

**RULES**  
**OF**  
**GEORGIA DEPARTMENT OF AGRICULTURE**

**CHAPTER 40-2-16**  
**RAW MILK FOR HUMAN CONSUMPTION**

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#### 40-2-16-.01 PURPOSE

- (1) Raw Milk for Human Consumption. These provisions shall be known as the Raw Milk for Human Consumption regulations, hereinafter referred to as “these regulations.”
- (2) Standards for Raw Milk. The purpose of these regulations is to provide the minimum standards required to produce and sell raw milk to the end consumer, in the state of Georgia.
- (3) Applicability.
  - (a) These regulations establish definitions; set standards for equipment, sanitation, and labeling; provide for product sampling; and describes the processes regarding permitting and licensing, inspection, and the enforcement remedies available for non-compliance with these regulations or the Georgia Raw Dairy Act.
  - (b) Nothing in these regulations should be construed to allow, either by interpretation or by omission, contractual arrangements, such as “farm-shares” or “dairy-shares.”
  - (c) Additionally, nothing in these regulations shall infringe upon an individual’s right to produce and store raw milk for their own personal consumption.

#### 40-2-16-.02 DEFINITIONS

- (1) Terms Defined. The following definitions shall apply in the interpretation and application of these regulations.
  - (a) “Abnormal(ities)” means:
    1. Adulterated. This would include milk that:
      - (i) Bears or contains any poisonous or deleterious substance in a quantity that may render it injurious to health;
      - (ii) Bears or contains any added poisonous or deleterious substance for which no safe tolerance has been established by state or federal regulation, or is in excess of such tolerance if one has been established;
      - (iii) Consists, in whole or in part, of any substance unfit for human consumption;
      - (iv) Has been produced, processed, prepared, packaged, or held under unsanitary conditions;
      - (v) Is packaged in a container which is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health;

- (vi) Has any substance added thereto or mixed or packaged therewith so as to increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is; or
  - (vii) Contains any animal drug residues;
2. Irregular. Milk that is uncharacteristic in color, odor, and/or texture.
  3. Undesirable. Milk that, prior to the milking of the animal, is known to be unsuitable for sale, such as colostrum.
- (b) “CFR” means the Food and Drug Administration’s (FDA’s) Code of Federal Regulations. Citations in these regulations to the CFR refer sequentially to the Title, Part, and Section numbers, such as 40 CFR 180.940 refers to Title 40, Part 180, Section 940.
  - (c) “CIP” means “Cleaned in Place” by the circulation or flowing by mechanical means through a piping system of a detergent solution, water rinse, and sanitizing solution onto or over equipment surfaces that require cleaning.
  - (d) “Clean” means the effective and thorough removal of product and/or contaminants from direct product contact surfaces.
  - (e) “Cowyard” means:
    1. The enclosed or unenclosed area adjacent to the milking barn in which the lactating animals may congregate, including animal-housing areas and feed lots.
    2. Animal housing areas, stables without stanchions, such as loose-housing stables, pen stables, resting barns, holding barns, loafing sheds, wandering sheds, and free-stall housing are considered part of the cowyard.
  - (f) “Dairy Farm” means any place where one (1) or more lactating animals (cows, goats, sheep, or other hooved mammal) are kept for milking purposes, and from which the milk is provided, sold, or offered for sale.
  - (g) “Department” means the Georgia Department of Agriculture.
  - (h) “Domestic Purposes” means uses related to the supply, service, and activities of households and private residences.
  - (i) “Goat Milk” means the normal lacteal secretion, practically free of colostrum, obtained by the complete milking of one (1) or more healthy goats.
  - (j) “Misbranded” means:
    1. The product’s labeling is false or misleading;
    2. The product’s container is made, formed, or filled as to be misleading;

3. Any word, statement, or other information required to appear on the label or labeling is not prominently placed thereon with such conspicuousness, and in such terms as to render it likely to be read and understood by the consumer under customary conditions of purchase and use;
  4. It purports to be or is represented for special dietary uses, unless its label bears such information concerning its vitamin, mineral, and other dietary properties as the Commissioner determines necessary in order to fully inform consumers as to its value for such uses; and
  5. It bears or contains any artificial flavoring, artificial coloring, or chemical preservative.
- (k) “Owner” means the legal owner and operator of a dairy farm, including the animal(s) and equipment required in the production of raw milk for human consumption.
- (l) “Person” means any individual, producer, distributor, plant operator, partnership, corporation, company, firm, trustee, association, or institution.
- (m) “Raw Milk for Human Consumption” means:
1. Fluid whole milk in its natural state from healthy cows, or other hoofed animals, which is intended for human consumption and has been produced under these rules and regulations pursuant to the Georgia Raw Dairy Act; and
  2. Has not received any heat treatment such as pasteurization or any other further processing.
- (n) “Sanitize” means to adequately treat cleaned surfaces by a process that is effective in destroying vegetative cells of pathogens and in substantially reducing numbers of other undesirable microorganisms, but without adversely affecting the product or its safety for the consumer.
- (o) “Sheep Milk” means the normal lacteal secretion, practically free of colostrum, obtained by the complete milking of one (1) or more healthy sheep.

