



Rules of
Department of Agriculture
Division 90—Weights and Measures
Chapter 10—Liquefied Petroleum Gases

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**Title 2—DEPARTMENT OF
AGRICULTURE
Division 90—Weights and Measures
Chapter 10—Liquefied Petroleum
Gases**

2 CSR 90-10.001 Definitions and General Provisions

PURPOSE: This rule reflects the terms of the Missouri Propane Gas Commission.

(1) Definitions. The following words and phrases shall mean:

(A) "Affiliated industry," any person or firm engaged in the manufacturing, assembling, and marketing of appliances, containers, and products used in the propane industry, the interstate or intrastate transportation or storage of propane, the installation or design of propane piping systems, or other such affiliation with the commercial, residential, or agricultural use of propane by consumers in Missouri;

(B) "Commission," the Missouri Propane Gas Commission;

(C) "Compressed natural gas" (CNG), a mixture of hydrocarbon gases and vapors, consisting principally of methane in gaseous form that has been compressed for use as a vehicular fuel;

(D) "Director," the executive director of the commission;

(E) "Director of the Missouri Department of Agriculture," the director of the Missouri Department of Agriculture or their designee;

(F) "Dispensing station," a system of compressors, safety devices, cylinders, piping, fittings, valves, regulators, gauges, relief devices, vents, installation fixtures, and other compressed natural gas equipment intended for use in conjunction with motor vehicle fueling by compressed natural gas but does not include a natural gas pipeline located upstream of the inlet of the compressor;

(G) "Liquefied petroleum gas," any material which is composed predominantly of any of the following hydrocarbons, or mixtures of the same: propane, propylene, butanes (normal butane or isobutane), and butylenes;

(H) "Motor vehicle," all vehicles except those operated on rails which are propelled by internal combustion engines and are used or designed for use in the transportation of a person or persons or property;

(I) "Person," any individual, group of individuals, partnership, association, cooperative, corporation, or any other entity;

(J) "Producer," the owner of the propane at the time it is recovered at a manufacturing facility, irrespective of the state where production occurs;

(K) "Propane," propane, butane, mixtures of propane and butane, and liquefied petroleum gas, as defined by the National Fire Protection Association Standard 58 for the storage and handling of liquefied petroleum gases;

(L) "Public member," a member of the commission who is a resident of Missouri, is a user of odorized propane, and is not related by the third degree of consanguinity to any retailer or wholesale distributor of propane;

(M) "Retail marketer," a business engaged primarily in selling propane gas, its appliances, and equipment to the ultimate consumer or to retail propane dispensers;

(N) "Wholesaler" or "reseller," a seller of propane who is not a producer and who does not sell propane to the ultimate consumer.

AUTHORITY: section 323.010, RSMo Supp. 2008. Original rule filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 323.010, RSMo 1947, amended 1994, 2007.*

2 CSR 90-10.010 Installing, Metering, Transporting, Licensing for LPG
(Rescinded November 11, 1977)

AUTHORITY: section 323.020, RSMo 1969. Original rule filed Sept. 8, 1969, effective Sept. 18, 1969. Rescinded: Filed July 13, 1977, effective Nov. 11, 1977.

2 CSR 90-10.011 Inspection Authority—Duties

PURPOSE: This rule sets out the authority and duties of the inspection authority and has been developed in the interest of safety to life and property. These rules do not apply to public utilities regulated by the Missouri Public Service Commission.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) The director is the officer in charge of the safety in the storage, handling, transportation, and use of liquefied petroleum gas of

the Missouri Propane Gas Commission referred to as the inspection authority.

(A) The director of the Missouri Department of Agriculture is the officer in charge of the collection of meter inspection fees and liquefied petroleum gas (LPG) meter inspections.

(2) The inspection authority shall have discretionary authority to require annual leak testing of all LPG piping systems serving schools, churches, nursing homes, resorts, mobile home parks, public housing, hospitals, amusement parks, summer camps (Boy Scout, Girl Scout, church, etc.), and other public buildings and institutions. It shall be the responsibility of the owner, administrator, superintendent, director, or other responsible person directly associated with any of the piping systems serving any of the listed public buildings, mobile home parks, summer camps (Boy Scout, Girl Scout, church, etc.), amusement parks, and institutions to assume full responsibility to secure the annual leak test of the LPG system on or before September 1 of each calendar year with the exception of summer camps and amusement parks which shall be completed on or before June 1 of each calendar year. A copy of the test report shall be submitted to the inspection authority within five (5) days after completion of the test. Failure to complete the required annual leak tests may be due cause to consider the LPG system unsafe for continued use and shall be reason to place the system out-of-service until the time a leak test is completed and the system found to be free of leaks and safe for continued operation.

(3) The standards for storage and handling of LPGs and the standards for the installation of gas appliances and gas piping as published in the National Fire Protection Association publications, Numbers 54, 1999 edition; 58, 2001 edition; 59, 1984 edition; 501A, 1982 edition; and 501C, 1987 edition. All publications are published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101, which are incorporated by reference, and will be adhered to by the inspection authority in the course of administering its duties. This rule does not incorporate any subsequent amendments or additions to the referenced material. These are adopted as rules in 2 CSR 90-10.020, 2 CSR 90-10.040, 2 CSR 90-10.060, and 2 CSR 90-10.090.

