

RULES OF

Department of Agriculture

Division 80—State Milk Board Chapter 2—Grade "A" Pasteurized Milk Regulations

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TITLE 2 – DEPARTMENT OF AGRICULTURE Division 80 – State Milk Board Chapter 2 – Grade "A" Pasteurized Milk Regulations

2 CSR 80-2.001 Adoption of the *Grade "A" Pasteurized Milk Ordinance* (PMO), 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration

PURPOSE: This rule provides for the adoption of the **Grade "A" Pasteurized Milk Ordinance** (PMO), 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, which is the recommended ordinance for adoption by state and local governments for the sanitary control of Grade "A" milk and milk products.

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

(1) The Grade "A" Pasteurized Milk Ordinance (PMO), 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration establishes minimum standards that must be complied with for satisfactorily producing and for processing Grade "A" raw milk for pasteurization and Grade "A" pasteurized milk and milk products in Missouri. The document further contains administrative procedures that provide information as to satisfactory compliance with the required items of sanitation. The Grade "A" Pasteurized Milk Ordinance (PMO), 2023 Revision, is hereby incorporated by reference as published by the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, Division of Plant and Dairy Food (HFS-316), 5100 Paint Branch Parkway, College Park, MD 20740-3835. This rule does not incorporate any subsequent amendments or additions to the Grade "A" Pasteurized Milk Ordinance (PMO).

AUTHORITY: section 196.939, RSMo 2016.* This rule originally filed as 2 CSR 80-2.180. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Emergency amendment filed Oct. 25, 1999, effective Nov. 4, 1999, expired May 1, 2000. Amended: Filed Nov. 1, 1999, effective April 30, 2000. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Moved and amended: Filed April 30, 2018, effective Nov. 30, 2018. Amended: Filed Aug. 7, 2020, effective Feb. 28, 2021. Amended: Filed Sept. 27, 2024, effective April 30, 2025.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.002 Adoption of the *Procedures Governing the Cooperative State-Public Health Service/Food and Drug Administration Program of the National Conference on Interstate Milk Shipments*, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, and the National Conference on Interstate Milk Shipments

PURPOSE: This rule provides for the adoption of the **Procedures**

Governing the Cooperative State-Public Health Service/Food and Drug Administration Program of the National Conference on Interstate Milk Shipments, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, and the National Conference on Interstate Milk Shipments, which is the recommended procedures for adoption by state and local governments for sound and uniform milk sanitation programs.

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

(1) The Procedures Governing the Cooperative State-Public Health Service, Food and Drug Administration Program of the National Conference on Interstate Milk Shipments, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, and the National Conference on Interstate Milk Shipments are the procedures for establishing milk sanitation standards, rating procedures, sampling procedures, laboratory procedures, laboratory evaluation, and sample collector procedures. The document further contains the Constitution of the National Conference on Interstate Milk Shipments (NCIMS), the Bylaws of the NCIMS, the Memorandum of Understanding (MOU) between the United States Food and Drug Administration and NCIMS, and related documents. This procedures document governs the NCIMS and contains the information necessary to maintain a national program that is both uniform and acceptable to the states, United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, and the dairy industry. The Procedures Governing the Cooperative State-Public Health Service, Food and Drug Administration Program of the National Conference on Interstate Milk Shipments, 2023 Revision, is hereby incorporated by reference as published by the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, Division of Plant and Dairy Food (HFS-316), 5100 Paint Branch Parkway, College Park, MD 20740-3835. This rule does not incorporate any subsequent amendments or additions to the Pasteurized Milk Ordinance (PMO).

AUTHORITY: section 196.939, RSMo 2016.* This rule originally filed as 2 CSR 80-2.181. Original rule filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Moved and amended: Filed April 30, 2018, effective Nov. 30, 2018. Amended: Filed Aug. 7, 2020, effective Feb. 28, 2021. Amended: Filed Sept. 27, 2024, effective April 30, 2025.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.003 Adoption of *Code of Federal Regulations* Title 21 Food and Drugs, Chapter I Food and Drug Administration, Department of Health and Senior Services, Subchapter B Food for Human Consumption, Part 117 Current Good Manufacturing Practice, Hazard Analysis, and Risk Based Preventive Controls for Human Food

PURPOSE: This rule provides for the adoption of the most recent

publication of Title 21, Part 117 "The **Code of Federal Regulations**" for Missouri State Milk Board to be in compliance with federal regulations as determined by the United States Department of Agriculture and Food and Drug Administration.

(1) The standards used by the State Milk Board shall be those shown in Title 21, the *Code of Federal Regulations*, Subchapter B Food for Human Consumption, Part 117 Current and Good Manufacturing Practice, Hazard Analysis, and Risk Based Preventive Controls for Human Food, January 2018, are herein incorporated by reference and made part of this rule as published in the United States Superintendent of Documents, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions to the Pasteurized Milk Ordinance (PMO).

AUTHORITY: section 196.939, RSMo 2016.* Original rule filed April 30, 2018, effective Nov. 30, 2018.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.004 Adoption of the *Evaluation of Milk Laboratories*, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration

PURPOSE: This rule provides for the adoption of the **Evaluation of Milk Laboratories**, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, which is the recommended ordinance for adoption by state and local governments for the sanitary control of Grade "A" milk and milk products.

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

(1) The Evaluation of Milk Laboratories, 2023 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration provides for the evaluation of milk laboratories required to meet the sanitation standards of the current in-use edition of the Grade "A" Pasteurized Milk Ordinance (PMO). The Evaluation of Milk Laboratories, 2023 Revision, is hereby incorporated by reference as published by the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, Division of Plant and Dairy Food (HFS-316), 5100 Paint Branch Parkway, College Park, MD 20740-3835. This rule does not incorporate any subsequent amendments or additions to the Grade "A" Pasteurized Milk Ordinance (PMO).

AUTHORITY: section 196.939, RSMo 2016.* Original rule filed Sept. 27, 2024, effective April 30, 2025.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.010 Definitions

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Rescinded and readopted: Filed Feb. 17, 2012, effective Aug. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.020 Sale of Adulterated, Misbranded Milk, or Milk Products

PURPOSE: This rule provides for the control of adulterated, misbranded Grade "A" milk, or milk products, or any combination of these. This rule corresponds with Section 2 of the federal **Grade** "A" Pasteurized Milk Ordinance (PMO), as adopted in 2 CSR 80-2.001.