#### **40-2-16-.03 PERMITTING**

(1) **Prerequisite for Operation.**

- (a) It shall be unlawful for any person who does not possess a permit from the Department to manufacture, have in storage, sell or offer for sale therein, or offer to give away any raw milk for human consumption.
- (b) No permit shall be issued until all parts of the operation are in compliance with the requirements of the Georgia Raw Dairy Act and these regulations.

- (2) **Form of Submission.** A person desiring to operate a dairy farm producing raw milk for human consumption must submit an application for a permit or license on a form provided by the Department.
- (3) **Qualifications and Responsibilities of Applicants.** To qualify for a permit or license, an applicant must:
- (a) Be an owner of the dairy farm or an officer of the legal ownership;
  - (b) Comply with the requirements of these regulations;
  - (c) As specified under 40-2-16-.04(2), agree to allow access to the dairy farm and to provide required information;
  - (d) Comply with the verification of citizenship/immigration status by completing a notarized affidavit and providing one form of acceptable documentation as defined in O.C.G.A. § 50-36-1; and
  - (e) Pay the applicable permit or license fees at the time the application is submitted.
- (4) **Permit Renewal.** All permits and licenses:
- (a) Are valid for a period of one (1) year unless revoked or suspended,
  - (b) Are renewable on January 1 of the calendar year, and
  - (c) Application forms are not required for permit or license renewals.
- (5) **Responsibilities of the Permit Holder.** Upon acceptance of a permit or license issued by the Department, the permit or license holder, in order to retain the permit or license, must:
- (a) Comply with the provisions of the Raw Dairy Act and these regulations;
  - (b) Immediately discontinue operations and notify the Department if an imminent health hazard may exist;
  - (c) Allow representatives of the Department access to the dairy farm;
  - (d) Replace existing facilities and equipment with facilities and equipment that comply with these regulations if:
    - 1. The Department directs the replacement because the facilities and equipment constitute a public health hazard or nuisance or no longer comply with the criteria upon which the facilities and equipment were accepted, or
    - 2. The Department directs the replacement of the facilities and equipment because of a change of ownership.

- (e) Comply with directives of the Department including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives issued by the Department in regard to the permit or license holder's dairy farm or in response to community emergencies;
  - (f) Accept notices issued and served by the Department according to law; and
  - (g) Be subject to the remedies authorized in law for failure to comply with these regulations or a directive of the Department, including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives.
- (6) **Permits or Licenses Not Transferable.** Permits or licenses issued by the Department are not transferable to other persons or locations.
- (7) **Complete and Accurate Records.** Any person operating under the 'Georgia Raw Dairy Act' and these regulations must:
- (a) Upon the request of the Commissioner or their designee, provide such data and statistics as he or she may require; and
  - (b) Keep complete and accurate records of their operations and provide the Commissioner or their designee free access to all such records.

#### **40-2-16-.04 INSPECTION AND CORRECTION OF VIOLATIONS**

- (1) **Inspection Interval.** Inspections shall be conducted as often as the Department deems necessary to ensure compliance with these regulations and at a minimum inspection frequency as established by Departmental policies and directives.
- (2) **Access Allowed After Due Notice.** After the Department presents official credentials and provides notice of the purpose of and an intent to conduct an inspection, the permit or license holder must allow the Department to determine if the dairy farm is in compliance with these regulations by allowing access to the premises, allowing inspection which may include product and environmental sampling, and providing information and records specified in these regulations and to which the Department is entitled according to law, during the dairy farm's normal hours of operation and at other reasonable times.
- (3) **Refusal and Inspection Orders.** The permit or license holder is required to allow access to the Department as specified under law and these regulations.
- (a) Access is a condition of the acceptance and retention of a permit or license to operate a raw milk for human consumption dairy farm as specified under 40-2-16-.03(6)(c), and
  - (b) If access is denied, an inspection warrant may be obtained pursuant to O.C.G.A. § 2-2-11.
- (4) **Time Frame for Corrections.** The Department shall specify on an inspection report form the time frame for correction of violative conditions noted.