(4) For the purpose of ascertaining whether any container or system complies with all rules regulating the storage and handling of



LPGs and the installation of appliances and piping—

(A) The inspection authority and/or the authorized agents, deputies and inspectors shall have free access, at reasonable times and upon reasonable notice, to any premises where a LPG container or system is offered for sale, stored, being repaired, installed or being used; and

(B) Owners, operators, drivers, custodians and occupants of transport vehicles, during reasonable hours and upon reasonable request of the inspection authority, shall permit inspection of that vehicle.

(5) Any person, firm, corporation or others making LPG installations or supplying fuel for installations, upon reasonable request, shall furnish reasonable and pertinent information as may be considered necessary by the inspection authority to determine that there is compliance with the rules.

(6) An exception to these regulations may be approved by the inspection authority after sufficient evidence is supplied showing that the exception will provide a level of safety at least equivalent to that contemplated by the regulations.

(7) The provisions of these regulations shall not be construed as prohibiting the continued use of an installation which received the written approval of the inspection authority at the time of installation or was in compliance with safety standards and codes at the time of installation, unless circumstances of a hazardous nature justify correction for the benefit of public safety.

(8) If the director determines that any LPG container constitutes an immediate danger to the public or property, s/he shall require the immediate removal of liquid and vapor LPG from the container by a registered LPG dealer or company. If the director determines that any LPG appliance, equipment, or system constitutes an immediate danger to the public and property, s/he shall require the immediate disconnection by a registered LPG dealer or company from the LPG container.

AUTHORITY: section 323.020, RSMo Supp. 2008. Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed April 3, 1990, effective June 28, 1990. Emergency amendment filed Oct. 15, 2008, effective Oct. 25, 2008, expired April 22, 2009. Amended: Filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.*

2 CSR 90-10.012 Registration—Training

PURPOSE: This rule sets forth registration, training and examination requirements for persons applying for or holding registrations to ensure the safety of life and property.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) As a prerequisite to registration in this state and receiving a numbered certificate of registration to engage in the business of selling at retail liquefied petroleum gas (LPG), or in the business of handling or transporting LPG over the highways of this state, or in the business of installing and servicing equipment and appliances for use with LPG in this state, application shall be made to the director on forms, prescribed for this purpose with such reasonable information as shall be deemed necessary, which may be obtained from the Missouri Propane Gas Commission at (573) 893-1073 and are incorporated by reference.

(2) All persons applying for registration to engage in the business of handling, storing or transporting LPGs or in the business of installing, repairing or servicing piping, equipment or appliances for use with LPGs shall be properly trained and experienced in the work, familiar with all safety precautions required and comply with all requirements of Chapter 323, RSMo and the rules pursuant to it.

(3) Every individual applying for registration to engage in the business of handling, storing, or transporting LPGs or in the business of installing, repairing, or servicing piping, equipment, or appliances for use with LPGs must score at least seventy-five percent (75%) on a written examination administered or authorized by the Missouri Propane Gas Commission before approval of registration will be granted.

(4) Every individual, except clerical personnel and others not actually handling LPGs or servicing appliances or equipment, within any business involved in handling, storing or transporting LPGs or involved in the installation, repairing or servicing of piping, equipment or appliances for use with LPGs must attend and complete an initial training program, including the passing of a written examination with a score of at least seventy-five percent (75%). Every individual subject to the requirements of this section shall attend refresher training at least once every three (3) years. New employees shall be trained by their employer until such time that training is available through a state-approved training program. Each training program's curriculum must be based on the National Propane Gas Association's (NPGA) Certified Employee Training Program (CETP) or equivalent, structured to meet the trainees needs, and approved by the director. All training programs submitted to the director must contain information on applicable statutes and regulations governing liquefied petroleum gases; must be resubmitted to the director for review and approval on an annual basis or at such time change has been made; and any training program that, through audit, does not meet the approved training program criteria, may be rejected for use by the director.

(5) Residents of states other than Missouri who desire to engage in or continue to do business in this state shall submit an application for registration on forms MPGC-1219, MPGC-0910, and MPGC-1136, all published in 2008, and furnished for this purpose by the director, which may be obtained from the publisher, Missouri Propane Gas Commission at (573) 893-1073, 4110 Country Club Dr., Ste. 200, Jefferson City, MO 65109-0302, which are incorporated by reference. This rule does not incorporate any subsequent amendments or additions to the referenced material. Qualifications and approval for this registration permit will be determined on the basis outlined in Chapter 323, RSMo. The information submitted shall be related to the requirements of this state and any additional provisions required by the LPG inspection authority of their state residency in determining eligibility for registration.