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

- (1) No person shall produce, provide, sell, offer, or expose for sale, or have in possession with intent to sell, within the state of Missouri, or its jurisdiction, any milk or milk product which is adulterated or misbranded. Provided that, in an emergency, the sale of pasteurized milk and milk products which have not been graded, or the grade of which is unknown, may be authorized by the regulatory agency, in which case those products shall be labeled ungraded.
- (2) Any adulterated or misbranded milk or milk product may be impounded under proper authority by the regulatory agency and disposed of in accordance with applicable laws or regulations, including the *Grade "A" Pasteurized Milk Ordinance*, as adopted in 2 CSR 80-2.001.

AUTHORITY: section 196.939, RSMo 2016.* Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Amended: Filed April 30, 2018, effective Nov. 30, 2018.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.030 Permits

PURPOSE: This rule provides for the issuance of permits to persons involved in the production, transporting, and processing of Grade



"A" milk and milk products. This rule corresponds with Section 3 of the federal **Grade** "A" **Pasteurized Milk Ordinance** (PMO), as adopted in 2 CSR 80-2.001.

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

(1) It shall be unlawful for any person who does not possess a permit from the regulatory agency of Missouri to bring into, send into, or receive into Missouri or its jurisdiction, for sale, or to sell, or offer for sale, or to have in storage any milk or milk products defined in these rules. Imported sources of milk or milk products shall be permitted jointly by the state Department of Agriculture, state Department of Health, and the State Milk Board. An Export Certificate shall serve as the permit. Provided that grocery stores, restaurants, soda fountains, and similar establishments where milk or milk products are served or sold at retail, but not processed, may be exempt from the requirements of this rule.

AUTHORITY: section 196.939, RSMo 2016.* Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Amended: Filed April 30, 2018, effective Nov. 30, 2018.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.040 Labeling

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.050 Inspection Frequency and Procedure (Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2013, effective Feb. 28, 2014. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed Feb. 9, 2016, effective

July 30, 2016. Amended: Filed April 22, 2016, effective Nov. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.060 The Examination of Milk and Milk Products (Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.070 Standards for Milk and Milk Products

PURPOSE: This rule provides standards which Grade "A" raw or pasteurized milk or milk products must meet with regard to cooling temperatures, bacterial limits, somatic cell counts, antibiotics, coliform limits, phosphatase determinations, and sanitation requirements for dairy farms, milk haulers, transfer stations, receiving stations, and milk plants. This rule corresponds with Section 7 of the federal Grade "A" Pasteurized Milk Ordinance (PMO), as adopted in 2 CSR 80-2.001.

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

- (1) All Grade "A" raw milk for pasteurization and all Grade "A" pasteurized milk and milk products shall be produced, processed, manufactured, and pasteurized to conform to the following chemical, physical, bacteriological, and temperature standards and the sanitation requirements of this rule. The *Grade "A" Pasteurized Milk Ordinance* (PMO), as adopted in 2 CSR 80-2.001.
- (2) No process or manipulation other than pasteurization, processing, and packaging methods integral to pasteurization, and appropriate refrigeration shall be applied to milk and milk products for the purpose of removing or deactivating microorganisms. Provided that in the bulk shipment of raw cream, skim milk, or lowfat milk, the heating of the raw milk to temperatures no greater than one hundred twenty-five degrees Fahrenheit (125 °F) (fifty-two degrees Celsius (52 °C)) for separation purposes is permitted when the resulting bulk shipments of cream, skim milk, and lowfat milk are labeled heat-treated.



Table 1 – Chemical, Bacteriological, and Temperature Standards

Grade	"A"	raw	mil	k and	mill	k prodi	ıcts			
for postourization										

for pasteurization

Temperature Cooled to 45 °F (7 °C) or less within two (2) hours

after milking, provided that the blend temperature first and subsequent milkings does not exceed 50 $^{\circ}\text{F}$

(10 °C).

Bacterial limits Individual producer milk not to exceed 100,000 per

milliliter (mL) prior to commingling with other

producer milk.

Not to exceed 300,000 per mL as commingled milk

prior to pasteurization.

Drugs Tests and methodology as required by the *Grade "A"*

Pasteurized Milk Ordinance, as adopted in 2 CSR

80-2.001.

Commingled milk: Tests and methodology as required by the *Grade "A" Pasteurized Milk*

Ordinance, as adopted in 2 CSR 80-2.001.

Somatic cell count Individual cow producer milk: Not to exceed 750,000

permL.

Individual goat producer milk: Not to exceed

1,500,000 per mL.

Grade "A" pasteurized milk and

milk products

Temperature

Cooled to 45 °F (7 °C) or less and maintained

thereat.

Bacterial limits*

Not to exceed 20,000 per mL.

Coliform

Not to exceed 10 per mL. Provided that, in case of

bulk milk transport tank shipments, shall not exceed

100 per mL.

Phosphatase Less than 350 milliunits/L for fluid products and

other milk products by approved electronic

phosphatase procedures.

Drugs No positive results on drug residue detection

methods as referenced in Section 6. – Laboratory Techniques of the *Grade "A" Pasteurized Milk Ordinance*, as adopted in 2 CSR 80-2.001 which have been found to be acceptable for use with Pasteurized

Milk and/or Milk Products.

^{*}Not applicable to cultured products.



- (3) Ungraded Raw Milk for Pasteurization. Ungraded raw milk for pasteurization is raw milk which does not meet the requirements for Grade "A" raw milk for pasteurization.
- (4) Ungraded Pasteurized Milk, Milk Products, or both.
- (A) Ungraded pasteurized milk, milk products, or both, are pasteurized milk, milk products, or both, which do not meet the requirements of Grade "A" pasteurized milk products.
- (B) Only in an emergency, so declared by the regulatory agency, can raw or pasteurized fluid milk products which have not been graded or the grade of which is unknown, be sold, in which case these fluid milk or milk products shall be labeled Ungraded and these milk and milk products shall comply with antibiotic, phosphatase, and pesticide residue tolerances.
- (5) Grade "A" Pasteurized Milk Regulation Items.
- (A) Sanitation Requirements for Grade "A" Raw Milk for Pasteurization.
- 1. Abnormal milk based upon bacteriological, chemical, or physical examination, lactating animals which show evidence of the secretion of abnormal milk in one (1) or more quarters shall be milked last or with separate equipment and the milk shall be discarded. Lactating animals treated with, or lactating animals which have consumed chemical, medicinal, or radioactive agents which are capable of being secreted in the milk and which, in the judgment of the regulatory agency, may be deleterious to human health, shall be milked last or with separate equipment and the milk disposed of as the regulatory agency may direct.
- 2. Milking barn, stable, or parlor construction. On all dairy farms a milking barn, stable, or parlor shall be provided in which the milking herd shall be housed during milking time operations. The areas used for milking purposes shall –
- A. Have floors constructed of concrete or equally impervious material;
- B. Have walls and ceilings which are smooth, painted, or finished in an approved manner, in good repair, ceiling dust-tight;
- C. Have separate stalls or pens for horses, calves, and bulls:
- D. Be provided with natural light, artificial light, or both, well distributed for day and/or night milking, or both;
- E. Provide sufficient air space and air circulation to prevent condensation and excessive odors;
 - F. Not be overcrowded; and
- G. Have dust-tight covered boxes or bins or separate storage facilities for ground, chopped, or concentrated feed.
- 3. Milking barn, stable, or parlor cleanliness. The interior shall be kept clean. Floors, walls, ceilings, windows, pipelines, and equipment shall be free of filth, litter, or both, and shall be clean. Swine and fowl shall be kept out of the milking barn.
- 4. Cowyard. The cowyard shall be graded and drained and shall have no standing pools of water or accumulations of organic wastes. Provided that in loafing or lactating animal housing areas, lactating animal droppings and soiled bedding shall be removed or clean bedding added at sufficiently frequent intervals to prevent the soiling of the lactating animal's udder and flanks. Waste feed shall not be allowed to accumulate. Manure packs shall be properly drained and shall provide a reasonably firm footing. Swine shall be kept out of the cowyard.
- 5. Milkhouse or room—construction and facilities. Milkhouse or room construction and facilities shall comply with the following:
 - A. A milkhouse or room of sufficient size shall be