- (a) Except as specified in subparagraph (b), the permit or license holder must at the time of inspection correct a violation of these regulations whose purpose contributes directly to the elimination, prevention or reduction to an acceptable level, hazards associated with foodborne illness or injury.
- (b) Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the Department may agree to or specify a longer time frame, not to exceed:
  - 1. Seventy-two (72) hours after the inspection, for the permit or license holder to correct violations of a critical nature; or
  - 2. Ten (10) calendar days after the inspection, for the permit or license holder to correct violations regarding incorporation of specific actions, equipment or procedures to attain control of risk factors that contribute to foodborne illness or injury, such as personnel training, infrastructure or necessary equipment, documentation or record keeping, and labeling.
- (c) Except as specified in subparagraph (d), the permit or license holder must correct non-critical violations by a date and time agreed to or specified by the Department but no later than ninety (90) calendar days after the inspection. Examples of non-critical violations include general sanitation, operational controls, sanitation standard operating procedures (SSOPs), facilities or structures, equipment design, or general maintenance.
- (d) The Department may approve a compliance schedule that extends beyond the time limits specified under subparagraph (c) if a written schedule of compliance is submitted by the permit or license holder and no health hazard exists or will result from allowing an extended schedule for compliance.
- (5) **Ceasing Operations and Reporting.** A permit or license holder must immediately discontinue operations and notify the Department if an imminent health hazard may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, onset of an apparent foodborne illness outbreak, gross insanitary occurrence or condition, or other circumstance that may endanger public health.
- (6) **Resumption of Operations.** If operations are discontinued as specified under paragraph (5) above or otherwise as according to law, the permit or license holder must obtain written approval from the Department before resuming operations.

#### **40-2-16-.05 ABNORMAL MILK**

- (1) **Bacteriological, Chemical or Physical Examinations.** Lactating animals which show evidence of the secretion of milk with abnormalities in one or more quarters, based upon bacteriological, chemical, or physical examination, must be milked last or with separate equipment and the milk must be discarded.
- (2) **Chemical, Medicinal, or Radioactive Agents.** Lactating animals that have been treated with, or have consumed, chemical, medicinal or radioactive agents, which are capable of being secreted in the milk and which, in the judgment of the Department, may be deleterious to human health,

must be milked last or with separate equipment and the milk disposed of as the Department may direct.

- (3) **Medicinal Agents.** Milk from lactating animals being treated with medicinal agents, which are capable of being secreted in the milk, is prohibited from sale for such a period as is recommended by the attending veterinarian or as indicated on the package label of the medicinal agent.
- (4) **Insecticides.** Milk from lactating animals treated with or exposed to insecticides, not approved for use on dairy animals by the EPA, is prohibited from sale.
- (5) **Detection of Abnormalities.** The Department may require such additional tests for the detection of milk with abnormalities, as they deem necessary.
- (6) **Milked Last or on Separate Equipment.**
  - (a) Lactating animals secreting milk with abnormalities must be milked last or in separate equipment, which effectively prevents the contamination of the wholesome supply.
  - (b) Milking equipment used on animals with abnormalities in their milk must be maintained clean to reduce the possibility of re-infecting or cross infection of the dairy animals.
- (7) **Preventing Contamination From.** Bloody, stringy, off-colored milk, or milk that is abnormal to sight or odor, must be handled and disposed of in a manner to prevent the infection of other lactating animals and the contamination of milk utensils.
- (8) **Between Use – Cleaning and Sanitizing.** Equipment, utensils and containers used for the handling of milk with abnormalities cannot be used for the handling of milk to be offered for sale, unless they are first cleaned and effectively sanitized.
- (9) **Diversion.** Milk without abnormalities may be diverted for other uses and the parts of the milking system that came into contact with this milk are not required to be cleaned and sanitized prior to use for milk to be offered for sale.
- (10) **Waste Derivatives as Feed.** Processed animal waste derivatives used as a feed ingredient for any portion of the total ration of the lactating dairy animal:
  - (a) Must be properly processed in accordance with at least those requirements contained in the Model Regulations for Processed Animal Wastes developed by the Association of American Feed Control Officials; and
  - (b) Must not contain levels of deleterious substances, harmful pathogenic organisms, or other toxic substances which are secreted in the milk at any level or which may be deleterious to human health.
- (11) **Unprocessed Litter Prohibited as Feed.** Unprocessed poultry litter and unprocessed recycled animal body discharges are prohibited from being fed to lactating dairy animals.



