewal fee on or before May 31 of each year.

LNG Safety Rules, §14.2019

#### 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 must notify the Railroad Commission by telephone as soon as possible 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 involved in an accident where there is damage to the tank, piping appurtenances, or any release of LNG resulting from the accident must be reported to the Railroad Commission, 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 must be reported to the Railroad Commission, regardless of the accident location.
- (c) The telephone notification must 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 the division is requested.
- (d) The individual making the telephone notification must 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 must file LNG Form 2020 with the Railroad Commission. The form must be postmarked within 14 calendar days of the date of initial notification to the Railroad Commission.

LNG Safety Rules, §14.2049

#### Entry on Property; Inspection and Investigation

- (a) A Commission-authorized person may enter the premises of a licensee or any building or other premises open to the public or inspect any LNG system or motor vehicle equipped with LNG equipment any reasonable time.
- (b) Any authorized Commission representative may enter any building or premises where an accident has occurred in which LNG was a probable cause for purposes of investigating the cause, origin, and circumstances of such accident.

During the Commission investigation of an LNG-related accident the Commission may request that any state or local authority having jurisdiction take appropriate action as may be necessary for preservation of property and premises.

Texas Natural Resources Code, §116.015

#### **Licensing Requirements**

- (a) A person is required to obtain a license from the Commission to engage in any of the following activities:
  - (1) work that includes the manufacture, assembly, repair, testing, sale, installation, or subframing of LNG containers for use in this state;
  - (2) systems work that includes the sale, installation, modification, or servicing of LNG systems for use in this state, including the installation, modification, or servicing by any person, except a political subdivision, of a LNG motor fuel system or mobile fuel system on a vehicle used in the transportation of the general public; or
  - (3) product work that includes the sale, storage, transportation for delivery, or dispensing of LNG in this state.
- (b) A license obtained by a partnership, corporation or other legal entity extends to the entity's employees who are performing LNG work, provided that each employee is qualified and registered as required by rules adopted by the Commission.
- (c) No license is required by an original vehicle manufacturer or a subcontractor of such manufacturer for the installation and sale of a new LNG system when such system is installed on a new original vehicle fueled by LNG.

Texas Natural Resources Code, §116.031

#### **Insurance Requirements**

(a) All licensees must acquire and maintain appropriate workers' compensation or coverage for its employees under policies of work-related accident, disability, and health insurance, including coverage for death benefits, from an insurance carrier authorized to provide coverage in this state and other insurance coverage required by the Commission in the amounts required by the Commission.

Texas Natural Resources Code, §116.036

#### **Disciplinary Action**

(e) If the Commission determines that a probable violation or noncompliance concerning LNG motor vehicles constitutes an immediate danger to the public health, safety, and welfare, it must require the immediate cessation of the probable violation or noncompliance and proceed with a hearing.

Texas Natural Resources Code, §116.037

#### **Warning Tags**

- (a) A warning tag may be attached by an employee, agent, or inspector of the Commission to any LNG motor vehicle required to be registered, declared unsafe or dangerous for service or any LNG equipment or system that is defective or any system in a conspicuous location.
- (b) A person may not sell, furnish, deliver, or supply liquefied natural gas for use or consumption by or through a motor vehicle or system in a public place or operate a motor vehicle having LNG equipment to which a warning tag is attached.
- (c) A warning tag may be removed on approval of the Commission or by a person designated by the Commission to remove the tag.

Texas Natural Resources Code, §116.103

#### **Injunctive Relief**

(a) On request of the Commission, the Attorney General of Texas may bring suit in the name of the state to enjoin a person from violating this chapter or a rule adopted under this chapter.

Texas Natural Resources Code, §116.141

#### **Administrative Penalty**

- (a) A civil penalty under Chapter 116 may be assessed after the persons charged with the violation have been given an opportunity to schedule or be granted a public hearing.
- (b) Each day a violation continues may be considered a separate violation for purposes of penalty assessments; the maximum civil penalty that may be assessed is \$10,000 per day per violation.

Texas Natural Resources Code, §116.143

#### **Penalty Assessment Procedure**

(a) A civil penalty may be assessed only after the person charged with the violation has been given an opportunity for a public hearing.

Texas Natural Resources Code, §116.144

#### SAMPLE QUESTION

The operating end of the container at a stationary LNG installation, including \_\_\_\_\_, which is exposed to vehicular traffic, must be protected from damage by the vehicular traffic.

- A. The material handling equipment
- B. The entire dispensing system
- C. Any part of the LNG transfer system, dispensing system or storage container
- D. All of the above

Answer: D

## RRC ALTERNATIVE FUELS TRAINING CENTER 4044 PROMONTORY POINT DR., AUSTIN