provided, in which the cooling, handling, and storing of milk and the washing, sanitizing, and storing of milk containers and utensils shall be conducted, except as provided for in paragraph (5)(A)12. of this rule;

- B. The milkhouse shall be provided with a smooth floor constructed of concrete or equally impervious material graded to drain and maintained in good repair. Liquid waste shall be disposed of in a sanitary manner; all floor drains shall be accessible and shall be trapped if connected to a sanitary sewer system;
- C. The walls and ceilings shall be constructed of smooth material, in good repair, well painted, or finished in an equally suitable manner:
- D. The milkhouse shall have adequate natural light, artificial light, or both, and be well ventilated;
- E. The milkhouse shall be used for no other purpose than milkhouse operations; there shall be no direct opening into any barn, stable, or into a room used for domestic purposes. Provided that a direct opening between the milkhouse and milking barn, stable, or parlor is permitted when a tight-fitting, self-closing, solid door(s) hinged to be single or double acting is provided;
- F. Water under pressure shall be piped into the milkhouse:
- G. The milkhouse shall be equipped with a two- (2-) compartment wash vat and adequate hot water heating facilities;
- H. When a transportation tank is used for the cooling of milk, storage of milk, or both, on the dairy farm, the tank shall be provided with a suitable shelter for the receipt of milk. The shelter shall be adjacent to, but not a part of, the milkroom and shall comply with the requirements of the milkroom with respect to construction, light, drainage, insect and rodent control, and general maintenance; and
- I. Effective July 1, 1985, all bulk milk cooling tanks, holding tanks, or both, in use shall be equipped with interval timing devices.
- (I) Construction requirements. Interval timers shall be set and adjusted so that the milk will be agitated not less than five (5) minutes with a frequency of at least once every hour.
- (II) Installation requirements. The installation and operation of interval timing devices shall be the responsibility of the milk producer.
- 6. Milkhouse or room—cleanliness. The floors, walls, ceilings, windows, tables, shelves, cabinets, wash vats, nonproduct contact surfaces of milk containers, utensils, and equipment, and other milkroom equipment shall be clean. Only articles directly related to milkroom activities shall be permitted in the milkroom. The milkroom shall be free of trash, animals, and fowl.
- 7. Toilet. Every dairy farm shall be provided with one (1) or more toilets, conveniently located and properly constructed, operated, and maintained in a sanitary manner. The waste shall be inaccessible to flies and shall not pollute the soil surface or contaminate any water supply.
- 8. Water supply. Water for milkhouse and milking operations shall be from a supply properly located, protected, and operated and shall be easily accessible, adequate, and of a safe, sanitary quality.
- 9. Utensils and equipment—construction. All multi-use containers, equipment, and utensils used in the handling, storage, or transportation of milk shall be made of smooth, nonabsorbent, corrosion-resistant, nontoxic materials and shall be so constructed as to be easily cleaned. All containers, utensils, and equipment shall be in good repair. All milk pails used for

hand milking and stripping shall be seamless and of the hooded type. Multi-use woven material shall not be used for straining milk. All single-service articles shall have been manufactured, packaged, transported, stored, and handled in a sanitary manner and shall comply with the applicable requirements of paragraph (7)(B)11. of this rule. Articles intended for single-service shall not be reused.

- A. Farm holding/cooling tanks, welded sanitary piping, and transportation tank shall comply with the applicable requirements of paragraphs (7)(B)10. and 11. of this rule.
- 10. Utensils and equipment—cleaning. The product-contact surfaces of all multi-use containers, equipment, and utensils used in the handling, storage, or transportation of milk shall be cleaned after each usage.
- 11. Utensils and equipment—sanitization. The product-contact surfaces of all multi-use containers, equipment, and utensils used in the handling, storage, and transportation of milk shall be sanitized before each usage.
- 12. Utensils and equipment—storage. All containers, utensils, and equipment used in the handling, storage, or transportation of milk, unless stored in sanitizing solutions, shall be stored to assure complete drainage and shall be protected from contamination prior to use. Provided that milk pipelines and pipeline milking equipment, such as milker claws, inflations, weigh jars, meters, milk hoses, milk receivers, and milk pumps which are designed for mechanical cleaning, may be stored in the milking barn or parlor provided this equipment is designed, installed, and operated to protect the product- and solution-contact surfaces from contamination at all times.
- 13. Utensils and equipment handling. After sanitization, all containers, utensils, and equipment shall be handled in a manner as to prevent contamination of any product-contact surface.
- 14. Milking flanks, udders, and teats. Milking shall be done in the milking barn, stable, or parlor. The flanks, udders, bellies, and tails of all milking animals shall be free from visible dirt. All brushing shall be completed prior to milking. The udders and teats of all milking animals shall be cleaned and treated with a sanitizing solution just prior to the time of milking and shall be relatively dry before milking. Wet hand milking is prohibited.
- 15. Milking surcingles, milk stools, and antikickers. Surcingles, milk stools, and antikickers shall be kept clean and stored above the floor.
- 16. Protection from contamination. Milking and milkhouse operations, equipment, and facilities shall be located and conducted to prevent any contamination of milk, equipment, containers, and utensils. No milk shall be strained, poured, transferred, or stored unless it is properly protected from contamination.
- 17. Personnel handwashing facilities. Adequate handwashing facilities shall be provided, including a lavatory fixture with running water, soap or detergent, and individual sanitary towels, in the milkhouse and in or convenient to the milking barn, stable, parlor, or flush toilet.
- 18. Personnel cleanliness. Hands shall be washed clean and dried with an individual sanitary towel immediately before milking, performing any milkhouse function, and immediately after the interruption of any of these activities. Milkers and milk haulers shall wear clean outer garments while milking or handling milk, milk containers, utensils, or equipment.
- 19. Cooling. Raw milk for pasteurization shall be cooled to forty-five degrees Fahrenheit (45 °F) (7 °C) or less within two (2) hours after milking, provided that the blend temperature after

the first milking and subsequent milkings does not exceed fifty degrees Fahrenheit (50 °F) (10 °C).