## 40-2-16-.06 UNLAWFUL ACTIVITIES

(1) Actions Considered Unlawful. It shall be unlawful:

- (a) To handle raw milk for human consumption in unclean or unsanitary places or in an unsanitary manner;
- (b) To keep, store, or prepare for market any raw milk for human consumption in the same building or enclosure where any hide or fur or any cow, horse, nontraditional livestock, hog, or other livestock is kept;
- (c) To handle or ship raw milk for human consumption in unclean or unsanitary vessels;
- (d) To expose raw milk for human consumption to flies or to any contaminating influence likely to convey pathogenic or other injurious bacteria;
- (e) To use or possess any branded or registered raw milk for human consumption can or container for any purpose other than the handling, storing, or shipping of raw milk for human consumption;
  - 1. Provided, however, that no person other than the rightful owner thereof shall use or possess any can, bottle, or other receptacle if such receptacle shall be marked with the brand or trademark of the owner.
  - 2. *Nothing in this paragraph shall prohibit the temporary possession by a business involved in the normal processing, distribution, or retail sale of dairy products of any can, bottle, or other receptacle which is marked with the brand or trademark of another person or entity prior to its return to the rightful owner in the normal course of business, or if purchased from the rightful owner;*
- (f) To sell or offer for sale raw milk for human consumption that is not pure and fresh and handled with clean utensils;
- (g) To sell or offer for sale raw milk for human consumption from diseased or unhealthy animals or which was handled by any person suffering from or coming in contact with persons affected with any contagious disease;
- (h) To sell or offer for sale any raw milk for human consumption which has been exposed to contamination or contains any unsanitary articles or any foreign substance which would render the raw milk unfit for human consumption; or
- (i) To sell or offer for sale raw milk for human consumption which do not comply with the standards and requirements of the Georgia Raw Dairy Act or the rules and regulations promulgated thereunder.

## **40-2-16-.07 MILKING BARN, STABLE OR PARLOR – CONSTRUCTION**

- (1) **Provided.** A milking barn, stable, or parlor must be provided on all dairy farms.
- (2) **Gutters, Floors, and Feed Troughs – Characteristics.**
  - (a) Gutters, floors, and feed troughs must be constructed of good quality concrete or equally impervious material.
  - (b) Floors must be:
    1. Easily cleaned, brushed surfaces permitted;
    2. Graded to drain;
    3. Maintained in good repair; and
    4. Free of excessive breaks or worn areas that may create pools.
- (3) **Walls and Ceilings.**
  - (a) Walls and ceilings must be finished with wood, tile, smooth-surfaced concrete, cement plaster, brick, or other equivalent materials with light colored surfaces.
    1. Walls, partitions, doors, shelves, windows and ceilings must be kept in good repair.
    2. Surfaces must be refinished whenever wear or discoloration is evident.
  - (b) Whenever feed is stored overhead:
    3. Ceilings must be constructed to prevent the sifting of chaff and dust into the milking barn, stable, or parlor.
    4. If a hay opening is provided from a loft, which is open into the milking portion of the barn, such openings must be provided with a dust-tight door, which must be kept closed during milking operations.
- (4) **Pens and Stalls.** Bull pens, maternity stalls, calf stalls, and horse stalls must be partitioned from the milking portion of the barn. Such portions of the barn that are not separated by tight partitions must comply with all the requirements of this Rule.
- (5) **Overcrowding Prohibited.** Milking barns, stables, and parlors must not be overcrowded. Overcrowding may be evidenced by:
  - (a) The presence of calves, lactating animals, or other barnyard animals in walks or feed alleys;  
or
  - (b) Inadequate ventilation and excessive odors.

- (6) **Milking Barn, Lighting Intensity.** The milking barn:
  - (a) Must be provided with natural and/or artificial light to ensure that all surfaces and particularly the working areas will be plainly visible.
  - (b) The equivalent of at least ten (10) foot-candles (110 lux) of light in all working areas must be provided.
- (7) **Air Circulation.** Air circulation must be of sufficient measure to minimize odors and to prevent condensation upon walls and ceilings.
- (8) **Milking Area Partitions.**
  - (a) A dust-tight partition, provided with doors that are kept closed, *except when in actual use*, must separate the milking portion of the barn from any feed room or silo in which feed is ground or mixed, or in which sweet feed is stored.
  - (b) When conditions warrant, the Department may approve a barn without four walls extending from floor to roof, or a shed-type barn, provided the prohibition of animals and fowl from entering the barn is satisfied.

#### **40-2-16-.08 MILKING BARN, STABLE OR PARLOR – CLEANLINESS**

- (1) **Interiors Clean.** The interior of the milking barn, stable, or parlor must be kept clean.
- (2) **Feed Mangers.** Leftover feed in feed mangers must appear fresh, and not wet or soggy.
- (3) **Bedding Material.** If bedding material is used, manure must be removed from all bedding material between each milking.
- (4) **Outside Surfaces Clean.** Outside surfaces of all milking and clean-in-place (CIP) equipment located in the milking barn, stable, or parlor must be kept clean.
- (5) **Gutter Cleaners.** Gutter cleaners must be kept clean.
- (6) **Pens and Stalls Kept Clean.** All pens, calf stalls, and bull pens, if not separated from the milking barn, stable, or parlor, must be kept clean.
- (7) **Swine and Fowl Exclusion.** Swine and fowl must be kept out of the milking area.
- (8) **Milk Stools, Characteristics.**
  - (a) Milk stools cannot be padded;
  - (b) Milk stools must be constructed to be easily cleaned;
  - (c) Milk stools, surcingles, and antikickers must be kept clean and in good repair; and

- (d) Milk stools must be stored above the floor in a clean place in the milking barn, stable, parlor, or milkhouse when not in use.

