# Rules of **Department of Agriculture**

# Division 80—Weights and Measures Chapter 30—Petroleum Inspection

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# Title 2—DEPARTMENT OF AGRICULTURE

Division 90—Weights and Measures Chapter 30—Petroleum Inspection

- **2 CSR 90-30.010 Inspection of Premises** (Rescinded February 11, 1988)
- **2 CSR 90-30.020 Measuring Devices** (Rescinded February 11, 1988)
- 2 CSR 90-30.030 Quality Standards for Motor Fuels

(Rescinded February 11, 1988)

## 2 CSR 90-30.040 Quality Standards For Motor Fuels

PURPOSE: This rule establishes quality standards for motor and heating fuels sold in Missouri as provided in Chapter 414, RSMo.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the head-quarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: American Society for Testing and Materials (ASTM) Designation: D 4814-88a addresses standard specifications for the properties of automotive spark-ignition engine fuel. ASTM Designation: No. D 910-88a addresses standard specifications for the properties of aviation gasoline. ASTM Designation: D 1655-88a addresses standard specifications for the properties of aviation turbine fuel. ASTM Designation: D 975-88 addresses standard specifications for the properties of all diesel fuel. ASTM Designation: D 396-86 addresses standard specifications for the properties of all fuel oils. ASTM Designation: D 3699-88 addresses standard specifications for the properties of all kerosene. The number immediately following the designated specification number indicates the year of original adoption or, in the case of revision, the year of last revision.

(1) Regulation Regarding Quality of Motor Fuels. The following fuels when sold, offered for sale or when used in this state shall meet the following requirements:

- (A) Motor Fuels. Any liquid fuel product used for the generation of power in an internal combustion engine. Note: liquefied petroleum gas which is composed predominantly of propane, propylene, butanes (normal or isobutanes) and butylenes are not considered as motor fuels in Chapter 414, RSMo and this regulation:
- (B) All automotive gasoline shall meet the requirements set in the *Annual Book of ASTM Standards*, Designation: D 4814-88a;
- (C) All automotive gasoline containing oxygenated additives shall meet the requirements set in the *Annual Book of ASTM Standards*, Designation: D 4814-88a and the following requirements:
- 1. The total alcohol content shall not exceed ten (10) volume percent;
- 2. The oxygen content shall not exceed three and seven-tenths percent (3.7%) by weight;
- 3. When methanol is blended in quantities greater than three-tenths (0.3) volume percent, the finished blend shall contain at least an equal amount of butanol or higher molecular weight alcohol; and
- 4. When gasoline is blended with ten percent (10%) denatured ethanol, a vapor pressure tolerance not exceeding one (1) pound per square inch may be allowed and the fifty percent (50%) evaporated distillation temperature shall not be less than one hundred fifty-eight degrees Fahrenheit (158°F) (seventy degrees Celsius (70°C));
- (D) All gasoline or gasoline-oxygenate blends classified as leaded shall contain a minimum of five hundredths (0.05) grams of lead per United States gallon;
- (E) The minimum  $(R\pm M)/2$  octane rating of automotive gasoline grades and gasoline-oxygenate blended grades shall be no less than the following:
  - 1. Sub-Octane Unleaded 86;
  - 2. Regular Unleaded 87;
  - 3. Regular Leaded

and

- 4. Premium Unleaded
- (F) The motor octane number shall not be less than eighty-two (82) for regular unleaded gasoline;
- (G) All aviation gasoline shall meet the requirements in the *Annual Book of ASTM Standards*, Designation: D 910-88a;
- (H) All aviation turbine fuel shall meet the requirements in the *Annual Book of ASTM Standards*, Designation: D 1655-88a;
- (I) All diesel fuel shall meet the requirements in the *Annual Book of ASTM Standards*, Designation: D 975-88;
- (J) All fuel oils shall meet the requirements in the *Annual Book of ASTM Standards*, Designation: D 396-86; and

(K) All kerosene shall meet the requirements in the *Annual Book of ASTM Standards*, Designation: D 3699-88.