- 20. Vehicles. Vehicles used to transport milk from the dairy farm to the milk plant or receiving station shall be constructed and operated to protect their contents from sun, freezing, and contamination. These vehicles shall be kept clean, inside and out, and no substance capable of contaminating milk shall be transported with milk.
- 21. Insect and rodent control. Effective measures shall be taken to prevent the contamination of milk, containers, equipment, and utensils by insects and rodents and by chemicals used to control vermin. Milkrooms shall be free of insects and rodents. Surroundings shall be kept neat, clean, and free of conditions which might harbor or be conducive to the breeding of insects and rodents.
- (6) To secure and hold a valid permit, license, or both, a hauler shall meet the following requirements governing Grade "A" milk haulers, the collection of Grade "A" milk from farm bulk milk cooling tanks, storage tanks, or both, and the collection and care of Grade "A" milk samples:
 - (A) General Requirements.
- 1. All bulk tank trucks, associated and auxiliary equipment, shall be maintained in a clean and sanitary condition and shall be in good repair.
- 2. Whenever a bulk tank truck has been cleaned and sanitized, as required by the regulatory agency, it shall bear a tag showing the date, time, place, and signature of the employee or contract operator doing the work, unless the truck delivers to only one (1) receiving unit where responsibility for cleaning and sanitizing can be definitely established without tagging. The tag is to be removed at the first stop on route and kept on file for the regulatory agency.
- 3. Milk shall never be collected at a producer farm during the milking operation. Partial collections of milk from a bulk cooling tank, storage tank, or both, are prohibited without special permission from the regulatory agency.
- 4. Milk which has not been cooled to forty-five degrees Fahrenheit (45 °F) (7 °C) within two (2) hours after milking or on which the blend temperature after the first milking and subsequent milkings has exceeded fifty degrees Fahrenheit (50 °F) (10 °C) shall not be collected. Except that where recording thermometer charts are available, milk may be collected provided it complies with standards adopted by the regulatory agency.
 - 5. Abnormal milk shall not be collected.
- 6. The tank truck pump and hose shall be handled in a sanitary manner and shall be protected during the collection procedure.
- 7. An accurate complete record of each producer's milk pick-up shall be kept. This shall include producer number and name; milk measurement, weight, or both; date and time of collection; temperature of the milk; remarks on condition or quality; and the hauler's signature or initials.
- 8. Hauling of toxic materials in bulk milk tank trucks is prohibited. Permission to haul nontoxic material other than Grade "A" milk, milk products, or both, must be obtained from the regulatory agency on an individual basis;
 - (B) Permits and Licenses.
- 1. All milk haulers must possess a license from the state Department of Agriculture and a permit from the regulatory agency. The permit, license, or both, are subject to suspension or revocation whenever any of the laws or rules are violated on the second consecutive inspection. Flagrant violations on the part of the hauler, such as fraudulent practices, intentional adulteration,



or any actions adversely affecting the integrity of producer milk samples, shall result in immediate permit suspension, court action, or both.

- 2. A temporary permit may be given in the field by the regulatory agency to an applicant who satisfactorily passes an examination and who possesses a temporary license issued through the regulatory authority. The temporary permit may be revoked for cause at any time. Regular status of a temporary permit, license, or both, is acquired only after an applicant satisfactorily passes a hauler training course provided by a company or organization if the training course has been approved by the State Milk Board and the regulatory agency.
- 3. An approved hauler training course should include the following:
 - A. Basic milk microbiology;
 - B. Milk quality tests and what they mean;
 - C. Evaluation and detection of flavors and odors;
- D. Sampling and bacteriological, chemical, and physical analysis:
 - E. Sampling, why and how to handle samples;
 - F. Cleaning and sanitizing of dairy equipment;
 - G. Milk and its composition;
 - H. The how and why of tank calibration; and
- I. Procedures for the collection of milk from farm cooling or storage tanks, or both;
 - (C) Requirements Pertaining to the Operator.
- 1. The operator must maintain a neat and clean appearance and must have clean habits.
- 2. The operator must be able to differentiate between normal and abnormal milk.
 - 3. The operator must not use tobacco in the milkroom.
- 4. The operator must carry an approved thermometer for checking milk temperature.
- 5. The operator must carry a suitable container bearing a bactericidal solution and appropriate brushes to give supplemental bactericidal treatment for bulk tank valve, tank truck hose opening, and other equipment as the need is indicated:
 - (D) Hauler Procedure at the Farm.
- 1. Examine the milk for off-odor and any other abnormalities which would class the milk as unmarketable. Wash hands thoroughly and dry with clean single-service towel immediately prior to measuring, sampling the milk, or both.
- 2. Measure the milk before agitation. If the agitator is running upon arrival, the measurement can be taken only after the surface of the milk has been undisturbed for at least two (2) minutes. An accurate cold stick reading shall be used for milk measurement.
- 3. If the agitator is running upon arrival, run it at least five (5) minutes before sampling and recording temperature. If the agitator is not running, it must be started and run for at least five (5) minutes before sampling.
 - 4. Identify sample container and collect sample.
- 5. Sanitize the hauler's thermometer when used to check accuracy of tank thermometer or before use when tank thermometer is inoperable.
- 6. After pumping milk into tank truck, disconnect and cap hose and replace hose in truck. Be sure porthole cover is closed. Rinse tank and porthole thoroughly with tempered water.
- 7. When a route collection has started, complete it without any unnecessary delay;
- (E) Procedures and Practices Concerning Sampling. A sample which will qualify for bacteriological analysis (universal sampling) shall be properly collected at each stop on the

route. The sample shall be handled properly and subsequently delivered to the proper destination. While on the pick-up route, the hauler shall have an adequate supply of sample containers available. These containers shall be properly stored and handled. An approved sampling dipper or single-service sampling tubes shall be provided and must be maintained and handled to avoid possible contamination of the sample. The following procedures shall be carried out when collecting any sample:

- 1. Identify the sample container with the producer number, the date, time of day, and temperature;
- 2. Bring sample container, dipper, and dipper container or single-service sampling tubes into the milkroom. Dipper container must contain chlorine solution of one hundred to two hundred parts per million (100–200 ppm) or other approved bactericide at all times while on the route. Dipper must be kept clean;
- 3. Open sample container carefully and avoid contamination of the milk contact surfaces;
- 4. Immerse the sample dipper at least three (3) times in the milk, completely emptying each time. This will eliminate any remaining sanitizing solution in the dipper;
- 5. Collect representative sample or samples from the farm tank;
 - 6. Do not hold sample container over the milk in the tank;
- 7. Rinse the sample dipper free of milk and place in its carrying container; and
- 8. Place sample or samples in cooling medium immediately after collection; and
 - (F) Specifications Which Are Related to Sampling.
- 1. All sample containers and single-service sampling tubes used for samples to determine bacteria counts shall be sterile. Samples shall be cooled to and held between thirty-two degrees Fahrenheit (32 °F) (0 °C) and forty degrees Fahrenheit (40 °F) (4 °C) during transit to the laboratory. Multi-use sampling dippers shall be cleaned and sanitized.
- 2. Sample containers shall have space to properly identify sample.
- 3. Means shall be provided to properly protect sample in sample case.
- 4. Adequate racks also shall be provided when plastic sample bags are used. Other methods may be used as approved by the regulatory agency.
- 5. Adequate insulation of sample container box or ice chest shall be provided to keep samples from freezing during cold weather
- 6. An extra sample of milk shall be collected and properly identified as a temperature sample at the first stop on each route and placed in the cooling medium as a temperature check.
- 7. Samples for butterfat and bacterial counts shall not be taken from tanks which contain frozen or churned milk.
- (7) Sanitation Requirements for Grade "A" Pasteurized Milk and Milk Products.
- (A) A receiving station shall comply with paragraphs (7)(B)1.–15., 17., 20., and 22., except that the partitioning requirement of paragraph (7)(B)5. shall not apply.
- (B) A transfer station shall comply with paragraphs (7)(B)1., 4., 6.–12., 14., 15., 17., 20., and 22.; and as climatic and operating conditions require, the applicable provisions of paragraphs (7) (B)2. and 3., provided that in every case, overhead protection shall be provided. Facilities for the cleaning and sanitizing of bulk milk pick-up tanker and milk transport tanks shall comply with paragraphs (7)(B)1., 4., 6.–12., 14., 15., 20., and 22.; and



as climatic and operating conditions require, the applicable provisions of paragraphs (7)(B)2. and 3., provided that in every case, overhead protection shall be provided.

- 1. Floors construction. The floors of all rooms in which milk or milk products are processed, handled, or stored, or in which milk containers, equipment, and utensils are washed shall be constructed of concrete or other equally impervious and easily cleaned material, and shall be smooth, properly sloped, provided with trapped drains, and kept in good repair. Provided that cold-storage rooms used for storing milk and milk products need not be provided with floor drains when the floors are sloped to drain to one (1) or more exits. Provided further that storage rooms for storing dry ingredients, packaging materials, or both, need not be provided with drains and the floors may be constructed of tightly joined wood.
- 2. Walls and ceilings construction. Walls and ceilings of rooms in which milk or milk products are handled, processed, or stored, or in which milk containers, utensils, and equipment are washed, shall be in good repair with a smooth, washable, light-colored surface.
- 3. Doors and windows. Effective means shall be provided to prevent the access of flies and rodents. All openings to the outside shall have solid doors or glazed windows which shall be closed during dusty weather.
- 4. Lighting and ventilation. All rooms in which milk or milk products are handled, processed, or stored, in which milk containers, equipment, and utensils are washed, or both handled and washed, shall be well lighted and well ventilated.
- 5. Separate rooms. There shall be separate rooms for the pasteurizing, processing, cooling, and packaging of milk and milk products; the cleaning of milk cans, bottles, and cases; the cleaning and sanitizing facilities for milk tank trucks in plants receiving milk in those tanks; and receiving cans of milk and milk products in plants receiving those cans. Rooms in which milk or milk products are handled, processed, or stored, or in which milk containers, utensils, and equipment are washed or stored, shall not open directly into any stable or any room for domestic purposes. All rooms shall be of sufficient size for their intended purposes.
- 6. Toilet sewage disposal facilities. Every milk plant shall be provided with toilet facilities conforming with the regulations of the state of Missouri. Toilet rooms shall not open directly into any room in which milk, milk products, or both, are processed. Toilet rooms shall be completely enclosed and shall have tight-fitting, self-closing doors. Dressing rooms, toilet rooms, and fixtures shall be kept in a clean condition, in good repair, and shall be well ventilated and well lighted. Sewage and other liquid wastes shall be disposed of in a sanitary manner.
- 7. Water supply. Water for milk plant purposes shall be from a supply properly located, protected, and operated and shall be easily accessible, adequate, and of a safe, sanitary quality.
- 8. Handwashing facilities. Convenient handwashing facilities shall be provided, including hot and cold or warm running water, soap, and individual sanitary towels or other approved hand drying devices. Handwashing facilities shall be kept in a clean condition and in good repair.
- 9. Milk plant cleanliness. All rooms in which milk and milk products are handled, processed, or stored, and in which containers, utensils, or equipment are washed or stored, shall be kept clean, neat, and free of evidence of insects and rodents. Only equipment directly related to processing operations or to handling of containers, utensils, and equipment shall be permitted in the pasteurizing, processing, cooling, packaging,

and bulk milk storage rooms.

