

# **TEXAS LNG EXAMINATION STUDY GUIDE**

**Category 15**  
**Container Manufacturer and / or**  
**Fabricator**  
**Management Level**



**RAILROAD COMMISSION OF TEXAS**

June 2015

## **NOTICE**

This publication is intended for use in its entirety as a guide for persons preparing to take a Railroad Commission LP-gas qualifying examination. 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.

This publication is not intended to be an exhaustive treatment of the subjects covered and should not be interpreted as precluding the use of other safety programs or procedures that comply with (1) applicable federal, state, and/or local code provisions, statutes, ordinances, and/or other regulations, including, but not limited to, the Railroad Commission of Texas' LP-Gas Safety Rules and codes adopted by the Railroad Commission of Texas, and/or (2) other industry standards and/or practices.

Every effort was made to ensure that this publication was accurate and up-to-date as of the date of publication. The reader is cautioned, however, about reliance on this publication or any portion thereof at any time thereafter, particularly because changes in technology are likely to occur that might make portions of this publication inaccurate and out-of-date. The Railroad Commission of Texas assumes no liability, under any circumstances, for any actions taken or omissions made in reliance of the contents of this publication, from whatever source, or any other consequences of any such reliance.

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## Exam administration

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### 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.

(See map to Training Center on page 33.)

### Taking an examination outside of Austin

You may also take any Railroad Commission qualifying examination at several 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 [www.rrc.state.tx.us](http://www.rrc.state.tx.us). From the drop-down menu under “Alternative Fuels” choose “Safety, Licensing, Training & Certification” and click on “Training and Exam Events.” 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 [www.rrc.state.tx.us](http://www.rrc.state.tx.us). From the drop-down menu under “Alternative Fuels” choose “Safety, Licensing, Training & Certification”, under Liquefied Petroleum Gas click on “Training” then find 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 [www.rrc.state.tx.us](http://www.rrc.state.tx.us). To pay online, be sure to print out the confirmation page. 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.

Examinees should prepare for the Category 15 LNG Container Manufacturer and / or Fabricator management-level examination by studying the applicable sections of the Railroad Commission’s Regulations for Compressed Natural Gas and Liquefied Natural Gas ; *Gas* (16 Texas Administrative Code, Chapter 14), known informally as the Commission’s LNG Safety Rules and *section § 178.338 of 49 CFR*. The full current text of 49 CFR can also be viewed online. Go to <http://ecfr.gpoaccess.gov> and select “Title 49—Transportation.”

### **Examination time limit**

The Category 15 LNG Container Manufacturer and / or Fabricator management-level qualifying examination 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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# **LNG EXAMINATION STUDY GUIDE MANAGEMENT-LEVEL CATEGORY 15 LNG CONTAINER MANUFACTURER and / or FABRICATOR**

## **Who should use this guide?**

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You should use this guide if you plan to take the Railroad Commission's management-level qualifying examination for a Category 15 license for container manufacturers and/or fabricators which 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 LNG transport and transfer systems for use in Texas.

## **What books do I need?**

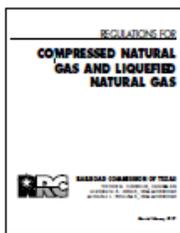
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This examination tests your knowledge of the laws and standards that apply to LNG manufacture, fabrication, assembly, repair, installation, testing, and sale of LNG containers, including LNG motor or mobile fuel containers and systems, and the repair of LNG transport and transfer systems for use in Texas. These laws and standards are found in two books:

*LNG Regulations Compressed Natural Gas and Liquefied Natural Gas* (Texas Railroad Commission); *section § 178.338 of 49 CFR*.

## **Where do I get these books?**

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You may download the current edition of the Railroad Commission's Regulations *for Compressed Natural Gas and Liquefied Natural Gas Safety Rules* in PDF format free online at [www.rrc.state.tx.us](http://www.rrc.state.tx.us). 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.

*The Code of Federal Regulation section § 178.338 of 49 CFR*, as well as the full current text of 49 CFR can be viewed online. Go to <http://ecfr.gpoaccess.gov> and select "Title 49 - Transportation."