(6) Registration shall be filed at the time of or before commencing operations by the classes described in this section. The registrant shall notify the inspection authority within ten (10) days after discontinuance of his/her individual operations, providing the name of his/her successor organization, if any. The classes are—



(A) Class I—General LP gas operation. The storage, sale, transportation and distribution of LP gas at retail-wholesale and the installation, service and repair of appliances, equipment and piping for use with LP gas. This does not include LP gas carburetion or liquid meter service or repair;

(B) Class II—Installer and service of low pressure systems. The installation, service and repair of appliances, equipment and piping for use with LP gas. This class applies to only the low pressure portion of the LP gas system downstream of the first stage regulator and those systems addressed in NFPA 54;

(C) Class III—Installer and service of high pressure systems. The installation, service and repair of piping and equipment for use with LP gas. This class applies to only the high pressure portion of the LP gas system upstream of the first stage regulator and those systems addressed in NFPA 58;

(D) Class IV—Installer and service of high and low pressure. The installation, service and repair of appliances, equipment and piping for use with LP gas, the installation of LP gas cylinders and tanks and the delivery of LP gas cylinders. This class applies to both high and low pressure portions of LP gas systems as addressed in NFPA 54 and NFPA 58;

(E) Class V—LP service station operator (metered sales). The retail operation of an LP gas service station consisting of LP gas storage containers, piping, pumps, and other pertinent equipment utilized to fill portable LP gas containers by weight;

(F) Class VI—LP gas dispenser operator (non-metered sales). The retail operation of an LP gas dispensing station consisting of an LP gas storage container(s), piping, pumps and other pertinent equipment utilized to fill portable LP gas containers by weight;

(G) Class VII—Cylinder exchange dealer. The operation of an LP gas cylinder exchange business whereby Department of Transportation (DOT) cylinders are stored in a secured cage or area and exchanged with customers (full cylinder for empty cylinder). This does not include the filling of any cylinder or tank on premises;

(H) Class VIII—Cylinder sales and service. An operation or business engaged in the filling, distribution and service of LP gas cylinders;

(I) Class IX—Carburetion. An operation or business engaged in the installation and services of LP gas carburetion systems;

(J) Class X—Liquid meter repair and service. The installation, repair and service of LP gas meters utilized for liquid LP gas deliveries, i.e., bobtail delivery truck meters; and

(K) Class XI—Transporters. An operation engaged in the business of transporting LP gas.

(7) Each registrant shall be issued a certificate of registration which shall bear a permanent identifying number. This certificate shall be displayed in a conspicuous location in the office at the address for which issuance was made.

(A) This same number shall be used as an identifying number to be conspicuously displayed on each and every motor vehicle used by the registrant for the transportation of liquefied petroleum gas over the highways of this state.

(B) The number shall be preceded by the letters LPG MO.

(C) The letters and numbers shall be in a color contrasting with the background color, at least two inches (2") in height, painted with a minimum stroke width of one-fourth inch (1/4").

(D) The letters and numbers shall be located in clear view on the rear of each truck and bulk tank or on each side of a truck not equipped with a tank body.

(E) Trucks and tank tanks shall be numbered consecutively or by some other method of identification which has been approved by the inspection authority. This method of identification shall be used and placed on the tank or truck following the identifying number.

(8) Each transporter making delivery to a bulk plant or any similar type delivery of LPG over the highways of this state, shall have the LPG MO identifying number printed or written on each ticket delivered to each consignee in this state receiving a product which is transported by the registered transporter.

AUTHORITY: section 323.020, RSMo Supp. 2008. Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Amended: Filed Dec. 3, 2001, effective June 30, 2002. Emergency amendment filed Oct. 15, 2008, effective Oct. 25, 2008, expired April 22, 2009. Amended: Filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.*

2 CSR 90-10.013 Installation Requirements

PURPOSE: This rule sets out the minimum general standards governing design, construction, location and installation of equipment for storing and handling liquefied petroleum gas. These minimum general standards are designed to assure the required safety for life and property. The requirements contained in this rule will insure the safety of life and property.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Prior to installation, two (2) copies of the detailed plans of the proposed liquefied petroleum gas (LPG) installation covering the LPG system and piping, including the size and total storage capacity of all LPG storage tanks shall be forwarded to the inspection authority for consideration and approval for installations at buildings of public assembly or use such as schools, churches, recreational halls, tourist courts, hotels, hospitals, sanitariums, convalescent homes, nursing homes, rest homes, four (4)-unit apartments and larger or similar types of public buildings having institutional occupancies, for new construction, major renovations or additions to these installations and mobile home parks, shopping center areas, service stations, bulk plants, industrial plants and other similar locations of public gathering. When approval is granted, one (1) copy of the plans will be returned to the party submitting the original proposal. Final inspection and approval is required before placing the installation into service. If installation of the proposed LPG system has not begun within ninety (90) days from the date of approval by the state LPG inspection authority, new plans shall be resubmitted prior to the time installation does begin.

(2) Detailed plans shall be furnished to the inspection authority for approval before installation of LPG containers having a water capacity of ten thousand (10,000) gallons or more, or two (2) or more containers that are



to be connected and have a combined capacity of ten thousand (10,000) gallons or over, or when LPG in the liquid phase is to be withdrawn or of a container charging plant where portable containers are to be recharged and filled regardless of the capacity of the storage containers used as the supply for filling containers and cylinders.