- 10. Sanitary piping. All sanitary piping, fittings, and connections which are exposed to milk or milk products, or from which liquids may drip, drain, or be drawn into milk or milk products, shall consist of smooth, impervious, corrosion-resistant, nontoxic, easily cleanable material. All piping shall be in good repair. Pasteurized milk and milk products shall be conducted from one (1) piece of equipment to another only through sanitary piping. Provided that cottage cheese, cheese dressings, or cheese ingredients may be transported by other methods which protect the product from contamination.
- 11. Construction and repair of containers and equipment. All multi-use containers and equipment with which milk or milk products come into contact shall be of smooth, impervious, corrosion-resistant, nontoxic material, shall be constructed for ease of cleaning, and shall be kept in good repair. All single-service containers, closures, gaskets, and other articles with which milk or milk products come in contact shall be nontoxic and shall have been manufactured, packaged, transported, and handled in a sanitary manner. Articles intended for single-service use shall not be reused.
- 12. Cleaning and sanitizing of containers and equipment. The product-contact surfaces of all multi-use containers, utensils, and equipment used in the transportation, processing, handling, and storage of milk or milk products shall be effectively cleaned and shall be sanitized before each use.
- 13. Storage of cleaned containers and equipment. After cleaning, all multi-use milk or milk product containers, utensils, and equipment shall be transported and stored to assure complete drainage and shall be protected from contamination before use.
- 14. Storage of single-service containers, utensils, and materials. Single-service caps, cap stock, parchment paper, containers, gaskets, and other single-service articles for use in contact with milk and milk products shall be purchased and stored in sanitary tubes, wrappings, or cartons, shall be kept in a clean, dry place until used, and shall be handled in a sanitary manner.
- 15. Protection from contamination. Milk plant operations, equipment, and facilities shall be located and conducted to prevent any contamination of milk or milk products, ingredients, equipment, containers, and utensils. All milk or milk products or ingredients which have spilled, overflowed, or leaked shall be discarded. The processing or handling of products other than fluid milk and milk products in the pasteurization plant shall be performed to preclude the contamination of milk and milk products. The storage, handling, and use of poisonous or toxic materials shall be performed to preclude the contamination of milk and milk products, the ingredients of milk and milk products, or the product-contact surfaces of all equipment, containers, or utensils.
- 16. Cooling of milk. All raw milk and milk products shall be maintained at forty-five degrees Fahrenheit (45 °F) (7 °C) or less until processed. All pasteurized milk and milk products, except those to be cultured, shall be cooled immediately prior to filling or packaging in approved equipment to a temperature of forty-five degrees Fahrenheit (45 °F) (7 °C) or less. All pasteurized milk and milk products shall be stored at a temperature of forty-five degrees Fahrenheit (45 °F) (7 °C) or less. On delivery vehicles, the temperature of milk and milk products shall not exceed fifty degrees Fahrenheit (50 °F) (10 °C). Every room or tank in which milk or milk products are stored shall be equipped with an accurate thermometer.
 - 17. Bottling and packaging. Bottling and packaging of milk



and milk products shall be done at the place of pasteurization in approved mechanical equipment. Provided that cottage cheese may be transported in sealed containers in a protected, sanitary manner from one (1) plant to another for creaming, packaging, or both.

- 18. Capping. Capping or closing of milk and milk product containers shall be done in a sanitary manner by approved mechanical capping, closing equipment, or both. The cap or closure shall be designed and applied in a manner that the pouring lip is protected to at least its largest diameter and with respect to fluid product containers, removal cannot be made without detection.
- 19. Personnel cleanliness. Hands shall be thoroughly washed before commencing plant functions and as often as may be required to remove soil and contamination. No employee shall resume work after visiting the toilet room without thoroughly washing his/her hands. All persons shall wear clean outer garments while engaged in the processing, pasteurization, handling, storage, or transportation of milk, milk products, containers, equipment, and utensils. All persons, while engaged in the processing of milk or milk products, shall wear adequate hair coverings and shall not use tobacco.
- 20. Vehicles. All vehicles used for transportation of pasteurized milk and milk products shall be constructed and operated so that the milk and milk products are maintained at forty-five degrees Fahrenheit (45 °F) (7 °C) or less, and are protected from sun, freezing, and contamination.
- 21. Surroundings. Milk plant surroundings shall be kept neat, clean, and free from conditions which might attract or harbor flies, other insects, and rodents or which otherwise constitutes a nuisance.

AUTHORITY: section 196.939, RSMo 2016.* Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Amended: Filed April 30, 2018, effective Nov. 30, 2018.

*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.

2 CSR 80-2.080 Animal Health

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.090 Transferring, Delivery Containers – Cooling (Rescinded June 30, 1980)

AUTHORITY: section 196.939, RSMo 1978. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded: Filed March 10, 1980, effective June 30, 1980.

2 CSR 80-2.091 Milk and Milk Products Which May Be Sold (Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.100 Future Dairy Farms and Milk Plants (Rescinded June 30, 1980)

AUTHORITY: section 196.934, RSMo 1978. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded: Filed March 10, 1980, effective June 30, 1980.

2 CSR 80-2.101 Transferring; Delivery Containers; Cooling (Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.110 Milk and Milk Products from Points Beyond the Limits of Routine Inspection

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.120 Procedure When Infection Is Suspected (Rescinded June 30, 1980)

AUTHORITY: section 196.939, RSMo 1978. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded: Filed March 10, 1980, effective June 30, 1980.

2 CSR 80-2.121 Future Dairy Farms and Milk Plants

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April



22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.130 Personnel Health

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded and readopted: Filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.140 Enforcement

(Rescinded June 30, 1980)

AUTHORITY: section 196.939, RSMo 1978. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded: Filed March 10, 1980, effective June 30, 1980.

2 CSR 80-2.141 Procedure When Infection is Suspected (Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.150 Unconstitutionality Clause

(Rescinded June 30, 1980)

AUTHORITY: section 196.939, RSMo 1978. Original rule filed April 20, 1973, effective April 30, 1973. Rescinded: Filed March 10, 1980, effective June 30, 1980.

2 CSR 80-2.151 Enforcement

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.160 Adoption of Grade A Pasteurized Milk Ordinances, 1965 Recommendations of the United States Public Health Service by Reference

(Rescinded June 30, 1980)

AUTHORITY: section 196.939, RSMo 1978. Original ruled filed

April 20, 1973, effective April 30, 1973, Rescinded: March 10, 1980, effective June 30, 1980.

2 CSR 80-2.161 Penalty

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Filed Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.170 Separability Clause

(Rescinded November 30, 2018)

AUTHORITY: section 196.939, RSMo 2000. Original rule filed March 11, 1980, effective July 1, 1980. Amended: Filed Feb. 1, 1990, effective April 26, 1990. Amended: Feb. 15, 2007, effective July 30, 2007. Amended: Filed Aug. 3, 2009, effective Jan. 30, 2010. Amended: Filed March 13, 2012, effective Sept. 30, 2012. Amended: Filed July 23, 2014, effective Jan. 30, 2015. Amended: Filed April 22, 2016, effective Oct. 30, 2016. Rescinded: Filed April 30, 2018, effective Nov. 30, 2018.