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## Sections and Topics

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Before you take this examination you should know the definitions found in this study guide and the contents of the sections of the codes and standards listed below. The actual examination questions may not cover all of the listed sections and topics.

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

§14.2013	Licenses and Related Fees
§14.2016	Licensing Requirements
§14.2019	Certification Requirements
§14.2019	Certification Requirements
§14.2049	Accident Reports
§14.2116	Transfer of LNG
§14.2419	Welding and Piping Installations
§14.2431	Welded Pipe Test
§14.2607	Vehicle Fuel Containers

### Natural Resources Code

§116.015	Entry on Property; Inspection and Investigation
§116.031	Licensing Requirements
§116.037	Disciplinary Action
§116.141	Injunctive Relief
§116.143	Administrative Penalty
§116.144	Penalty Assessment Procedure

### Title 49, Code of Federal Regulations (CFR)

49 CFR §178.338	Specification MC 338; Insulated Cargo Tank Motor Vehicle
49 CFR §178.338-1	General Requirements
49 CFR §178.338-2	Material
49 CFR §178.338-3	Structural Integrity
49 CFR §178.338-4	Joints
49 CFR §178.338-5	Stiffening Rings
49 CFR §178.338-6	Manholes
49 CFR §178.338-7	Openings

## Terms and Definitions

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

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

The 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)**

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)**

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)**

The design pressure is the pressure for which a system or portion of that system is designed.

**LNG Safety Rules §14.2007(18)**

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)**

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)**

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)*

An Outlet is 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.  
*LNG Safety Rules §14.2007(52)*

A pressure relief valve is 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.  
*LNG Safety Rules §14.2007(54)*

A pressure vessel is a container or other component designed in accordance with the ASME Code. *LNG Safety Rules §14.2007(55)*

PSIG means Pounds per square inch gauge. *LNG Safety Rules §14.2007(57)*

A transport system is any and all piping, fittings, valves, and equipment on a transport, excluding the container. *LNG Safety Rules §14.2007(72)*

Water capacity is the amount of water in gallons required to fill a container.  
*LNG Safety Rules §14.2007(75)*

### ***Title 49, Code of Federal Regulations***

Design pressure means the “Maximum Allowable Working Pressure” as used in Section VIII of the ASME Code, and is the gauge pressure at the top of the tank.  
*§178.338–1 (a) (1)*

Design service temperature means the coldest temperature for which the tank is suitable.  
*§178.338–1 (a) (2)*

## **Key Topics**

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NOTE: The list below is not exhaustive. You are responsible for knowing all the facts, rules, standards and procedures that apply to the LP-gas 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. When you take the examination, read each question very carefully.

## GENERAL RULES FOR ALL STATIONARY LNG INSTALLATIONS

### Stationary LNG Storage Containers

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

**LNG Safety Rule §14.2107 (d)**

### Transfer of LNG

(a) Venting of LNG is prohibited as part of routine activities, except for the following:

(1) as provided for in LNG Safety Rule, section §14.2119 ; and

(2) through a trycock installed on a stationary storage tank during filling of the tank.

(b) LNG being transferred into stationary storage containers must be compatible in composition or temperature and density with the LNG already in the container. When making transfers into fueling facility containers, the LNG must 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 must be taken to prevent an excessive rate of vapor evolution.

(d) At least one licensed or certified individual must be in attendance while unloading is in progress.

(e) Ignition sources must 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 must be provided to determine that containers are not overfilled.

**LNG Safety Rules, §14.2116**

**Sample Question**

Vent pipes or stacks must have the open end protected to prevent the entrance of \_\_\_\_\_.

- A. Rain
- B. Snow
- C. Foreign materials
- D. All of the above

*Answer: D*

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## PIPING SYSTEMS AND COMPONENTS FOR ALL STATIONARY LNG INSTALLATIONS

### Welding at Piping Installations

Qualification and performance of welders must 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 is permissible.