(3) The following requirements shall be met on plans that shall be submitted to the inspection authority of Missouri for approval before starting construction:

(A) Two (2) complete copies of the plans shall be submitted to the inspection authority together with detailed specifications;

(B) Plans shall be on good quality paper, legible and contain the information required by this section;

(C) Plans and specifications are to be accompanied by a written application on a form prescribed by the inspection authority and shall include the following:

1. The address of the proposed location and the name and mailing address of the owner or builder;

2. An outline of the boundary lines of the property owned or leased;

3. A diagram showing adjoining property on all sides and the distance to all adjacent buildings and roadways;

4. A diagram showing the location and sizes of each container or containers on the plot of ground to be used;

5. A diagram pinpointing each location where liquid transfer will be made, such as loading, unloading and bottling;

6. A general layout of piping, pipe supports and pipe protection; the location, size and type of each important piece of equipment, gate valve, excess flow valve, pressure relief valve, hose, regulator and all other important parts of the system planned;

7. The location of each building or shed to be built on the property and each sewer or drain opening;

8. The location of electrical lines and poles and telephone poles if located twenty-five feet (25') or less from storage tanks or liquid transfer areas;

9. The location of the electrical service pole;

10. The location of fences;

11. The dimensions of tank foundations, footings, reinforcements and tank clearance above ground level;

12. Storage container dimensions, whether new or used, and the name of the manufacturer;

13. All used containers of two thousand (2,000) gallons water capacity or more to be reinstalled shall have all valves removed and

inspected. Relief valves shall be tested and if defective, replaced with new valves of proper design. A statement of all tests, inspections and valve replacements shall be submitted to the inspection authority; and

14. A statement that all materials and workmanship will be in conformity with the requirements of Missouri pertaining to LPG safety standards; and

(D) All electrical equipment in vaporizer houses, pump houses and cylinder filling rooms or other similar locations shall be of the type approved for use in Class 1, Group D, Hazardous Locations, of the *National Electrical Code*.

(4) All installations for use of LPGs in containers of sixty to one hundred ten (60–110) pounds, LPG capacity, shall be provided with adequate and safe means of protection to assure that the cylinder is supported in its installed position and that there is reasonable protection from the elements.

(5) When two (2) or more LPG containers, having a water capacity of over one thousand (1,000) gallons each or a combined total water capacity of more than one thousand two hundred (1,200) gallons, are connected by a common liquid line that provides outlet or inlet that may be used as a common filling or withdrawing convenience—

(A) All tanks so connected shall be installed in a manner as to assure that the tops of all tanks are at the same elevation and have approximately the same working pressure rating;

(B) Each tank shall be provided with the proper size and type excess flow valve in the immediate point of opening in the tank where the common line enters each tank;

(C) The rated capacity of excess flow valves in the common header between the tanks and the common pipeline from the system shall not be greater than the maximum flow capacity of the piping, valves and fittings located downstream from the point of installation of the excess flow valve; and

(D) All pipelines and connections shall be provided with sufficient flexibility to withstand any and all settling of the tank foundation, expansion or contraction of the system.

(6) All commercial, industrial and institutional LPG storage systems shall be accessible for emergency fire fighting equipment.

(7) All LPG storage tanks shall be installed a minimum distance of twenty feet (20') from all other Class I, II and III liquids. In the event of a hazardous location, the LPG inspection authority may require a greater

distance and location up to a maximum distance of one hundred feet (100').

(8) Industrial, commercial or institutional LPG storage tanks shall not be buried, mounded or partially mounded without specific approval by the LPG inspection authority. Approval shall not be granted until a complete assessment of the proposed system and location has been made and found to comply with all state and local safety requirements.

(9) All LPG dispensers shall have plans submitted as required by sections (1)–(3).

(10) All LPG dispensers shall be protected from tampering or vandalism by either a six foot (6') high industrial-type fence with one (1) lockable gate or a lockable storage cabinet to protect service valves, meters, hoses and accessory equipment.

(11) All LPG dispensers shall have recommended fill procedures posted in a conspicuous location, and all cylinder fill dispensers shall be equipped with a state-approved scale to be utilized for the safe filling of LPG cylinders. LP gas cylinders of one hundred (100) pounds propane capacity or less shall be filled by weight only utilizing a state-approved scale. Cylinders of one hundred (100) pounds capacity or less shall not be filled from any LP gas delivery vehicle. An exception may be made by the inspection authority for cylinders utilized in hot air balloon service if the cylinders are approved for such service, have an accurate approved method of gauging, are in good condition, and are filled in a safe location away from any source of ignition.

(12) Each commercial and industrial LPG dispensing system, except those filled by weight only, shall incorporate into the dispensing system an approved pullaway device to stop the uncontrolled discharge of LPG. The pullaway device shall be adequately secured against displacement and shall be installed in accordance with the manufacturer's instructions.

(13) Polyethylene pipe or tubing may be used for LPG service if in compliance with the American Society of Testing and Materials (ASTM) D2513 Standards, National Fire Protection Association (NFPA) 58, 1995 Edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101 and incorporated by reference, installed only underground and approved by the LPG inspection authority. Plastic pipe or tubing shall not be used. This



rule does not incorporate any subsequent amendments or additions to the referenced material.

AUTHORITY: section 323.020, RSMo Supp. 2008. Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Amended: Filed Dec. 3, 2001, effective June 30, 2002. Amended: Filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.*

Op. Atty. Gen. No. 86, Sturgis, 2-3-55. A private individual user of liquified petroleum gas may transport over the highways of Missouri empty liquified petroleum gas drums or such drums containing such gas without violating Basic Rule B.15 of the regulations promulgated under section 323.020, RSMo 1969.