#### **40-2-16-.09 COWYARD**

- (1) **Cowyard Characteristics.** The cowyard must be:
  - (a) Graded and drained;
  - (b) Depressions and soggy areas must be filled;
  - (c) Lactating animal's lanes must be kept dry; and
  - (d) Manure packs must be solid to the footing of the animals.
- (2) **Solid Footing.** Approaches to the barn door and the surroundings of stock watering and feed stations must be solid to the footing of the animals.
- (3) **Pooling of Waste.**
  - (a) Wastes from the barn or milkhouse must not be allowed to pool in the cowyard.
  - (b) Cowyards that are muddy due to recent rains will not be considered in violation of this Rule.
- (4) **Keeping Udders and Flanks Clean.** Manure, soiled bedding, and waste feed must not be stored or permitted to accumulate in such a manner as to permit the soiling of cow's udders and flanks.
- (5) **Animal Droppings.** Cowyards must be kept reasonably free of animal droppings. Animal droppings must not be allowed to accumulate in piles that are accessible to the animals.

#### **40-2-16-.10 MILKHOUSE – CONSTRUCTION AND FACILITIES**

- (1) **Separate Facilities.** A separate milkhouse of sufficient size must be provided for the cooling, handling, and storing of milk as well as the washing, sanitizing, and storing of milk containers and utensils.
- (2) **Floors, Characteristics.** The floors of all milkhouses must:
  - (a) Be constructed of good quality concrete (float finish permissible), or equally impervious tile, or brick laid closely with impervious material, or metal surfacing with impervious joints, or other material the equivalent of concrete; and
  - (b) Be maintained free of breaks, depressions, and surface peelings.
- (3) **Sloped to Drain and Watertight Wall Junctures.**

- (a) The floor must be sloped to drain so that there are no pools of standing water.
  - (b) The joints between the floor and the walls must be watertight.
- (4) **Liquid Waste Disposal.**
- (a) Liquid wastes must be disposed of in a sanitary manner.
  - (b) All floor drains must be:
    - 1. Maintained accessible, and
    - 2. Trapped if connected to a sanitary sewer.
- (5) **Walls and Ceilings, Characteristics.**
- (a) Walls and ceilings must be:
    - 1. Constructed of smooth dressed lumber or similar material;
    - 2. Well painted with a light-colored washable paint; and
    - 3. Maintained in good repair.
  - (b) Surfaces and joints.
    - 1. Sheet metal, tile, cement block, brick, concrete, cement plaster, or similar materials of light color may be used.
    - 2. The surfaces and joints must be smooth.
- (6) **Milkhouse, Lighting Intensity.** A minimum of twenty (20) foot-candles (220 lux) of light must be provided at all working areas from natural and/or artificial light for milkhouse operations.
- (7) **Adequate Ventilation.** The milkhouse must be adequately ventilated to minimize condensation on floors, walls, ceilings, and clean utensils.
- (8) **Vents and Light Fixtures.** Vents, if installed, and lighting fixtures must be installed in a manner to preclude the contamination of bulk milk tanks or clean utensil storage areas.
- (9) **No Other Purpose.** The milkhouse must be used for no other purpose than milkhouse operations.
- (10) **Direct Openings Prohibited.** There must be no direct opening into any barn, stable, parlor, or room used for domestic purposes, *except:*
  - (a) *An 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.*

- (b) Screened vents are permitted in the wall between the milkhouse and a breezeway, which separates the milkhouse from the milking parlor, provided animals are not housed within the milking facility.
- (11) **Vestibule, Characteristics.** A vestibule, if used, must comply with milkhouse construction requirements.
- (12) **Water Under Pressure.** Water under pressure must be piped into the milkhouse.
- (13) **Capacity.** Each milkhouse must be provided with facilities for heating water in sufficient quantity and to such temperatures for the effective cleaning of all equipment and utensils.
- (14) **Wash and Rinse Vats.**
- (a) The milkhouse must be equipped with a wash-and-rinse vat having at least two (2) compartments.
- (b) Each compartment must be of sufficient size to accommodate the largest utensil or container used.
- (c) The upright wash vat for milk pipelines and milk machines may be accepted as one (1) part of the two (2) compartment vat.
- (d) The stationary wash rack, in or on the vat, and the milking machine inflations and appurtenances must be completely removed from the vat during the washing, rinsing, and/or sanitizing of other utensils and equipment.
- (e) The Department may, on an individual farm basis, authorize the use of a single vat compartment when CIP cleaning/recirculated systems eliminate the need for handwashing of equipment.