2 CSR 80-2.180 Adoption of the Grade "A" Pasteurized Milk Ordinance (PMO), 2017 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration (Moved to 2 CSR 80-2.001)

2 CSR 80-2.181 Adoption of the Procedures Governing the Cooperative State-Public Health Service/Food and Drug Administration Program of the National Conference on Interstate Milk Shipments, 2017 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration, and the National **Conference on Interstate Milk Shipments** (Moved to 2 CSR 80-2.002)

2 CSR 80-2.190 State Milk Board Grade "A" Milk Policies

PURPOSE: This rule provides for the adoption into regulation of certain policies of the State Milk Board. None of the following regulations should be interpreted to conflict with existing regulations set forth at 2 CSR 80-2 et seq.

(1) Added Water as Milk Adulterant.

(A) Samples for added water shall be collected and analyzed at least once each six (6) months. Compliance is based on a freeze point of -0.525 degrees centigrade. After five (5) days from the date of notice of the first unsatisfactory sample, a second sample should be collected and analyzed for added water. If the producer's second sample violates the freeze point test, the State Milk Board will automatically suspend the producer's permit. The producer's permit shall remain suspended until the producer's milk passes the freeze point test. A repeat violation of the freeze point test within a six- (6-) month period following



a permit suspension for added water will result in immediate suspension of the producer's permit. Repeated offenses during the same six- (6-) month period may result in permit revocation after a hearing before the State Milk Board. No on-farm inspection for permit reinstatement is required after an addedwater violation.

(2) Authentic Freeze Point Procedure.

- (A) In order to obtain uniformity in establishing an authentic freezing point, the following procedure should be implemented:
- 1. The producer must request the assistance for the establishment of an authentic freeze point to the State Milk Board in writing;
- 2. The State Milk Board will notify the servicing sanitarian and fieldman of the request. In the absence of a fieldman, two (2) sanitarians from the State Milk Board or its agent should implement the procedure;
- 3. On the date of the test, the producer must make sure to $\!-\!$
- A. Thoroughly wash, rinse, and sanitize all milk contact surfaces after the morning milking and milk pickup;
- B. Maintain all milk contact surfaces in a manner to allow complete drainage, including the pump and all low points in the milking equipment to eliminate any entrapped water;
- C. Not allow milk contact surfaces to be sanitized or allow any water to come in contact with any milk contact surfaces after the State Milk Board or its agents have arrived for testing;
- D. Not dip inflations between dairy animals or perform any procedure that could allow any water to enter the milk supply; and
 - E. Prepare for and perform evening milking as normal;
- 4. At the conclusion of the milking procedure, the producer should not flush the pipeline with water while the pipeline is attached to the bulk tank. This is a prohibited procedure at any time. As soon as the milk has entered the bulk tank and has remained quiescent for at least five (5) minutes, the State Milk Board or its agent should measure the milk, take a sample of the milk, and place it on ice immediately;
- 5. The producer must follow the procedures outlined in paragraph (2)(A)3. above in order to allow all cleaned and sanitized surfaces to drain overnight;
- 6. Thirty (30) minutes prior to normal milking time the next morning, the State Milk Board or its agents should measure the milk in the bulk milk tank after a quiescent period of at least five (5) minutes. Next, the State Milk Board or its agents should agitate the milk thoroughly and collect a second sample;
- 7. The producer should follow the same procedure utilized in the previous milking to ensure that no water is allowed to come in contact with, or obtain entrance into, the milk supply;
- 8. At the end of the second milking, the State Milk Board or its agent must thoroughly agitate the milk and collect a sample;
- 9. The State Milk Board or its agent should transport the three (3) milk samples on ice directly to an approved milk testing laboratory. The laboratory should be notified in advance and arrangements should be made to conduct the freeze point test. The sample collected at the end of the first milking and the sample collected prior to the beginning of the second milking should provide a freezing point of a variance not greater than -0.002 degrees centigrade. There may be a slight variance in the two (2) samples as carbon dioxide in milk passes off as a gas between the night and morning milkings. If the variance is greater than -0.002 degrees centigrade, the milk itself was altered between milkings by something

other than the release of carbon dioxide. To prevent such an occurrence, the producer should lock the milk house door between these tested milkings; and

10. If the authentic freeze point procedure outlined in this regulation is used, the producer will document the procedure and provide documentation to the State Milk Board. The samples collected immediately after the two (2) milkings will be the official non-water freezing record for the producer. For enforcement purposes, the producer will be allowed a freezing point of –0.005 degrees centigrade less than the results of the lowest number of the two (2) officially tested samples that were collected after the evening and morning milkings. Once established, the authentic freezing point will remain in effect for a producer until the producer's feeding program or herd is substantially changed.

(3) Drug Residue Test.

(A) Whenever a drug residue test is found to be positive, the State Milk Board shall immediately suspend the producer's permit.

(4) Appendix N.

(A) Whenever a bulk milk truck tank tests positive for antibiotic drug residue, the State Milk Board shall randomly verify the disposition of at least ten percent (10%) of milk tank truck loads. A memo for record of this verification will be attached to the Appendix N report.

(5) Water for Use in Milk House.

- (A) Water sampling procedure for water used in the milk house will be as follows:
- 1. Three (3) consecutive unsatisfactory water samples shall result in a degrade;
- 2. Sixty (60) days is the maximum time allowed between the second bad sample collected and degrading sample collection;
- 3. A producer's permit is considered to be under warning during the interval that the water sample is testing unsafe. A new well or continuous disinfection system of the well should be considered a new water source and would result in a return to regulatory procedure step one above;
- 4. It is not the duty of the sanitarian to witness, or participate in, the act of chlorination; and
- 5. A producer who previously has incurred three (3) consecutive bad samples as a Grade "A" producer must be given thirty (30) days as a manufacturing grade producer in which to obtain a well water sample in compliance with state regulations.

(6) Permit Suspension.

- (A) Following an initial inspection or a reinstatement inspection, a new producer or a producer under permit suspension must ship milk within seven (7) calendar days or one hundred sixty-eight (168) hours. If milk is not shipped within the required time, the barn must be re-inspected to maintain sanitary conditions prior to milk marketing.
- (B) Producers who incur three (3) permit suspensions within a twelve- (12-) month period shall appear before the State Milk Board or its agents for a pre-hearing. If the producer incurs an additional suspension in the following six (6) months, the producer may request a hearing before the State Milk Board.
- (C) Appendix N Violations. A pre-hearing will be held after two (2) violations for antibiotics in a twelve- (12-) month period, and a third antibiotics violation in a twelve- (12-) month period will result in a permit revocation hearing before the State Milk



Board.

(D) A clearing sample is required before shipping milk.

(7) Grade "A" Permits Automatically Degraded After One Hundred Eighty (180) Days of Inactivity.

(A) A Grade "A" permit issued to a producer that is in degrade status for one hundred eighty (180) consecutive days will be eliminated from the records. A producer that has lost a permit in this manner will need to reapply and comply with existing Grade "A" standards before obtaining a new permit. All producers issued a new Grade "A" permit will be placed on accelerated sampling in accordance with the current Grade "A" Pasteurized Milk Ordinance to establish a quality history.