#### ***LNG Safety Rules, §14.2419***

#### Welded Pipe Tests

- (a) Longitudinal or spiral welded pipe which will be subjected to service temperatures below -20 degrees Fahrenheit must 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 must 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 must be fully examined by liquid penetrant.
- (d) Fully penetrated groove welds for branch connections required by ANSI B31.3, 327.4.4 must be fully examined by in process examination in accordance with ANSI B31.3, 336.4.7, and must 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 must 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) must be maintained for the life of the system.

#### ***LNG Safety Rules, §14.2431***

### ENGINE FUEL SYSTEMS

- (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 container must be responsible for its suitability for continued service.
- (c) Repair or alteration of containers must comply with the Code under which that container was fabricated. Licensees making repairs or alterations must file LNG Form 2008 with LP-Gas Operations.
- (d) Containers must be equipped with a dip tube or other device so that the maximum filling volume of the container complies with LNG Safety Rule, section §14.2107
- (e) Containers must be constructed so that the unrelieved pressure inside the container must 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 must be located and installed to communicate directly with the vapor space.
- (g) Containers must 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 must be fabricated of materials suitable for LNG service. Pressure containing metal parts of appurtenances, except fusible elements, must have a minimum melting point of +1,500 degrees Fahrenheit. Container appurtenances must have a rated maximum allowable working pressure not less than the maximum allowable working pressure of the container.
- (i) Containers must 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 must communicate directly with the vapor space of the container, and shall be designed to minimize the possibility of tampering. Externally set or adjusted valves must be provided with a means of sealing the adjustment.
- (j) Valves must be readily accessible and operable without the use of tools. A shutoff valve must be installed directly on the container vapor outlet with no intervening fitting other than pressure relief devices and must be marked with the words, "VAPOR SHUTOFF VALVE." Another shutoff valve must be installed directly on the container liquid outlet and must be marked with the words, "LIQUID SHUTOFF VALVE." The markings must 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.

**LNG Safety Rules, §14.2607**

**Sample Question**

What type of welding is permitted on an LNG piping system?

- A. Oxygen-fuel gas
- B. Electric arc
- C. Inert gas-shielded
- D. Both B and C
- E. All of the above

*Answer: D*

## **TITLE 49, CODE OF FEDERAL REGULATIONS (CFR)**

### **§178.338 SPECIFICATION MC-338; INSULATED CARGO TANK MOTOR VEHICLE**

#### **General Requirements**

Each cargo tank must consist of a suitably supported welded inner vessel enclosed within an outer shell or jacket, with insulation between the inner vessel and outer shell or jacket, and having piping, valves, supports and other appurtenances as specified.

#### **§178.338–1 (b) General requirements**

The design pressure of the tank (the inner vessel) must be at least 25.3 psig but not more than 500 psig.

#### **§178.338–1(c) (1) General requirements**

To determine the required thicknesses of the parts of the tank (the inner vessel), the static head of the lading must be added to the design pressure.

#### **§178.338–1(c) (1) General requirements**

If the jacket (the outer shell or insulation cover) is evacuated, the tank (the inner vessel) must be designed for a pressure of 14.7 psi, plus the lading static head, higher than its design pressure.

#### **§178.338–1(c) (1) General requirements**

The design service temperature of the tank (the inner vessel), piping and valves may not be warmer than the liquefaction temperature at one atmosphere of the lading to be transported

***§178.338-1(c) (2) General requirements***

Design and construction details of the tank interior may not allow collection and retention of cleaning materials or contaminants.

***§178.338-1(c) (3) General requirements***

To preclude the entrapment of foreign material, the design and construction of the tank must allow washing of all interior surfaces by the normal surging of the lading during transportation.

***§178.338-1(c) (3) General requirements***

The exterior surface of the tank must be insulated with a material compatible with the lading.

***§178.338-1 (d) General requirements***

Each cargo tank must have an insulation system that will prevent the tank pressure from exceeding the pressure relief valve set pressure within the specified holding time when the tank is loaded with the specific cryogenic liquid at the design conditions of the following conditions:

1. The specified temperature and pressure of the cryogenic liquid
2. The exposure of the filled cargo tank to an average ambient temperature of 85 °F.

***§178.338-1 (d) (1) (i) (ii) General requirements***

Each vacuum-insulated cargo tank must be provided with a connection for a vacuum gauge to indicate the absolute pressure within the insulation space.