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- (2) Method of Sale of Gasoline-Alcohol Blends.
- (A) Method of Retail Sale. Notwithstanding any rule to the contrary, all motor fuel kept, offered or exposed for sale, or sold at retail containing at least one percent (1%) by volume of any alcohol shall be identified as such using the word contains or other wording approved by the director, in conjunction therein, the maximum volume percentages to the nearest whole percent and the name of each alcohol additive on the upper fifty percent (50%) of the dispenser front panel in a position clear and conspicuous from the driver's position, in a type at least one-half inch (1/2") in height, one-sixteenth inch (1/16")stroke (width of type). Examples:

### CONTAINS 10% ETHANOL CONTAINS ALCOHOL 5% METHANOL 5% TERTIARY BUTANOL

- (B) Documentation for Dispenser Labeling Purposes. The retailer must be provided, at the time of delivery of the fuel on an invoice, bill of lading, shipping paper or other documentation, the presence and maximum amount of ethanol, methanol or any type of alcohol (in terms of percent by volume) contained in the fuel. This documentation is only for dispenser labeling purposes; it is the responsibility of any potential blender to determine the total oxygen content of the motor fuel before blending.
- (3) Procedures for Storage of Motor Fuels Containing Alcohol Additives. The following procedures shall be used by retail outlets when the total alcohol content is over threetenths (0.3) volume percent:
- (A) Retail establishments offering any gasoline-alcohol blended fuel for the first time shall remove all water and precipitated materials from the storage tank before the gasoline-alcohol blend is delivered into the tank; and
- (B) A suitable filter, ten (10) microns or less, must be installed in the meter inlet or discharge line and immediately adjacent to the meter.
- (4) Classification of Petroleum Fuels. When gasoline, illuminating oils, heating fuels or other motor fuels are sold or offered for sale in Missouri, the invoice bill of lading, shipping paper or other documentation must identify the name of the product, the particular

grade of the product as designated by ASTM and when applicable the minimum octane (antiknock index) as listed in subsections (4)(A)—(G) of this section. All retail dispensing devices must conspicuously identify the name of the product, the particular grade of the product as designated and when applicable the minimum octane (antiknock index) as listed as follows:

- (A) Automotive gasoline shall be identified by leaded or unleaded and the octane (antiknock index) number. The octane posting shall be in accordance with the Federal Trade Commission (FTC) octane posting and certification rule;
- (B) Gasoline-alcohol blends shall be identified by leaded or unleaded and the octane number. The octane posting shall be in accordance with FTC octane posting and certification rule:
- (C) Aviation gasoline shall be identified by Grade 80, Grade 100 or Grade 100LL;
- (D) Aviation turbine fuels shall be identified by Jet A, Jet A-1 or Jet B;
- (E) Diesel fuel shall be identified by the grades No. 1-D, No. 2-D or No. 4-D;
- (F) Fuel oil shall be identified by the grades of No. 1, No. 2, No. 4 (Light), No. 4, No. 5 (Light), No. 5 (Heavy) or No. 6; and
- (G) Kerosene shall be identified by the grades of No. 1-K or No. 2-K. Grade No. 2-K sold or offered for sale at retail shall also post conspicuously on the front of the dispensing device, the words WARNING—NOT SUITABLE FOR USE IN UNVENTED HEATERS REQUIRING NO. 1-K in one-half inch by one-sixteenth inch (1/2" × 1/16") strokes, block style letters.
- (5) Retail Establishments-Retention of Delivery Tickets. The retailers shall retain on the premises to which kerosene or motor fuel has been delivered, copies of the loading ticket, manifest or delivery receipt for each grade of product received, subject to examination by the director upon request. If a delivery receipt is retained rather than a manifest or loading ticket, the delivery ticket shall bear the following information: vendor name, date of deliver, quantity of each grade, point of origin and the manifest or loading ticket number. The required retention of the loading ticket, manifest or delivery receipt shall be limited to the four (4) most recent receipts of each grade of product.
- (6) Water in Retail Tanks. It shall be a violation for water to exceed one inch (1") in depth, when measured from the bottom through the fill pipe, of any tank utilized in the storage of regulated products sold at

retail. Water must be removed from the tank prior to the delivery and subsequent selling of additional product from the storage tank.

### (7) Stop Sale.

- (A) Retail Service Stations. A Stop Sale notice will be issued to retail service station dealers for kerosene or motor fuel failing to meet established specifications. A release from a Stop Sale order will be awarded only after final disposition has been agreed upon by the director. Confirmation for disposition shall be submitted in writing and contain an explanation for its failure to meet specifications. The Stop Sale will apply only to the location where sample analysis indicates specification violation. Upon discovery of fuels failing to meet established specifications, meter readings and physical inventory shall be taken and reported in the confirmation for disposition.
- (B) Bulk Storage Plants Including Terminals. A Stop Sale notice will be issued when petroleum products maintained in bulk plant facilities fail to meet specifications established by the director. The bulk storage plant immediately shall notify all customers that have received those products and make any arrangements necessary to replace or adjust to specifications those products. Confirmation of disposition of Stop Sale on products shall be made available in writing to the director. Specific variations or exemptions may be made for fuels used for blending purposes or designed for special equipment or services and for which it can be demonstrated that the distribution will be restricted to those uses.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* This rule was previously filed as 2 CSR 90-30.030. Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. II, 1988. Amended: Filed April 2, 1990, effective June 28, 1990.

