
Rules of
Department of Agriculture
Division 90—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(Rescinded February 11, 1988)

AUTHORITY: section 414.142, RSMo (Supp. 1987). Original rule filed July 27, 1970, effective Aug. 5, 1970. Rescinded: Filed Oct. 16, 1987, effective Feb. 11, 1988.

2 CSR 90-30.020 Measuring Devices
(Rescinded February 11, 1988)

AUTHORITY: section 414.142, RSMo (Supp. 1987). Original rule filed July 27, 1970, effective Aug. 5, 1970. Rescinded: Filed Oct. 16, 1987, effective Feb. 11, 1988.

2 CSR 90-30.030 Quality Standards for Motor Fuels
(Rescinded February 11, 1988)

AUTHORITY: section 414.142, RSMo (Supp. 1987). Original rule filed Nov. 9, 1983, effective March 11, 1984. Amended: Filed May 15, 1985, effective Aug. 26, 1985. Rescinded: Filed Oct. 16, 1987, effective Feb. 11, 1988.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 headquarters 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	88;
and	
4. Premium Unleaded	90;

(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.

(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 three-tenths (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 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. 11, 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.

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(1) All 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) Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1996 Edition and NFPA 30A entitled *Automotive and Marine Service Station Code*, 1996 Edition which are incorporated herein by reference. 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 1996 Edition of NFPA Manual No. 30 or 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) New construction and new installations or major modifications made to any location shall be in conformity with the provisions of the 1996 Edition of NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code* and the 1996 Edition of NFPA 30A.

(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) All electrical equipment shall comply with NFPA Manual No. 70 entitled *National Electrical Code*, 1996 Edition.
- (10) Each loading and unloading connection to petroleum storage shall be identified with the petroleum product for which it is to be used.
- (11) All tanks storing products regulated by Chapter 414, RSMo shall meet the requirements of NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1996 Edition.
- (12) The fencing requirement contained in sections 2-1.3 and 2-4.7.1 of the 1996 Edition of NFPA Manual No. 30A shall not apply.
- (13) Section 2-4.2.1 contained in the 1996 Edition of the NFPA Manual No. 30A may be amended by the director if justification for the need is provided in writing and the level of safety to public and property will not be diminished.
- (14) After the effective date of this rule, the provisions of section 2-4.2.2, relating to aboveground storage tank distance requirements, contained in the 1996 Edition of NFPA Manual No. 30A shall apply only to new locations and those existing locations that—
- (A) Install aboveground storage tanks in place of underground storage tanks;
 - (B) Remove and replace all aboveground storage tanks, piping and dispensing devices;
 - (C) Replace any existing aboveground storage tanks with one of a larger capacity; and
 - (D) Install additional aboveground tanks.
- (15) Effective July 1, 2000, tank gauging systems incorporating external plastic sight tube gauges cannot be utilized for gauging tank volume.
- (16) All aboveground storage tanks installed and connected together, utilizing a common piping system or manifold, shall be installed with each tank top level with all other tank tops to prevent any overfilled tank condition. When tanks are manifolded or piped together, the total capacity of all tanks shall be considered as a single tank when calculating the capacity of the secondary containment facility.
- (17) Aboveground storage tanks shall not be installed or stacked above any aboveground or underground storage tank.
- (18) Storage tanks of double wall construction are not acceptable for use aboveground in lieu of secondary containment by diking or remote impounding unless the tanks meet the requirements of NFPA 30A, 1996 Edition, section 2-4.5, and are equipped with automatic tank gauging, overfill protection and interstitial monitoring. Section 2-3.4.1, exception (2), contained in the 1996 Edition of NFPA 30 shall not apply.
- (19) Aboveground storage tanks shall not be installed under any electrical lines or transformers. All aboveground storage tanks shall maintain a minimum horizontal distance of ten feet (10') from any overhead power line or transformer.
- (20) All aboveground storage tanks utilizing compartments and storing different classes of products shall be constructed with a double wall center bulkhead with means of interstitial monitoring. This may be accomplished using an interstitial drain which must be kept closed at all times except for draining condensate or checking for leakage or failure of the bulkhead. Any liquid that is drained from the interstitial space, may be considered a hazardous waste, and must be disposed of in a manner that is in compliance with the Department of Natural Resources regulations pertaining to such liquids.
- (21) Any aboveground storage tank utilizing riveted construction, that has been determined by inspection, by the Department of Agriculture, to have extensive corrosion of the tank shell or seepage or leakage from any portion of the tank shell or tank seams, shall be removed from service and disposed of in a safe manner. All other aboveground storage tanks utilizing riveted construction shall be removed from service on or before January 1, 2004, and disposed of in a manner that is safe to public, property and the environment.
- (22) The practice of switching the use of a storage tank from heating oil or kerosene to gasoline and from gasoline to heating oil or kerosene is prohibited (i.e., racing fuel to kerosene). Tank use is limited to a single product.
- (23) Tanks storing different classes of petroleum products (i.e., gasoline a class I or kerosene and diesel fuel a class II) shall not be piped or connected together.
- (24) Aboveground storage tanks that are not being used shall be removed from the secondary containment facilities.
- (25) Tanks manufactured for transportation purposes, such as tank wagon and transport tanks, shall not be utilized for fixed storage of products regulated by Chapter 414, RSMo. (Note: Tanks manufactured for underground use are also prohibited for aboveground storage tank use.)
- (26) Aboveground storage tanks storing alcohols, fuel blending components or additives for motor fuels shall meet the requirements as contained in the NFPA Manuals 30 and 30A, 1996 Editions and the requirements contained in 2 CSR 90-30.050.
- (27) Each aboveground storage tank shall meet the requirements of the 1996 Edition of NFPA 30A, section 2-4.6.1. An exception may be made for the ninety-five percent (95%) stop-fill requirement if the owner and/or operator of the tank can demonstrate there is adequate protection for the tank to prevent an overfill situation from occurring. Tanks of two thousand (2,000) gallons capacity or less, that are filled from fuel delivery vehicles by hose nozzle, and utilize a manual gaging method, such as a gage stick to determine the tank outage and volume of liquid that can be safely delivered into the tank, are exempt from the requirements of NFPA 30A, section 2-4.6.1. If this method is utilized, the delivery truck operator/driver shall be in attendance and manually operate the delivery nozzle throughout the entire delivery process to insure the tank is not overfilled.
- (28) All piping, including fiberglass and other non-metallic piping, constructed of low melting point materials shall be installed in conformance with manufacturers instructions. All piping, including fiberglass and other non-metallic piping, constructed of low melting point materials cannot be installed in dispensing devices or open pits beneath the dispensing device, unless the piping is protected from fire exposure by a method having a two (2)-hour fire rating and that is approved