***§178.338-1 (d) (3) General requirements***

The insulation for each vacuum-insulated cargo tank must be completely covered by a metal jacket.

***§178.338-1 (e) General requirements***

The jacket or the insulation for each vacuum-insulated cargo tank must be so constructed and sealed as to prevent moisture from coming into contact with the insulation

***§178.338-1 (e) General requirements***

An evacuated jacket must be designed to sustain a minimum critical collapsing pressure of 30 psig.

***§178.338-1 (f) (1) General requirements***

If an evacuated jacket supports additional loads, such as the weight of the tank and lading, the combined stress, may not exceed 25 percent of the minimum specified tensile strength.

***§178.338-1 (f) (2) General requirements***

**Sample Question**

The design pressure of each cargo tank (the inner vessel) must be at least \_\_\_\_\_ psig but not more than \_\_\_\_\_ psig.

- A. 10 / 100
- B. 15.5 / 250
- C. 25.3 / 500 \*
- D. 50.6 / 575

*Answer: C*

**Material**

All material used in the construction of a tank and its appurtenances that may come in contact with the lading must be compatible with the lading to be transported.

**§ 178.338–2 (a) Material**

All material used for tank pressure parts must conform to the requirements of the ASME Code.

**§ 178.338–2 (a) Material**

All material used for evacuated jacket pressure parts must conform to the chemistry and steelmaking practices of one of the material specifications of Section II of the ASME Code or the following ASTM Specifications: A 242, A 441, A 514, A 572, A 588, A 606, A 633, A 715, A 1008/A 1008M, A 1011/A 1011M.

**§ 178.338–2 (a) Material**

All tie-rods, mountings, and other appurtenances within the jacket and all piping, fittings and valves must be of material suitable for use at the lowest temperature to be encountered.

**§ 178.338–2 (b) Material**

Impact tests are required on all tank materials, except materials that are excepted from impact testing by the ASME Code, and must be performed using the procedure prescribed in the ASME Code.

**§ 178.338–2 (c) Material**

The direction of final rolling of the shell material must be the circumferential orientation of the tank shell.

**§ 178.338–2 (d) Material**

Each tank constructed in accordance with part UHT of the ASME Code must be Postweld heat treated as a unit after completion of all welds to the shell and heads.

**§ 178.338–2 (e) Material**

The fabricator must record the heat and slab numbers and the certified Charpy impact values of each plate used in the tank on a sketch showing the location of each plate in the shell and heads of the tank.

**§ 178.338–2 (f) Material**

A copy of the sketch of each plate used in the tank showing the location of each plate in the shell and heads of the tank, must be provided to the owner of the cargo tank and a copy must be retained by the fabricator for at least five years and made available, upon request, to any duly identified representative of the Department.

**§ 178.338–2 (f) Material**

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## GENERAL REQUIREMENTS (ADMINISTRATIVE)

### Licenses, Related Fees

A Category 15 Railroad Commission LNG license authorizes the sale, manufacture, fabrication, assembly, repair, installation and testing of LNG containers, the sale, installation and repair of LNG motor or mobile fuel systems and the installation and repair of transport and transfer systems.

***LNG Safety Rules §14.2013 (b) (1)***

### Licenses 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 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.

***NRC-116.031***

(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*

### **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 a 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.

*NRC-116.015*

### **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.

*NRC-116.036*

### **Disciplinary Action**

(e) During a proceeding hearing for Disciplinary Action involving a LNG Licensee, if the Commission determines that a probable violation or noncompliance concerning CNG motor vehicles constitutes an immediate danger to the public health, safety, or welfare, it must require the immediate cessation of the probable violation or noncompliance

***NRC-116.037***

### **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.

***NRC-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.

***NRC-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

***NRC-116.144 p.153***

### **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 Safety Division 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 registered with LP-Gas Operations 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 Safety Division, 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 Safety Division, 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 Safety Division. The form must be postmarked within 14 calendar days of the date of initial notification to the Safety Division.
- LNG Safety Rules §14.2049***