2 CSR 90-10.014 Storage

PURPOSE: This rule sets out minimum general standards for the storage of liquified petroleum gas and promotes safety for life and property. These requirements do not apply to public utility facilities regulated by the Missouri Public Service Commission.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) All liquefied petroleum gas (LPG) storage containers or storage systems where one (1) tank is used having a water capacity of one hundred (100) gallons or more, or where two (2) or more tanks are used having a total combined capacity of more than one hundred (100) gallons, and all related equipment located at or near containers which are installed on school grounds, public playgrounds, recreation park grounds or any other playground areas where children in age groups from preschool through grade twelve

(12) have access shall be fenced with industrial type fence a minimum of six feet (6') high as to prevent tampering with the gas system.

(2) Where LPG storage of five hundred (500) gallons or less is in use or where a hazard exists in connection with any size of underground storage system, reasonable protective methods, other than fencing, which are deemed necessary may be required.

(3) Used containers for storage of LPG, other than containers approved by the Interstate Commerce Commission (ICC) or the United States Department of Transportation and connected for use on a motor vehicle, shall not be imported into Missouri, or installed or used if they are not in conformance with the requirements of these regulations and unless the inspection authority has been furnished with the information contained in the manufacturer's data report. Name plate data may be accepted in lieu of a manufacturer's data report on tanks of two thousand (2,000) gallons water capacity or less.

(4) A manufacturer's data report shall be furnished to the inspection authority on all new LPG containers, other than containers approved by the ICC or United States Department of Transportation, having a water capacity greater than one thousand (1,000) gallons.

(5) Containers of any size shall not be used for storage other than manufacturer's design and specifications; i.e., railcars, converted railcars, bulk delivery truck tanks both transport and bobtail cannot be utilized for fixed storage.

(6) All LPG storage containers, including portable or semi-portable with attached supports or foundations to be used for temporary or permanent installations, shall be mounted on solid concrete piers or foundations with a maximum height of the outside bottom of the container shell no more than five feet (5') from the ground.

(7) All skid-mounted LPG storage tanks to be used for temporary or permanent installation shall be mounted on solid concrete footings with the outside bottom of the container not more than three feet (3') from the ground.

(8) All skid-mounted LPG storage container systems of four thousand (4000)-gallon capacity (single or multiple containers) shall comply with the National Fire Protection Association Manual Number 58, 1995 edition, section 3-2.8.10, published by the

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101 and incorporated by reference. This rule does not incorporate any subsequent amendments or additions to the referenced material.

(9) All LPG bulk storage containers, except those covered in section (1) of this rule, of two thousand (2,000) gallons or more capacity shall have its pumps, piping, vaporizers, hoses, bulkheads and related equipment protected from tampering by a metal industrial-type fence at least six feet (6') tall. All locations with one hundred (100) square feet or less fenced area shall have at least one (1) lockable access gate. All locations with more than one hundred (100) square feet fenced shall have at least two (2) lockable access gates.

(10) All aboveground LPG storage containers shall be kept properly painted with a light reflective paint such as white or aluminum.

(11) All aboveground LPG storage containers, except domestic installations of two thousand (2,000) gallons capacity or less, shall be marked with warning signs placed in a conspicuous location on both sides and both ends of the container incorporating the following or equivalent wording: FLAMMABLE—PROPANE: NO SMOKING OR OPEN FLAMES. All wording shall be in block-style letters with a minimum height of two inches (2") and a minimum width of one-fourth inch (1/4") on a contrasting background.

(12) Each LPG storage plant or system of two thousand (2,000) gallons or more shall have a sign displayed in a conspicuous location stating the name, address and telephone number of the nearest representative, agent or owner of the system.

(13) After the effective date of this rule, where possible, all LPG bulk storage containers shall be installed parallel to surrounding buildings.

(14) Any LPG storage container and its related piping and equipment which may be exposed to vehicle damage shall be protected by guard rails or guard posts. All guard rails or guard posts shall be constructed of heavy gauge metal of sufficient strength to absorb vehicle impact without damage to the container or its related equipment.

(15) Any LPG storage container, including any container used for motor fuel, which has been damaged in any manner shall be



repaired according to the requirements of the code it was manufactured under and shall be hydrostatically tested prior to placing in service.

(16) Repair of any LPG container shell, excluding valves, fittings, regulators and attachments, shall be in conformance with the code under which the container was manufactured and all repairs shall be performed only by a person certified under the code by which the container was manufactured.

(17) A copy of all container data information and repairs to the container shall be submitted to the inspection authority for review prior to installation of the container.

(18) LP gas storage containers supplying mobile home parks, schools, hospitals, commercial-industrial facilities, domestic systems, other public or institutional facilities shall not be utilized as a bulk storage plant for loading LP gas into any fuel delivery vessel or vehicle.

AUTHORITY: section 323.020, RSMo Supp. 2008. Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Amended: Filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.*

2 CSR 90-10.015 Container, System or Equipment Violations

PURPOSE: This rule sets out the procedure to govern the inspection authority's actions in eliminating hazardous conditions which could result in serious property damage and loss of life.