by the director of the Department of Agriculture.

(29) The walls and floor of secondary containment structures shall be constructed of earth, steel, concrete or solid masonry that is compatible with the specifications of the product being stored, that is liquid tight and have the ability to contain any released product until corrective action, such as the removal of released product and subsequent cleanup including soil and groundwater, can occur. Cleanup of any released product and contaminated soil, groundwater, etc., shall be in conformance with the Department of Natural Resources environmental regulations. The walls and floor of the containment structure shall be designed to support the gravity load of the storage containers and the hydrostatic loads resulting from a release within the secondary containment structure. Gravel, rock or open cell block structures are not considered to be liquid tight and cannot be used.

(30) The drains in all secondary containment facilities shall remain closed at all times except when accumulated water or released/spilled product is being removed. Water or product shall not be allowed to accumulate within any secondary containment facility, this includes dikes and remote impoundments. Accumulated water and/or product within a secondary containment facility shall be removed and disposed of in manner that is in compliance with applicable rules of the Department of Natural Resources.

(31) Storage of products other than petroleum products regulated by Chapter 414, RSMo, except waste oil storage or heating oil for owners use, within a secondary containment facility is prohibited. Any waste oil or heating oil storage tank(s) located within a facility containing regulated products shall meet all of the requirements of regulated product storage tanks. Chemicals and fertilizers shall not be stored within the secondary containment facility.

(32) Walls of buildings or other structures cannot be utilized as a wall or common wall for any secondary containment facility.

(33) All remote pumping and pressurized piping systems, including aboveground storage tanks systems that produce a gravity head on the dispensing device and piping system, shall be equipped with a listed leak detection device or approved leak detection method that will provide an indication if the dispensing and piping system is not liquid tight. Leak detection may be accomplished by, but not

limited to, one (1) or a combination of the following methods:

(A) Installation of an approved listed automatic line leak detector. The leak detector is to be tested at least once annually to insure its proper operation or at such time a problem with the detector is indicated. This also includes an annual pressure test performed on all piping;

(B) Annual pressure testing of the dispensing and piping system, provide and maintain an accurate inventory and reconciliation of all gallons of product received, gallons sold and gallons currently on hand; and

(C) Other method(s) approved by the director.

(34) In order to prevent product loss, all locations utilized for the sale of products regulated by Chapter 414, RSMo shall provide and maintain accurate inventory records of all gallons of product received, gallons sold and gallons currently on hand. Such records shall be made available to the director of agriculture or his/her delegated representative within forty-eight (48) hours of request.

(35) All persons installing, repairing or servicing appliances, equipment or devices including storage tanks and piping located at any facility utilized for the sale of products regulated by Chapter 414, RSMo, shall be properly trained and experienced in the work, familiar with all safety precautions and shall install, repair and service all appliances, equipment and devices including storage tanks and piping in conformance with all of the requirements of Chapter 414, RSMo and the petroleum inspection rules.