\*Original authority 1987, amended 1993.

#### 2 CSR 90-30.050 Inspection of Premises

PURPOSE: This rule establishes requirements for the safe storage and handling of flammable and combustible liquids regulated by Chapter 414, RSMo.

Editor's Note: The secretary of state has determined that the publication of this rule in

its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the headquarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: The publication of the National Fire Protection Association (NFPA) entitled Manual No. 30 (1987) Flammable and Combustible Liquids Code addresses safe storage and handling requirements for flammable and combustible liquids, including bulk storage in tanks; piping systems and valves; warehousing of containers; incidental use and operations. NFPA Manual No. 30A (1987) entitled Automotive and Marine Service Station Code addresses general provisions for piping, fuel dispensing systems, stations inside buildings and operations. It also includes requirements for self-serve and unattended self-serve operations. NFPA Manual No. 70 (1984) entitled National Electrical Code addresses electrical safety requirements.

- (1) All locations utilized for the sale or storage of petroleum products regulated by Chapter 414. RSMo shall meet the requirements of the NFPA Manual No. 30 entitled Flammable and Combustible Liquids Code, 1987 Edition. Existing plants, storage, storage equipment, buildings, structures and installations for the storage, handling or use of flammable or combustible liquids at any location which is not in strict compliance with the terms of this code may be continued in use, provided these do not constitute a distinct hazard to life or property. When the director determines that continued use will constitute a distinct hazard to life and property, s/he shall notify the owner or operator and specify the reason in writing and shall order the correction, discontinuance or removal of same.
- (2) Should any portion of the 1987 Edition of NFPA Manual No. 30 be deemed unacceptable, rules will be promulgated within this chapter denoting and excepting those portions and adopting alternative provisions as deemed necessary by the director of the Department of Agriculture.
- (3) New construction and new installations or major modifications made to any location shall be in conformity with the provisions of the 1987 Edition of NFPA Manual No. 30 entitled Flammable and Combustible Liquids Code
- (4) The director or his/her delegated representative shall have free access, at reasonable

times, to any location utilized for the sale or storage of petroleum products regulated by Chapter 414, RSMo.

- (5) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.
- (6) All areas adjacent to storage containers containing products regulated by Chapter 414, RSMo shall be kept free of flammable and combustible materials (for example, tall grass, weeds, tires, wood, petroleum products, etc.).
- (7) All storage containers, valves, piping, pumps and associated equipment shall be kept free of leaks.
- (8) Each storage container shall have the product it contains identified clearly and conspicuously on the container.
- (9) Storage tanks at automotive and marine locations which are at an elevation that produce a gravity head on the dispensing device shall comply with section 2-1.7 contained in NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1987 Edition.
- (10) Tanks storing products regulated by Chapter 414, RSMo shall not be permitted inside buildings except as permitted by section 2-4. contained in NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code* 1987 Edition and NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1987 Edition.
- (11) All electrical equipment shall comply with NFPA Manual No. 70 entitled *National Electrical Code*, 1987 Edition.
- (12) Each loading and unloading connection to petroleum storage shall be identified with the petroleum product for which it is to be used.
- (13) All tanks storing products regulated by Chapter 414, RSMo shall meet the requirements of NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1987 Edition.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* This rule was previously filed as 2 CSR 90-30.010. Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amend-

ed: Filed April 2, 1990, effective June 28, 1990.

\*Original authority 1987, amended 1993.

### 2 CSR 90-30.060 Automotive and Marine Service Stations

PURPOSE: This rule establishes safety and installation requirements for automotive and marine service stations.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the headquarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: The publication of the National Fire Protection Association (NFPA) entitled Manual No. 30A (1987) Automotive and Marine Service Station Code, addresses general provisions for piping, fuel dispensing systems, stations inside buildings and operations. It also includes requirements for self-serve and unattended self-serve operations.