(1) Any container, system or equipment that has been determined through inspection by the inspection authority to violate these regulations so as to constitute a substantial hazard or violation which makes the container, system or equipment unsafe for continued operation shall be so identified by the inspection authority through a notice or tag affixed to the container. The container, system or equipment upon which the tag has been affixed shall not be used, nor shall liquefied petroleum gas be placed in the container, system or equipment.

(2) Any container, system or equipment that has been determined through inspection by the inspection authority to violate these rules and regulations but does not constitute an immediate hazard to life or property shall only be tagged if the defect or the violation is not corrected within five (5) days after written notification setting forth the violation or defect has been personally served upon or directed through the United States mail, certified mail, postage prepaid, returned receipt requested, to the owner, operator or supplier of the container, system or equipment. In the event the owner or supplier is not identified on the container, system or equipment, notice to the occupant of the premises where the container, system or equipment is located shall be deemed sufficient.

(3) The tag or notice attached to the container, system or equipment, shall be the property of Missouri and only shall be removed by the inspection authority upon notification and/or request by the owner, or supplier, or his/her agent when defect or violation has been corrected. The tag is to be removed promptly after receiving notice of correction and reinspection.

(4) Any underground container or system that is being maintained in violation of these rules so as to constitute a substantial hazard to public safety may be required to be removed for inspection by the inspection authority upon reasonable demand and notice.

AUTHORITY: section 323.020, RSMo 1986. Original rule filed July 13, 1977, effective Nov. 11, 1977.*

**Original authority: 323.020, RSMo 1947.*

2 CSR 90-10.016 Meters for Measurement—Specifications and Proving

PURPOSE: This rule sets out minimum general standards governing the design of meters used for measuring liquefied petroleum gas.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) All liquid meters used in the sale of liquefied petroleum gas (LPG) shall be equipped with an effective vapor eliminator.

(2) Each vehicle tank used in the retail sale of LPG shall be equipped with a meter for measurement of LPG in terms of gallons and shall not be equipped with a bypass around the meter. A vapor equalization line is not a bypass and is not prohibited by this provision.

(3) LPG sold or delivered to a retail customer by liquid measure shall be corrected for temperature to sixty degrees Fahrenheit (60°F) with an automatic correction device or the quantity delivered shall be corrected for temperature of sixty degrees Fahrenheit (60°F) in accordance with the Volume Correction Factor Table, nationally accepted as accurate within fair tolerances.

(4) When the delivery is made through a meter automatically corrected for temperature, the retail sales ticket shall show the metered adjusted gallons delivered.

(5) When the delivery is made through a meter not corrected automatically, the retail sales ticket shall show the metered gallons delivered, the temperature at the time of delivery and the corrected gallonage.

(6) A person, firm, or corporation owning or having in its possession an LPG measuring device which is installed for use to measure liquid gallons to a retail customer in this state shall permit the device to be tested after reasonable request is made by the director of the Department of Agriculture and give full assistance and cooperation during the testing procedure. Tickets and other records of deliveries shall be made available upon request to determine that proper compliance and procedure is in effect for making deliveries to retail customers.

(7) When liquid meters are determined to be accurate within the tolerance limits in the 2008 edition of the National Institute of Standards and Technology Handbook 44, published by the National Institute of Standards and Technology, Weights and Measures Division, 100 Bureau Dr., Stop 2600, Gaithersburg, MD 20899-2600 and incorporated by reference, the director of the Department of Agriculture, immediately upon completion of the test, shall seal the meter in a manner so as to prevent tampering which would affect the accuracy of measurement. No person shall remove, break, or tamper with the meter seal without the written consent of the director of the Department of Agriculture. These



requirements shall not preclude the necessity to make needed repairs to the metering device or to transfer to another tank. If it is necessary to break or remove the seal to accomplish repairs or transfer, written notice shall be given to the director of the Department of Agriculture within forty-eight (48) hours from the date the repairs or transfer is made. This rule does not incorporate any subsequent amendments or additions to the referenced material.

(8) When a liquid meter is found to be inaccurate beyond the tolerance allowed in the National Institute of Standards and Technology Handbook 44, after a test is made, it shall be conspicuously marked INACCURATE by the director of the Department of Agriculture and shall not be used for measuring liquid gallons to retail customers until it has been corrected within tolerance limits.

(9) Any registrant delivering a lesser amount of LPG to a retail customer than is invoiced to the customer, if it is proven at a hearing conducted by the director of the Department of Agriculture for this purpose that the shortage of delivery and overbilling of the amount delivered was made with intent to defraud, shall be subject to having his/her registration permit suspended by the inspection authority.

AUTHORITY: section 323.020, RSMo Supp. 2008.* Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Amended: Filed Oct. 15, 2008, effective March 30, 2009.

*Original authority: 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.

2 CSR 90-10.017 Mobile Homes (Rescinded March 30, 2009)

AUTHORITY: section 323.020, RSMo 1994. Original rule filed July 13, 1977, effective Nov. 11, 1977. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Rescinded: Filed Oct. 15, 2008, effective March 30, 2009.

2 CSR 90-10.018 Accidents (Rescinded June 11, 1987)

AUTHORITY: section 323.020, RSMo 1986. Original rule filed July 13, 1977, effective

Nov. 11, 1977. Rescinded and readopted: Filed Oct. 4, 1981, effective Jan. 14, 1982. Rescinded: Filed March 18, 1987, effective June 11, 1987.