(8) Milk Procurers.

(A) Milk procurers may pick up Grade "A" producers being diverted to manufacturing utilization along with producers of the manufacturing market when arrangements can be made for providing samples and other necessary information.

(9) Route Trucks.

(A) When a farm milk truck delivers a load of milk to a plant or receiving location, the truck may start a second route without general washing and sanitizing within one (1) hour from emptying to first milk picked up except when the milk delivered is found to be contaminated with chemicals such as antibiotics.

(10) Access to Dairy Farm.

(A) Dairy farmers shall provide serviceable access to the dairy through a properly maintained road or driveway. Each road or driveway must be reasonably free of ruts, ridges, potholes, overhanging limbs, and any other attributes that will damage or contaminate the entering service vehicles, including milk trucks. It is the dairy farmer's responsibility to clear winter events of ice and snow to assure access for milk collection in accordance with these regulations.

(11) Farm Bulk Milk Collections.

(A) Farm bulk milk collections shall be made at least once every seventy-two (72) hours or every third day. Extended pickups may be granted by individual request to the executive secretary of the State Milk Board provided the safety and quality of milk is maintained and the delayed collection does not extend beyond the limit allowed by law. In the event of a natural disaster or emergency limiting milk pickups beyond the control of the hauler or producer, this regulation may be waived across specified geographic regions as needed.

(12) Milking Time Inspections – When Required.

(A) A milking time inspection shall be conducted on a new producer.

- (B) A milking time inspection should be conducted when reinstating a producer permit that has been suspended for high bacteria counts, sanitation violations, or antibiotics and/ or other adulterants. If it is impractical to conduct a milking time inspection at the time of reinstatement, the milking time inspection must be made within a reasonable amount of time following reinstatement. An inspection following reinstatement after suspension for somatic cell count violations is not required.
- (C) Additional milking time inspections should be made in relation to producer problems at the designation of the State Milk Board or its designated representative.
 - (D) A milking inspection will be made on every producer

within a reasonable time frame.

(13) Distributors.

- (A) This regulation affects inspection and permitting of distributors.
- 1. A distributor number is "D" plus the required number of digits in each contractee's permit number series.
- 2. "Distributor" is defined as an individual or company that handles finished dairy products beyond the responsibility of the dairy plant and prior to delivery to retailers and/or consumers and any milk processing plant-owned branch operation in which a permanent or mobile-milk cooler is operated.
- 3. Distribution permits shall be issued by the contractee responsible for the area in which the distributor is located.
- 4. Permanent branch or independent distributing points, such as milk coolers, will be inspected at least once each twelve (12) months according to the following current Grade "A" Pasteurized Milk Ordinance items:
 - A. Item 2p. Walls and Ceilings Construction;
 - B. Item 6p. Toilet-Sewage Disposal Facilities;
 - C. Item 7p. Water Supply;
 - D. Item 8p. Handwashing Facilities;
 - E. Item 15p. Protection from Contamination;
 - F. Item 17p. Cooling of Milk and Milk Products;
 - G. Item 20p. Personnel-Cleanliness;
 - H. Item 21p. Vehicles; and
 - I. Item 22p. Surroundings.
- 5. Mobile distributors will be inspected once every twelve (12) months and checked for the following current Grade "A" Pasteurized Milk Ordinance items:
 - A. Item 15p. Protection from Contamination;
 - B. Item 17p. Cooling of Milk and Milk Products;
 - C. Item 20p. Personnel–Cleanliness;
 - D. Item 21p. Vehicles; and
 - E. Item 22p. Surroundings.

(14) Sanitizers.

- (A) To be acceptable for use as a chemical sanitizer for milk contact surfaces, a product must –
- 1. Be clearly marked with an Environmental Protection Agency (EPA) registration number on its label;
- 2. Be clearly marked with instructions on the label, or instructions must be posted in the milk room that it is for use on milk contact surfaces;
- 3. Include a simple, practical test available to determine the strength of the sanitizing solution; and
- 4. Comply with the requirements of Appendix F of the current Grade "A" Pasteurized Milk Ordinance.
- (B) The State Milk Board recognizes and accepts the use of certain quaternary ammonium compounds (QAC) as chemical sanitizers for milk contact surfaces provided the QAC meets the preceding requirements of policy 14, part 1-a, b, c, d, and 21 CFR 178.1010 with the exception: QACs are not acceptable sanitizers for sampling equipment. Since chlorhexidine is not listed in 21 CFR 178.1010, it is unacceptable as a sanitizer for dairy equipment, udders, and teats of dairy animals.

(15) Adequate Cooling.

(A) Adequate cooling of Grade "A" milk as required by the current Grade "A" Pasteurized Milk Ordinance is adversely affected if the first milking into a farm bulk tank does not touch the agitator making the milk in this instance non-grade "A" for marketing purposes. The portion of an agitator used for washing (spatter spray) is not acceptable for agitating milk.



(16) Transfer from One Milk Marketing Agency to Another.

(A) When a producer requests a transfer from one milk marketing agency to another, there is a mandatory three- (3-) day waiting period after receipt of the transfer requested by the contracted inspection agency excluding weekends and holidays. The three- (3-) day period may be waived when agreeable to both marketing agencies.

(17) Barn Plans.

- (A) Barn plan review is to be accomplished by the State Milk Board or its agents provided these plans conform to the current Grade "A" Pasteurized Milk Ordinance and the current State Milk Board Informational Guide for Construction and Reconstruction of Milking Facilities as adopted by the State Milk Board. A copy of approved barn plans must be filed with the State Milk Board office. Barn plans that deviate from these requirements may be submitted to the State Milk Board for review and approval along with recommendation by the local inspection agency regarding recommended approval or disapproval of the plan.
- (B) Each approved barn plan must identify all equipment and show dimensions and location including pipe lengths and physical break locations. All location of equipment and dimensions must be clearly shown in accordance with the informational guide. Other facilities to be shown are: vestibule, feed room, toilet rooms, equipment storage, stanchions, operator pit, steps, location dairy animals enter and exit, type of barn, dairy animal holding area, and housing area when part of contingent construction.
- (C) The barn plan should show all dimensions drawn to scale as indicated.
- (D) The name of the sanitarian/inspector when servicing the facility must be identified.
 - (E) Identify the preparer of the plan by name and affiliation.
- (F) Identify the name and address of the person for whom the plan is developed.

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*Original authority: 196.939, RSMo 1972, amended 1993, 1994, 1995.