- (1) All automotive and marine service stations shall meet the requirements of NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1987 Edition. Existing automotive and marine service stations which are not in strict compliance with the terms of this code may be continued in use, provided these do not constitute a distinct hazard to life or property. When the director determines that continued use will constitute a distinct hazard to life and property, s/he shall notify the owner or operator and specify reason in writing and shall order correction, discontinuance or removal of same.
- (2) Should any portion of the 1987 Edition of NFPA Manual No. 30A be deemed unacceptable, rules will be promulgated within this chapter denoting and excepting those portions and adopting alternative provisions as deemed necessary by the director of the Department of Agriculture.
- (3) Section 2-1.1(A), contained in NFPA Manual No. 30A, 1987 Edition, shall not apply.
- (4) Warning signs shall be posted in a conspicuous location in the dispensing area

incorporating the following or equivalent wording: a) WARNING—IT IS UNLAWFUL AND DANGEROUS TO DISPENSE GASOLINE INTO UNAPPROVED CONTAINERS, b) NO SMOKING, c) STOP ENGINE. Letters shall be at least one-fourth inch wide by five-eighths inch (1/4"×5/8") high and contrast with background.

- (5) All automotive and marine service stations shall meet the requirements of 2 CSR 90-30.050.
- (6) Hose nozzles at automotive service stations shall be equipped with devices designed to retain the nozzle spout in the vehicle fill pipe while refueling (for example, spout anchor spring).
- (7) New construction and new installations or major modifications made to any service station or marine location shall be in conformity with the provisions of the 1987 Edition of NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*.
- (8) The director or his/her delegated representative shall have free access, at reasonable times, to any automotive or marine service station locations utilized for the sale or storage of petroleum products regulated by Chapter 414, RSMo.
- (9) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988.

\*Original authority 1987, amended 1993.

# **2** CSR 90-30.070 Unattended Self-Service Stations

PURPOSE: This rule establishes requirements for service stations which allow or permit the refueling of motor vehicles with Class I, II or III liquids by other than owner or employee without the presence of an attendant.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the head-

quarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: The publication of the National Fire Protection Association (NFPA) entitled Manual No. 30 (1987) Flammable and Combustible Liquids Code, addresses safe storage and handling requirements for flammable and combustible liquids, including bulk storage in tanks; piping systems and valves; warehousing of containers; incidental use and operations. NFPA Manual No. 30A (1987) entitled Automotive and Marine Service Station Code, addresses general provisions for piping, fuel dispensing systems, stations inside buildings and operations. It also includes requirements for self-serve and unattended self-serve operations. NFPA Manual No. 70 (1987) entitled National Electrical Code, addresses electrical safety requirements.

- (1) All unattended self-service stations shall meet the requirements contained in NFPA Manual No. 30 entitled Flammable and Combustible Liquids Code, 1987 Edition and NFPA No. 30A entitled Automotive and Marine Service Station Code, 1987 Edition. Existing unattended self-service stations which are not in strict compliance with the terms of this code may be continued in use, provided these do not constitute a distinct hazard to life or property. When the director determines that continued use will constitute a distinct hazard to life or property, s/he shall notify the owner or operator and specify the reason in writing and shall order correction, discontinuance or removal of same.
- (2) New construction and new installation or major modifications made to any unattended self-service station shall be in conformance with the provisions of NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1987 Edition and NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1987 Edition.
- (3) All unattended self-service stations shall meet the requirements contained in 2 CSR 90-30.050 and 2 CSR 90-30.060.
- (4) Operating instructions shall be conspicuously posted in the dispensing area and shall include location of emergency controls.
- (5) Warning signs shall be posted in a conspicuous location in the dispensing area stating: WARNING: a) USER MUST STAY OUTSIDE OF VEHICLE IN VIEW OF FUELING NOZZLE DURING DISPENSING OPERATION. b) IT IS UNLAWFUL AND DANGEROUS TO DISPENSE GASO-

LINE INTO UNAPPROVED CONTAINERS. c) NO SMOKING. d) STOP ENGINE.