#### **40-2-16-11 MILKHOUSE – CLEANLINESS**

- (1) **Milkhouse, Kept Clean.** The milkhouse structure, milkhouse equipment, and other milkhouse facilities used in its operation or maintenance must be clean at all times.
- (2) **Incidental Articles.** Incidental articles such as desks, refrigerators, and storage cabinets may be in the milkhouse, provided:
- (a) They are kept clean.
- (b) Ample space is available to conduct the normal operations in the milkhouse; and
- (c) The presence of such incidental articles will not cause contamination of the milk.
- (3) **Vestibules, Kept Clean.** Vestibules, if provided, must be kept clean.

- (4) **Animals Excluded.** Animals and fowl must be kept out of the milkhouse.

#### **40-2-16-.12 TOILET**

(1) **Minimum Number.**

- (a) There must be at least one (1) flush toilet connected to a public sewer system or to an individual sewage-disposal system, a chemical toilet, an earth pit privy, or other type of privy.
- (b) Sewage systems must be:
1. Constructed, maintained, and operated consistent with specifications outlined in Appendix C of the current edition of the Pasteurized Milk Ordinance, which is adopted by reference in 40-2-16-.31(7)(a).
  2. Designed specifically to not allow any mixing of animal and human waste.

(2) **Toilets, Conveniently Located.**

- (a) A toilet or privy must be conveniently located to the milking barn and the milkhouse.
- (b) There must be no evidence of human defecation or urination about the premises.

(3) **Opening into Processing Areas Prohibited.** A privy cannot open directly into the milkhouse.

(4) **Toilet Room and Fixtures.** The toilet room, including all fixtures and facilities, must be:

- (a) Kept clean, and
- (b) Free of insects and odors.

(5) **Self-Closing and Screened.** Where flush toilets are used:

- (a) Doors to toilet rooms must be tight and self-closing, and
- (b) All outer openings in toilet rooms must be screened or otherwise protected against the entrance of insects.

(6) **Earth Pits.** Vents of earth pits must be screened.

#### **40-2-16-.13 WATER SUPPLY**

(1) **Approved System.** The water supply for milkhouse and milking operations must be:

- (a) Approved as safe by the applicable Government Water Control Authority, or

- (b) For individual water systems, constructed, maintained, and operated consistent with specifications outlined in Appendix D and Appendix G of the current edition of the Pasteurized Milk Ordinance, which are adopted by reference in 40-2-16-.31(7)(a).
- (2) **Cross-Connections Prohibited.** No cross-connection may exist between a safe water supply and any unsafe or questionable water supply or any other source of pollution.
- (3) **Backflow Prevention.** There must be no submerged inlets through which a safe water supply may be contaminated.
- (4) **Well Head Protected.** The well or other source of water must be located and constructed in such a manner that neither underground nor surface contamination from any sewerage systems, privy or other source of pollution can reach such water supply.
- (5) **Disinfection Before Use.**
- (a) New individual water supplies and water supply systems that have been repaired or otherwise become contaminated must be thoroughly disinfected before being placed in use.
- (b) The supply must be made free of the disinfectant by pumping to waste before any sample for bacteriological testing is collected.
- (6) **Containers and Tanks.**
- (a) All containers and tanks used in the transportation of water must be sealed and protected from possible contamination.
- (b) These containers and tanks must be subjected to a thorough cleaning and a bacteriological treatment prior to filling with potable water to be used at the dairy farm.
- (c) To minimize the possibility of contamination of the water during its transfer from the potable tanks to the elevated or groundwater storage at the dairy farm, a suitable pump, hose, and fittings must be provided.
- (d) When the pump, hose, and fittings are not being used, the outlets must be capped and stored in a suitable dust-proof enclosure so as to prevent their contamination.
- (e) The storage tank at the dairy farm must be:
1. Constructed of impervious material;
  2. Provided with a dust and rainproof cover; and
  3. Provided with an approved vent and roof hatch.
  4. All new reservoirs or reservoirs which have been cleaned must be disinfected prior to placing them into service.