2 CSR 90-10.020 NFPA Manual No. 54, National Fuel Gas Code

PURPOSE: This rule regulates the installation of liquefied petroleum gas appliances and liquefied petroleum gas piping.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Standards contained in National Fire Protection Association (NFPA) Manual No. 54, National Fuel Gas Code, 1999 edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101, are incorporated herein by reference. This rule does not incorporate any subsequent amendments or additions to the referenced material. The balance of this rule sets forth requirements for liquefied petroleum (LPG) applications not covered in the manual. The scope of National Fire Protection Association (NFPA) Manual No. 54, National Fuel Gas Code, 1999 edition, is to develop fire safety codes, standards, recommended practices, and manuals, as may be considered desirable, covering the installation of piping and appliances using fuel gases such as natural gas, manufactured gas, liquefied petroleum gas, and liquefied petroleum gas-air mixture.

(2) All flexible appliance connectors shall be listed and approved for LPG use.

(3) All flexible appliance connectors which are listed and approved for LPG use shall have "Approved for LPG use" and pressure rating stamped or marked on connector.

(4) The repair or welding of LPG appliance heat exchangers is strictly prohibited.

(5) All appliances, except bunsen burners, ranges or cooktops, installed in public build-

ings, such as schools, nursing homes or hospitals, shall be equipped with one hundred percent (100%) shut-off safety valves.

(6) All science or laboratory rooms using LPG shall have an accessible and marked master shut-off valve located within the science or laboratory room.

(7) All home economic, science, kitchen or laboratory rooms shall have an accessible, properly charged fire extinguisher with a minimum rating of twenty (20) ABC (A class-combustible materials, B class-flammable liquids, C class-live electrical equipment) located in an accessible location within the room.

AUTHORITY: section 261.023.6, RSMo 2000 and section 323.020, RSMo Supp. 2008.* Original rule filed Jan. 24, 1968, effective Feb. 3, 1968. Amended: Filed Sept. 8, 1969, effective Sept. 18, 1969. Amended: Filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Amended: Filed Dec. 3, 2001, effective June 30, 2002. Amended: Filed Oct. 15, 2008, effective March 30, 2009.

*Original authority: 261.023.6, RSMo 1973 and 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.

2 CSR 90-10.030 NFPA Manual No. 54A, Industrial Gas Piping and Equipment (Rescinded January 13, 1978)

AUTHORITY: section 323.020, RSMo 1969. Original rule filed Sept. 8, 1969, effective Sept. 18, 1969. Rescinded: Filed June 1, 1977, effective Jan. 13, 1978.

2 CSR 90-10.040 NFPA Manual No. 58, Storage and Handling of Liquefied Petroleum Gases

PURPOSE: This rule regulates the storage and handling of liquefied petroleum gases. The balance of the rule sets forth installation procedures required for liquefied petroleum gas carburetion which are not contained in National Fire Protection Association Manual No. 58.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This



material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) This rule incorporates by reference National Fire Protection Association (NFPA) Manual No. 58, *Storage and Handling of Liquefied Petroleum Gases*, 2001 edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101, as the current Standard for the Storage and Handling of Liquefied Petroleum Gases. This rule does not incorporate any subsequent amendments or additions to the referenced material.

(2) All equipment shall be installed and maintained in compliance with the safety standards and in conformity with the rules.

(3) It shall be unlawful for any person or corporation to put into operation in this state any motor vehicle using liquefied petroleum gas (LPG) as a fuel unless the fuel containers and supporting equipment of the vehicle have been placed in service by an installer certified and registered by the LPG Inspection Authority, state of Missouri.

(4) All this installed equipment shall be identified by a state decal issued by the director and applied by the registered installer. Upon transfer of equipment from one (1) vehicle to another vehicle, the installation shall be re-inspected and a new decal applied to the container and proper forms filed with the director.

(5) Registered applicants for retail sales of LPG shall not fill LPG storage containers installed on any vehicle where containers being used as a source for carburetion fuel, unless the container has displayed the official state decal installed per section (4). This shall not apply to transient vehicles.

(6) At all LPG dispensers, it shall be the dispenser owner's responsibility to provide initial training to specific persons on the operation of the dispenser. It shall be illegal for any person other than the trained person to operate the dispensing device. It shall be the responsibility of the owner or manager of each business, where a dispenser is located and operated, to provide continuing training, as required by section 2 CSR 90-10.012(4), for each employee operating the dispenser.

(7) No person shall transport in a passenger type vehicle, or sell for transportation, LPG in containers of forty-five pounds (45 lbs.) capacity or over unless the container is connected for direct use in the passenger vehicle.

(8) The written Fire Safety Analysis, required by the 2001 edition of the National Fire Protection Association's Pamphlet 58, *Liquefied Petroleum Gas Code*, section 3.10.2.2, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101, and incorporated by reference, shall be prepared by a person approved by the Missouri Propane Gas Commission, who has relevant experience and is knowledgeable of the practices of the LP gas industry. Except for an engineered facility, the Fire Safety Analysis may be prepared by the owner of the facility in cooperation with the local fire department and/or Fire Marshall. The Fire Safety Analysis for an engineered facility, such as one that incorporates refrigerated storage, automated fuel standby (either industrial or utility) or pipeline terminals, shall be prepared, stamped, and signed by a professional engineer who has relevant experience in LP gas or fire protection. This rule does not incorporate any subsequent amendments or additions to the referenced material.