- (6) Emergency instructions and telephone numbers shall be posted in a conspicuous location in the dispensing area.
- (7) A telephone or other clearly identified means shall be provided on the site in a conspicuous, easily accessible location to be used to notify proper authorities.
- (8) Unattended self-service stations shall comply with section 8-5.8 contained in NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1987 Edition.
- (9) Equipment Required for an Unattended Self-Service Station.
- (A) Dispenser Control Device (Actuators and Monitors) For Use by Customers to Activate Dispensing Equipment.
- 1. Devices may use keys or cards to activate dispenser and pumps. Coin or currency activated devices may be permitted upon approval by the director after a site safety assessment has been made.
- 2. Card devices shall use magnetically coded, optically read or inductive coil cards to be inserted in a device to activate the number.
- 3. All dispenser control devices must meet Underwriters' Laboratory (UL) standards and shall be installed and maintained in accordance with the manufacturer's instructions. All wiring shall comply with NFPA Manual No. 70, 1987 Edition, Chapter 5.
- 4. Motors of pumps to dispensing devices shall not have electrical current supplied to them unless and until the dispensing device is activated by the insertion of the card or key device. The electric current to the motors of the pumps shall automatically terminate not more than three (3) minutes after the flow of product has ceased. Electrical current to the pump motors shall be off at all other times.
- (10) The owner or operator of each unattended self-service station, upon reasonable request, shall make available person(s) and keys or cards, necessary to inspect and test all measuring devices.
- (11) A container or storage shall be provided by the owner or operator of each device for the storage of the fuel dispensed during the device test. The container or storage shall comply with the requirements of NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1987 Edition.

- (12) Dispensing devices, remote pumps and hose nozzle valves must comply with 2 CSR 90-30.080 and the following rules:
- (A) Hose nozzles must meet the standards of UL and—
- 1. Nozzles must be equipped with devices designed to retain the nozzle spout in the vehicle fill pipe while refueling (for example, spout anchor spring). These devices must be in compliance with UL or Factory Mutual (FM). The spout anchor spring shall be of the type recommended by the manufacturer of the hose nozzle valve and installed and maintained in accordance with manufacturer's recommendations:
- 2. A listed automatic self-closing type nozzle with a latch-open device must be installed as an integral part of the nozzle assembly with exception of marine installations which shall not have latch-open devices;
- 3. Hose nozzle valves shall be of the type which will close automatically, independent of the latch-open device, upon loss of pressure in the dispensing system and in which the latch-open device may only be engaged when the dispensing system is under pressure; and
- 4. The nozzle must be designed and maintained to cease the flow of product if the nozzle falls from the fill pipe of the motor vehicle being fueled.
- (13) Remote pumps serving dispensing devices shall meet the standards of UL and shall be equipped with a leak detection device in accordance with 4-3.3 of NFPA Manual No. 30A, 1987 Edition and shall be installed and maintained in accordance with the manufacturer's instructions.
- (14) Dispensing devices shall meet the standards of UL and the following rules:
- (A) Dispensing devices served by remote pumps shall be equipped with an emergency shut-off valve meeting the standards of UL and which shall comply with 4-3.6 of NFPA Manual No. 30A, 1987 Edition;
- (B) Dispensing devices shall be bolted to their mounting surface in accordance with the manufacturer's instructions;
- (C) Dispensing devices shall be mounted or protected against collision damage by means of islands, posts or an equivalent means:
- (D) Dispensing devices shall be wired in accordance with Chapter 5 of NFPA Manual No. 70, 1987 Edition and shall be installed and maintained in accordance with the manufacturer's recommendations; and
- (E) An emergency breakaway device shall be installed on each hose at all dispensing devices available for self-service of Class I, II

and III liquids. The breakaway device shall be designed to retain liquid on both sides of the breakaway point and shall be installed and maintained in accordance with the manufacturer's recommendations.

- (15) Emergency electrical controls shall be provided and shall comply with the following rules:
- (A) A master electrical shut-off switch or circuit breaker shall be provided at a location not less than twenty feet (20') from the nearest, nor more than one hundred feet (100') from the farthest dispensing device for unattended self-service and shall—
- 1. Be visible from all unattended selfservice dispensing device locations on the premises. If installation of a single switch or circuit breaker does not achieve compliance with the requirement, duplicate switches or circuit breakers shall be required;
- 2. Terminate electric power to all dispensers, pumps and dispenser control devices on the premises, including neutral conductors and low voltage control wiring; and
- 3. Be of such a type, or installed in such a way, that it may only be reset manually with a key which shall be kept in custody of the unattended service station owner or employee of the owner or, alternatively, the resetting device shall be kept in a secured area accessible only by key or other device which is kept solely in the custody of the owner or employee of the owner (Club members, card holders and other persons utilizing the station may not have access to the mechanism necessary for resetting of the master electrical controls.);
- (B) In addition to the master electrical shut-off required in subsection (15)(A), additional emergency electrical controls shall be provided at each group of dispensers or pumps served by a single dispenser control device. These additional controls, at the option of the owner, may be an integral part of the dispenser control device assembly. The device, when activated, shall terminate all electrical power to all dispensing devices or pumps which are served by that dispenser control device. Stations with only one (1) island may elect to utilize only a master electrical control located at the dispenser control device meeting the requirements of subsection (15)(A);
- (C) The emergency electrical controls required by this section at all times shall be identified by a sign constructed of all weather material which shall state in letters not less than one inch (1") in height, EMERGENCY SHUT-OFF SWITCH. Letters shall contrast with the background material of the sign. The sign shall be mounted in place with the bot-

tom of the sign not less than five feet (5') above ground:

- above ground;
  (D) Resetting the master electrical shut-off required by this section shall be accomplished only after the condition which caused it to be activated has been corrected; and
- (E) Power for illumination of dispensing areas required by this section shall not be affected by activation of any of the emergency electrical controls.

AUTHORITY: section 414.142, RSMo (Supp. 1995).\* Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed March 4, 1996, effective Sept. 30, 1996.

\*Original authority 1987, amended 1993, 1995.

#### 2 CSR 90-30.080 Measuring Devices

PURPOSE: This rule establishes requirements for the specifications, installation, use and tolerances of measuring devices.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the headquarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: The publication of the National Institute of Standards and Technology (NIST) entitled Handbook 44 contains specifications, tolerances and other technical requirements for weighing and measuring devices. The purpose of these requirements is to remove from service any device that is false, that is of faulty construction or that facilitates the perpetration of fraud. The publication of the National Fire Protection Association (NFPA) entitled Manual No. 30 (1987) Flammable and Combustible Liquids Code, addresses safe storage and handling requirements for flammable and combustible liquids, including bulk storage in tanks; piping systems and valves; warehousing of containers; incidental use and operations. NFPA Manual No. 30A (1987) Automotive and Marine Service Station Code addresses general provisions for piping, fuel dispensing systems, stations inside buildings and operations. It also includes requirements for self-serve and unattended self-serve operations. NFPA Manual No. 70 (1984) *National Electrical Code* addresses electrical safety requirements.

- (1) Each location dispensing products regulated by Chapter 414, RSMo shall have a measuring device for each product dispensed.
- (2) All measuring devices shall be installed in locations easily accessible for testing, inspection and maintenance purposes.
- (3) The director shall order any device installed in a manner not accessible for testing, inspection and maintenance to be corrected, discontinued from use or removed.
- (4) Each measuring device used in the sale of petroleum products regulated by Chapter 414, RSMo shall meet the requirements contained in the current edition of *NIST Handbook 44*, National Fire Protection Association (NFPA) Manual No. 30A, 1987 Edition and be installed and maintained as recommended by the device manufacturer.
- (5) At least every six (6) months, the director shall test and inspect the measuring devices used by any person selling an average of two hundred (200) or more gallons of gasoline, gasoline-alcohol blends, diesel fuel, heating oil, kerosene or aviation turbine fuel each month at either retail or wholesale in this state except marinas, which shall be tested and inspected at least once each year.
- (6) The meter of each dispensing device shall be sealed with an official state security seal applied by the director or his/her delegated representative. No person shall break or tamper with any official state security seal without the consent of the director or his/her delegated representative except for repair or replacement of that device, at which time notification is to be given to the director within five (5) days.
- (7) No person, except the director or his/her delegated representative, shall duplicate the state seal of Missouri to be used for sealing or applying seals to any measuring device dispensing products regulated by Chapter 414, RSMo.
- (8) Each retail measuring device shall display unit price and product identity on the face of the device as required in 2 CSR 90-30.040 and the current edition of *NIST Handbook*
- (9) A container or storage shall be provided by the owner or operator of the device for

storage of the fuel dispensed during the device test. The container or storage must comply with the requirements of NFPA Manual No. 30, 1987 Edition.