(7) **Water Sampling.**

- (a) Samples for bacteriological examination of individual water supplies and reclaimed water from heat exchanger processes or compressors on dairy farms must be taken:
1. Upon the initial approval of the physical structure or water system;
  2. When any repair or alteration of the water supply system has been made; and
  3. At least:
    - (i) Once every three (3) year period for individual water supplies, and
    - (ii) At least once every six (6) month period for reclaimed water, thereafter.
    - (iii) Individual water supplies with buried well casing seals, installed prior to the adoption of these Regulations, must be tested at least once every six (6) month period.
- (b) Whenever such samples indicate either the presence of E. coli bacteria or whenever the well casing, pump, or seal need replacing or repair, the well casing and seal:
1. Must be brought above the ground surface; and
  2. Must comply with all other applicable construction criteria of this Rule.
- (c) When water is hauled to the dairy farm, such water must be sampled for bacteriological examination at the point of use and submitted to a laboratory at least four (4) times in separate months during any consecutive six (6) month period.
- (d) To determine if water samples have been taken at the frequency established in this Rule, the interval shall include the designated three (3) year or six (6) month period, respectively, plus the remaining days of the month in which the sample is due.

**40-2-16-.14 UTENSILS AND EQUIPMENT – CONSTRUCTION**

- (1) **Utensils and Equipment, Characteristics.** All multi-use containers, utensils and equipment, which are exposed to milk or milk products, or from which liquids may drip, drain or be drawn into milk or milk products, must be made of smooth impervious, nonabsorbent, safe materials of the following types:
- (a) Stainless steel of the American Iron and Steel Institute (AISI) 300 series; or
  - (b) Equally corrosion-resistant, non-toxic metal; or
  - (c) Heat-resistant glass; or
  - (d) Plastic or rubber and rubber-like materials which:

1. Are relatively inert and resistant to scratching, scoring, decomposition, crazing, chipping, and distortion under normal use conditions;
  2. Are non-toxic, fat resistant, relatively nonabsorbent, and relatively insoluble;
  3. Do not release component chemicals or impart flavor or odor to the product; and
  4. Maintain their original properties under repeated use conditions.
- (2) **Single-Service Articles.** Single-service articles must have been manufactured, packaged, transported and handled in a sanitary manner.
- (3) **Reuse Prohibited.** Articles intended for single-service use must not be reused.
- (4) **Breaks and Corrosion.** All containers, utensils and equipment must be free of breaks and corrosion.
- (5) **Joints.** All joints in such containers, utensils and equipment must be smooth and free from pits, cracks or inclusions.
- (6) **CIP, Characteristics.**
- (a) CIP cleaned milk pipelines and return-solution lines must be self-draining.
  - (b) If gaskets are used, they must be:
    1. Self-positioning;
    2. Made of material meeting the specifications described in subparagraph (1)(d) above; and
    3. Of such design, finish and application as to form a smooth, flush, interior surface.
  - (c) If gaskets are not used, all fittings must have self-positioning faces designed to form a smooth, flush, interior surface.
  - (d) All interior surfaces of welded joints in pipelines must be smooth and free of pits, cracks and inclusions.
- (7) **CIP, Approval Required.**
- (a) Detailed plans for CIP cleaned pipeline systems must be submitted to the Department for written approval prior to installation.
  - (b) No alteration or addition can be made to any milk pipeline system without prior written approval of the Department.

- (8) **Strainers, Characteristics.** Strainers, if used, must be:
- (a) Of perforated metal design, or
  - (b) Constructed as to utilize single-service strainer media.
- (9) **Disassembly for Inspection.**
- (a) All milking machines, including heads, milk claws, milk tubing and other milk-contact surfaces must be easily cleaned and inspected.
  - (b) Pipelines, milking equipment and appurtenances, which require a screwdriver or special tool, are considered easily accessible for inspection, *provided the necessary tools are available at the milkhouse.*
  - (c) Milking systems must not have components incorporated in the return solution lines, which by design do not comply with the criteria for product-contact surfaces. Some examples of these are:
    1. Ball type plastic valves;
    2. Plastic tees with barbed ridges to better grip the plastic or rubber hoses; and
    3. The use of polyvinyl chloride (PVC) water type piping for return solution lines.
- (10) **Milk Can Lids.** Milk cans must have umbrella-type lids.
- (11) **Welded Sanitary Piping.** Farm holding/cooling tanks, welded sanitary piping, and transportation tanks must comply with the applicable requirements of 40-2-16-.15 and 40-2-16-.16.
- (12) **Hoses, Characteristics.**
- (a) During filling, flexible plastic/rubber hoses may be used between the fill valves of bottom fill and top fill bulk milk storage tanks, when needed for functional purposes.
  - (b) Such hoses must:
    1. Be drainable,
    2. Be as short as practical,
    3. Have sanitary fittings, and
    4. Be supported to maintain uniform slope and alignment.

- (c) The end fittings of such hoses must be permanently attached in such a manner that will assure a crevice-free joint between the hose and the fitting, which can be cleaned by mechanical means.
- (d) The hoses shall be included as part of a CIP cleaning system.