### Sample Question

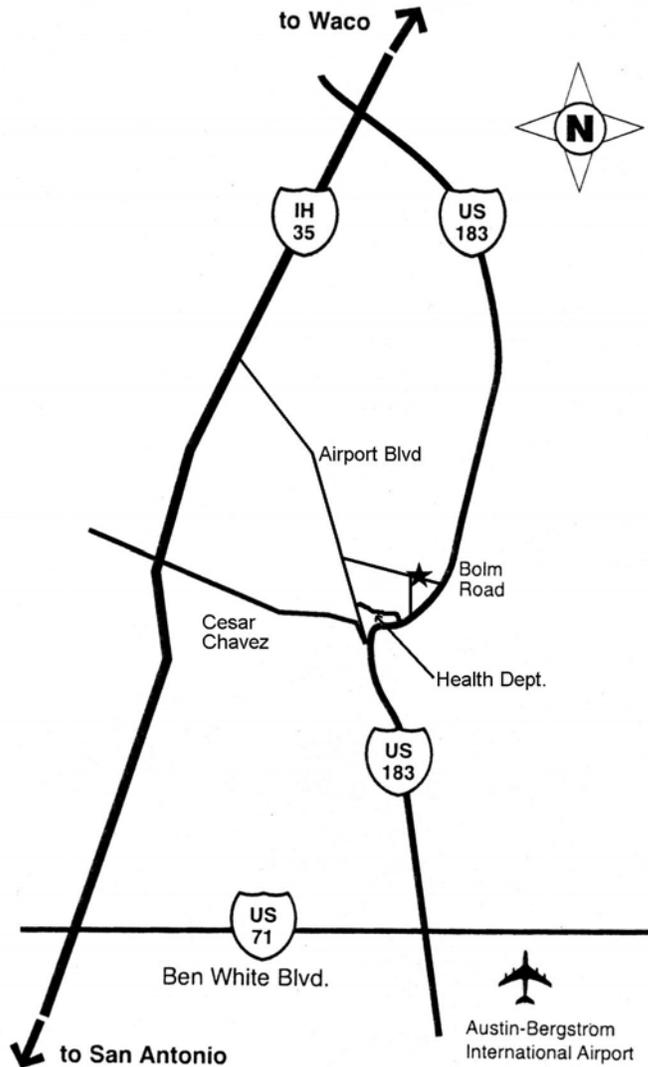
At the request of the Railroad Commission, which state entity must bring suit in the name of the state to enjoin a person from violating Chapter 116 or a rule adopted under Chapter 116?.

- A. State Office of Administrative Hearings
- B. Travis County District Attorney
- C. Texas Attorney Generals Office
- D. Texas Department of Public Safety

*Answer: C*

# ALTERNATIVE FUELS TRAINING CENTER

## 6506 Bolm Road, Austin



### DIRECTIONS TO ALTERNATIVE FUELS TRAINING CENTER

#### Entering Austin on I-35 going south:

Take exit 239/240 for Hwy 183 South/ Austin-Bergstrom International Airport. Stay on 183 past Cameron Road, U.S. 290, Manor Road, Loyola Lane, and Techni-Center Drive. Proceed down the hill on 183 and take the Bolm Road exit. At the light, turn right onto Bolm Road. The Training Center is on the northwest corner of 183 and Bolm Road. Enter through the double glass doors on the south side of the building.

#### Entering Austin on I-35 going north:

Take exit 230 for Texas Hwy. 71/Ben White Blvd. Turn right toward Bastrop. Stay on 71 for approximately 4.3 miles. Exit onto U.S. 183 North. Stay on 183 past the Colorado River bridge. Stay in the right lane and take the Bolm Road exit. Turn left at the light onto Bolm Road and go under the overpass. The Training Center is on the northwest corner of 183 and Bolm Road. Enter through the double glass doors on the south side of the building.

#### From the Travis Building:

Go one block north to Martin Luther King, Jr. Blvd. Turn right on MLK and go about 2 miles to Airport Blvd. Turn right (south) on Airport and go about 1 1/2 miles. The light, just over the railroad bridge, is Bolm Road. Turn left (east) onto Bolm Road and go about 1 mile. 6506 is the last building on the left before U.S. 183