- (10) Each measuring device dispensing products regulated by Chapter 414, RSMo shall be free of leaks; the dispensing hose shall be in a condition as to prevent a hazard of leaking or bursting; and electrical wiring shall meet requirements as contained in NFPA Manual No. 70, 1984 Edition.
- (11) Each measuring device shall be equipped with an effective vapor eliminator or other means automatic in operation to prevent the passage of vapor and air through the meter. Vent lines from the air or vapor eliminator shall be made of metal or some similar other suitable rigid material.
- (12) Size of Nozzle Spout for Dispensing Motor Fuels. Each dispensing device from which gasoline or other motor fuel that contains lead or phosphorus is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than ninety-three hundredths inch (0.93") (two and three hundred sixty-two thousandths centimeters (2.362 cm)). A gasoline or other motor fuel is considered to contain lead or phosphorus if it contains more than five hundredths (0.05) grams lead per United States gallon (thirteen thousandths (0.013) grams lead per liter) or more than five thousandths (0.005) grams phosphorus per United States gallon (thirteen ten thousandths (0.0013) per
- (13) Any measuring device that does not meet the requirements of this rule shall be ordered corrected, discontinued or removed.
- (14) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.
- (15) No person shall break, tamper with, reproduce, remove or deface any official state seal, decal, tag, lock, label, form or equipment.
- (16) If the design, construction or location of any device is such as to require a testing procedure involving special equipment or accessories or an abnormal amount of labor, the equipment, accessories and labor shall be supplied by the owner or operator of the device as required by the weights and measures official.
- (17) A listed rigidly anchored emergency shut-off valve (fire-impact) incorporating a

fusible link or other thermally actuated device designed to close automatically in the event of severe impact or fire exposure shall be installed in accordance with the manufacturer's instructions in the supplyline at the base of each island-type pump or dispenser or at the inlet of each overhead dispensing device. An emergency shut-off valve incorporating a slip joint feature shall not be used.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* This rule was previously filed as 2 CSR 90-30.020. Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 14, 1994, effective Sept. 30, 1994.

\*Original authority 1987, amended 1993.

## 2 CSR 90-30.090 Tank Trucks and Tank Wagons

PURPOSE: This rule establishes requirements for tank truck and tank wagon measuring devices and tank vehicle safety.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the head-quarters of the agency and is available to any interested person at a cost established by state law.

SUMMARY: The publication of the National Institute of Standards and Technology (NIST) entitled Handbook 44 which contains specifications, tolerances and other technical requirements for weighing and measuring devices. The purpose of these requirements is to remove from service any device that is false, that is of faulty construction or that facilitates the perpetration of fraud.

#### (1) Measuring Devices.

- (A) All tank truck and tank wagon measuring devices shall be made available, upon reasonable request, to the director or his/her delegated representative, for testing and inspection.
- (B) Each tank truck and tank wagon measuring device used in the retail or wholesale dispensing of products regulated by Chapter 414, RSMo shall meet the requirements con-

tained in the current edition of NIST Handbook 44. When these devices are found to be inaccurate or not meeting current NIST Handbook 44 requirements, the device shall be ordered corrected, removed or discontinued from use.

- (C) Each measuring device shall be equipped with an effective and operating vapor eliminator to prevent the passage of vapor and air through the device. Vent lines from the vapor eliminator shall be made of metal or similar rigid material.
- (D) No means shall be provided by which any measured liquid can be diverted from the measuring chamber of the meter or its discharge line.
- (E) The director of the Department of Agriculture or his/her delegated representative at least once each year shall test and inspect the measuring devices on tank trucks and tank wagons used in the retail or wholesale dispensing of products regulated by Chapter 414, RSMo.
- (F) No meter which has been condemned shall be used for commercial purposes. All condemned meters shall be conspicuously marked INACCURATE: USE PROHIBITED.
- (G) Each measuring device shall be sealed with an official state security seal to be applied by the director of the Department of Agriculture or his/her delegated representatives
- (H) No person, except the director or his/her delegated representative, shall duplicate the state seal of Missouri to be used for sealing or applying seals to any measuring device dispensing products regulated by Chapter 414, RSMo.
- (I) No person shall break or tamper with any official state security seal without the consent of the director of the Department of Agriculture or his/her delegated representative except for the repair or replacement of this device, at which time notification is to be given to the director within five (5) days.
- (J) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.
- (K) If the design, construction or location of any device is such as to require a testing procedure involving special equipment or accessories, or an abnormal amount of labor, the equipment, accessories and labor shall be supplied by the owner or operator of the device as required by the weights and measures official.
- (2) Safety. Failure by any owner or operator of a tank wagon to remedy any deficit or condition which is or may constitute a hazard to the person of any official inspector of meter-

ing devices shall constitute a refusal to inspect those metering devices and that device shall be subject to an order for discontinuance of use.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. II, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 14, 1994, effective Sept. 30, 1994.

\*Original authority 1987, amended 1993.