(36) No person shall install, repair or service any dispensing device without first having registered with the Department of Agriculture, Petroleum Inspection Program, submitting documentation of properly designed and calibrated testing equipment and proof of training and experience to perform such work. Registration may be revoked if such person does not obtain and maintain testing equipment calibration at least once every two (2) years and/or installs, repairs or services any dispensing device in violation of Chapter 414, RSMo and/or any rules promulgated thereunder.

(37) Installation of equipment and devices, such as vending machines and ATMs, that may produce safety hazards by distracting the customer from the dispensing operation, limit ingress and egress to the dispensing area or from electrical components of the equipment or device, or limit visibility to vehicle refueling on islands utilized for the dispensing of

petroleum products regulated by Chapter 414, RSMo is prohibited.

AUTHORITY: section 414.142, RSMo Supp. 1998. 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. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 8, 1999, effective Nov. 30, 1999.*

**Original authority 1987, amended 1993, 1995.*

2 CSR 90-30.060 Automotive and Marine Service Stations

(Rescinded November 30, 1999)

AUTHORITY: section 414.142, RSMo. 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. Rescinded: Filed April 8, 1999, effective Nov. 30, 1999.*

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.

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(1) All unattended self-service stations shall meet the requirements contained in NFPA Manual No. 30 entitled *Flammable and Combustible Liquids Code*, 1996 Edition and NFPA No. 30A entitled *Automotive and Marine Service Station Code*, 1996 Edition which are incorporated herein by reference. 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*, 1996 Edition and NFPA Manual No. 30A entitled *Automotive and Marine Service Station Code*, 1996 Edition.

(3) All unattended self-service stations shall meet the requirements contained in 2 CSR 90-30.050.

(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 GASOLINE 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*, 1996 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 pump.

3. All dispenser control devices must meet Underwriters' Laboratory (UL) stan-

dards and shall be installed and maintained in accordance with the manufacturer's instructions. All wiring shall comply with NFPA Manual No. 70, 1996 Edition.

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*, 1996 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

the requirements contained in 2 CSR 90-30.050 (33).

(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, 1996 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, 1996 Edition which is incorporated herein by reference 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 self-service 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 neces-

sary 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 bottom of the sign not less than five feet (5') 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. 1998. 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. Amended: Filed April 8, 1999, effective Nov. 30, 1999.*

**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.

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State

and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(1) Each location dispensing products regulated by Chapter 414, RSMo shall have a measuring device for each product dispensed which shall be utilized for the sale of products regulated by Chapter 414, RSMo. All transactions involving the sale of petroleum products regulated by Chapter 414, RSMo shall be based on the gallons stated by the measuring device.

(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, 1996 Edition which is incorporated herein by reference, 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 44*.

(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, 1996 Edition which is incorporated herein by reference.

(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, 1996 Edition which is incorporated herein by reference.

(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 liter).

(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 supply line 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.

(18) Each hose nozzle at automotive service stations shall be equipped with a device, such as a spout anchor spring, designed to retain the nozzle spout in the vehicle fuel tank inlet while refueling.

AUTHORITY: section 414.142, RSMo Supp. 1998. 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. Amended: Filed April 8, 1999, effective Nov. 30, 1999.*

**Original authority 1987, amended 1993, 1995.*

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.

(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 contained 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 representative.

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

(3) Each tank truck or tank wagon shall utilize a separate measuring device (meter) for each class of petroleum products dispensed. This requirement includes any vehicle which was not manufactured for use as a tank delivery vehicle, but has been retrofitted with a tank to be utilized to deliver products regulated by Chapter 414, RSMo to a customer or by a customer.

(4) Each meter utilized for the dispensing of products regulated by Chapter 414, RSMo shall be labeled or marked in a conspicuous location indicating those products it is utilized for (i.e., gasoline, diesel fuel, heating oil, kerosene, etc.)

(5) Tank filling shall not begin until the delivery truck driver or operator has determined the tank outage and calculated the volume that can be safely delivered into the tank.

(6) The driver, operator or attendant of any tank vehicle shall not remain in the vehicle during the delivery of petroleum products but shall remain at or near the loading or unloading point and not leave the vehicle unattended during the loading or unloading process.

(7) Section 2-4.9.4 contained in the 1996 edition of the NFPA Manual No. 30A shall not apply.

AUTHORITY: section 414.142, RSMo Supp. 1998. 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. Amended: Filed April 8, 1999, effective Nov. 30, 1999.*

**Original authority 1987, amended 1993, 1995.*

2 CSR 90-30.100 Terminals

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

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(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, 1996 Edition which is incorporated herein by reference.

(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 1996 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, 1996 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 Supp. 1998. 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. Amended: Filed April 8, 1999, effective Nov. 30, 1999.*

**Original authority 1987, amended 1993, 1995.*

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 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.*