AUTHORITY: section 261.023.6, RSMo 2000 and section 323.020, RSMo Supp. 2008. Original rule filed Jan. 24, 1968, effective Feb. 3, 1968. Amended: Filed Sept. 8, 1969, effective Sept. 18, 1969. Amended: Filed Nov. 1, 1972, effective Nov. 10, 1972. Amended: Filed May 13, 1977, effective Jan. 13, 1978. Emergency amendment filed March 27, 1981, effective April 7, 1981, expired July 10, 1981. Amended: Filed March 27, 1981, effective July 11, 1981. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Amended: Filed Nov. 13, 1997, effective June 30, 1998. Emergency amendment filed June 20, 2002, effective June 30, 2002, expired Dec. 30, 2002. Amended: Filed Dec. 3, 2001, effective June 30, 2002. Amended: Filed Oct. 15, 2008, effective March 30, 2009.*

**Original authority: 261.023.6, RSMo 1973 and 323.020, RSMo 1947, amended 1994, 1998, 2005, 2007.*

McConnell v. Pic-Walsh Freight Co., 432 SW2d 292 (Mo. 1968). Plaintiff, employee of an LPG company was not contributorily negligent as a matter of law when he overfilled an LPG tank on one (1) of defendant's trucks after being assured by defendant's employees that the tank was empty; plaintiff having no way of knowing the level of gas due to broken

gauge. Defendant claimed plaintiff was negligent per se because he violated safety rules concerning the filling of tanks inside a building, but court held that "all reasonable minds would not conclude that the infractions were the proximate cause of the injury in this case, and therefore . . . plaintiff is not as a matter of law barred from recovery."

2 CSR 90-10.050 NFPA Manual No. 30, Flammable and Combustible Liquids Code (Rescinded September 27, 1985)

AUTHORITY: section 323.020, RSMo 1978. Original rule filed July 20, 1967, effective July 30, 1967. Amended: Filed July 27, 1970, effective Aug. 6, 1970. Amended: Filed Nov. 1, 1972, effective Nov. 10, 1972. Amended: Filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed Nov. 12, 1982, effective Feb. 11, 1983. Rescinded: Filed May 2, 1985, effective Sept. 27, 1985.

2 CSR 90-10.060 NFPA Manual No. 59, LP Gases at Utility Gas Plants

PURPOSE: This rule regulates the standard for the storage and handling of liquefied petroleum gases at utility gas plants.

The scope of National Fire Protection Association Manual No. 59, *LP Gases at Utility Gas Plants*, 1984 edition, is to outline methods for protection of persons and property by providing a standard of reference to serve as a guide to all persons concerned with the construction and operation of liquefied petroleum gas equipment at utility gas plants.

AUTHORITY: section 323.020, RSMo 1986. Original rule filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed May 2, 1985, effective Sept. 27, 1985.*

**Original authority: 323.020, RSMo 1947.*

2 CSR 90-10.070 NFPA Manual No. 501A, Manufactured Home Installations

PURPOSE: This rule regulates the mobile home park fuel supply systems.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of



State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.

The scope of National Fire Protection Association Manual No. 501A, *Manufactured Home Installations*, 1982 edition covers the installation of manufactured homes within a mobile home park.

AUTHORITY: section 323.020, RSMo 1986. Original rule filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed May 2, 1985, effective Sept. 27, 1985.*

**Original authority: 323.020, RSMo 1947.*

2 CSR 90-10.080 Federal Housing and Urban Development (HUD) Standards Part 3280, Manufactured Home Construction and Safety Standards
(Rescinded June 29, 1989)

AUTHORITY: section 323.020, RSMo 1986. Original rule filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Rescinded: Filed March 3, 1989, effective June 29, 1989.

2 CSR 90-10.090 NFPA Manual No. 501C, Chapter 2, Standard for Recreational Vehicles

PURPOSE: This rule regulates the design, manufacturing, installation and inspection of recreational vehicle heating systems and related systems.

The scope of National Fire Protection Association Manual No. 501C, Chapter 2, *Recreational Vehicles*, 1987 edition covers the heat producing appliances and fuel systems within or on recreational vehicles. Whenever nationally recognized standards for heat producing appliances and fuel systems and this Chapter 2 differ, the requirements of the latter shall apply.

AUTHORITY: section 323.020, RSMo 1986. Original rule filed May 13, 1977, effective Jan. 13, 1978. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989.*

**Original authority: 323.020, RSMo 1947.*

2 CSR 90-10.100 Inspection of School Buses Propelled by Liquefied Propane Gas
(Rescinded March 30, 2009)

AUTHORITY: section 323.020, RSMo 1986. Original rule filed Oct. 13, 1982, effective Feb. 11, 1983. Amended: Filed May 2, 1985, effective Sept. 27, 1985. Amended: Filed March 3, 1989, effective June 29, 1989. Rescinded: Filed Oct. 15, 2008, effective March 30, 2009.