#### 2 CSR 90-30.100 Terminals

PURPOSE: This rule establishes requirements for measuring devices and safety.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the head-quarters of the agency and is available to any interested person at a cost established by state law

SUMMARY: The publication of the National Institute of Standards and Technology (NIST) entitled Handbook 44 which contains specifications, tolerances and other technical requirements for weighing and measuring devices. The purpose of these requirements is to remove from service any device that is false, that is of faulty construction or that facilitates the perpetration of fraud. The publication of the National Fire Protection Association (NFPA) entitled Manual No. 30 (1987) Flammable and Combustible Liquids Code, addresses safe storage and handling requirements for flammable and combustible liquids, including bulk storage in tanks; piping systems and valves; warehousing of containers, incidental use and operations.

#### (1) Safety.

- (A) All terminal locations utilized for the sale or storage of petroleum products regulated by Chapter 414, RSMo shall meet the requirements of the National Fire Protection Association (NFPA) entitled Manual No. 30, 1987 Edition.
- (B) Existing plants, storage, storage equipment, buildings, structures and installations for the sale, storage, handling or use of

flammable or combustible liquids at any location which is not in strict compliance with the terms of this code may be continued in use, provided these do not constitute a distinct hazard to life or property. When the director determines that continued use will constitute a distinct hazard to life or property, s/he shall notify the owner or operator and specify reason in writing and shall order the correction, discontinuance or removal of same.

- (C) New construction and new installations or major modifications made to any terminal location shall be in conformity with the provisions of the 1987 Edition of NFPA Manual No. 30.
- (D) At least once every six (6) months the director shall inspect and examine all terminal premises utilized for the sale or storage of petroleum products regulated by Chapter 414, RSMo to insure compliance with NFPA Manual No. 30, 1987 Edition.
- (E) The director or his/her delegated representative shall have free access, at reasonable times, to any terminal location utilized for the sale or storage of petroleum products regulated by Chapter 414, RSMo.
- (F) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.

### (2) Measuring Devices.

- (A) Each measuring device used in the sale of petroleum products regulated by Chapter 414, RSMo shall meet the requirements contained in the current edition of *NIST Handbook 44*.
- (B) At least every six (6) months, the director shall test and inspect each measuring device used in the sale of petroleum products regulated by Chapter 414, RSMo.
- (C) Any measuring device which does not meet the requirements contained in the current edition of *NIST Handbook 44* shall not be used and shall be ordered corrected, discontinued from use or removed.
- (D) If the design, construction or location of any device is such as to require a testing procedure involving special equipment or accessories or an abnormal amount of labor, the equipment, accessories and labor shall be supplied by the owner or operator of the device as required by the weights and measures official.
- (E) Each measuring device used in the sale of petroleum products regulated by Chapter 414, RSMo shall be sealed with an official state security seal to be applied by the director of the Department of Agriculture or his/her delegated representative.
- (F) All new construction and new installations or major modifications to existing facilities shall have installed separate product

return lines from measuring devices back to storage for device testing purposes.

- (G) No person shall break or tamper with any official state security seal without the consent of the director of the Department of Agriculture or his/her delegated representative, except for repair or replacement of that device, at which time notification is to be given to the director within five (5) days.
- (H) No person, except the director or his/her delegated representative, shall duplicate the state seal of Missouri to be used for sealing or applying seals to any measuring device regulated by Chapter 414, RSMo.
- (I) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* Emergency rule filed Dec. 1, 1987, effective Jan 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 14, 1994, effective Sept. 30, 1994.

\*Original authority 1987, amended 1993.

#### 2 CSR 90-30.110 Airports

PURPOSE: This rule establishes requirements for airport safety and measuring devices.

- (1) At least every six (6) months, the director shall test and inspect the measuring devices at all airports which dispense products regulated by Chapter 414, RSMo.
- (2) Each measuring device shall meet the requirements of 2 CSR 90-30.080.
- (3) If the design, construction or location of any device is such as to require a testing procedure involving special equipment or accessories or an abnormal amount of labor, the equipment, accessories and labor shall be supplied by the owner or operator of the device as required by the weights and measures official.
- (4) The director or his/her delegated representative shall have free access, at reasonable times, to any airport location utilized for the sale or storage of products regulated by Chapter 414, RSMo.
- (5) No person shall hinder or obstruct the director or his/her delegated representative in the reasonable performance of his/her duties.

(6) All airport locations utilized for the sale or storage of products regulated by Chapter 414, RSMo shall be safe from fire and explosion and not likely to cause injury to the public or property. The director shall order any location not meeting the requirements of this section corrected, discontinued from use or removed.

AUTHORITY: section 414.142, RSMo (Cum. Supp. 1993).\* Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988.

<sup>\*</sup>Original authority 1987, amended 1993.