(13) **Flexible Plastic Tubing.**

- (a) Transparent flexible plastic tubing (up to 150 feet in length) used in connection with milk transfer stations shall be considered acceptable if it remains sufficiently clear that the interior surfaces can be properly inspected.
- (b) Short lengths of flexible plastic tubing (8 feet or less) may be inspected for cleanliness by sight or by use of a “rod”.
- (c) The transparency or opacity of such tubing under this condition is not a factor in determining cleanliness.

**40-2-16-.15 UTENSILS AND EQUIPMENT – CLEANING**

- (1) **Separate Wash Manifold.** There must be a separate wash manifold for all CIP cleaned milk pipelines in all new or extensively remodeled facilities.
- (2) **Cleaning Frequency.** The product-contact surface of all multi-use containers, equipment and utensils used in the handling, storage or transportation of milk must be cleaned after each milking or once every twenty-four (24) hours for continuous operations.

**40-2-16-.16 UTENSILS AND EQUIPMENT – SANITIZATION**

- (1) **Contact Surfaces Sanitized.** All product-contact surfaces of multi-use containers, utensils, and equipment used in the handling or storage of milk must be sanitized before each usage by one of the following methods, or by any method which has been demonstrated to be equally effective and authorized for such use, in writing, by the Department:
  - (a) Complete immersion in hot water at a temperature of at least 77°C (170°F) for at least five (5) minutes; or
  - (b) Exposure to a flow of hot water at a temperature of at least 77°C (170°F), as determined by the use of a suitable accurate thermometer, at the outlet, for at least five (5) minutes.
  - (c) Certain chemical compounds are effective for the sanitization of milk utensils, containers, and equipment. These are contained in 40 CFR 180.940 and must be used in accordance with label directions.

**40-2-16-.17 UTENSILS AND EQUIPMENT – STORAGE**

- (1) **Storage Between Use.**

- (a) All milk containers, utensils, and equipment, including milking machine vacuum hoses, must be stored in the milkhouse in a sanitizing solution or on racks until used.
- (b) Pipeline milking equipment such as milker claws, inflations, weight jars, milk hoses, milk receivers, tubular coolers, plate coolers, milk pumps which are designed for CIP cleaning, and other equipment which meets these criteria, may be CIP cleaned, sanitized, and 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.
- (c) Parameters to be considered in determining protection are:
  - 1. Proper location of equipment;
  - 2. Proper drainage of equipment; and
  - 3. Adequate and properly located lighting and ventilation.

(2) **Manual Cleaning.**

- (a) The milking barn or parlor must only be used for milking.
- (b) Concentrates may be fed in the barn during milking, but the barn must not be used for the housing of animals.
- (c) When manual cleaning of product-contact surfaces is necessary, the cleaning must be done in the milkhouse.
- (d) In the case of a milking parlor that opens directly into an enclosed housing area through a covered holding area, the holding area may be seasonally enclosed when:
  - 1. There are no manure pit openings in the parlor, holding area, or in the housing area close enough to affect the milking parlor.
  - 2. The cattle holding and housing areas are maintained in good repair and clean.
  - 3. With respect to dust, odors, rodents, and insects, the entire area meets milking parlor standards, and the parlor is free of evidence of birds.

(3) **Drainage of Equipment.** Means must be provided to effect complete drainage of equipment when such equipment cannot be stored to drain freely.

(4) **Storage After Delivery.** Clean cans or other containers must be stored in the milkhouse within a reasonable time after delivery to the dairy farm.

(5) **Single-Service Articles, Protection from Contamination.** Strainer pads, parchment papers, gaskets, and similar single-service articles must be stored:

- (a) In a suitable container or cabinet;

- (b) In a location convenient to their use; and
- (c) Protected against contamination.

#### **40-2-16-.18 MILKING – FLANKS, UDDERS AND TEATS**

- (1) **Milking Location.** Milking must be done in a milking barn, stable, or parlor.
- (2) **Brushing.** Brushing must be completed prior to milking.
- (3) **Hair Length.**
  - (a) Flanks, bellies, tails, and udders must be clipped as often as necessary to facilitate cleaning of these areas and be free from dirt.
  - (b) The hair on the udders must be of such length that it is not incorporated with the teat in the inflation during milking.
- (4) **Udders and Teats.**
  - (a) Udders and teats of all milking animals must be clean and dry before milking.
  - (b) Teats:
    - 1. Must be cleaned, treated with a sanitizing solution, and dry just prior to milking.
    - 2. *The sanitizing of teats is not required if the udder is dry and the teats have been thoroughly cleaned (not dry wiped) and dried (manually wiped dry) prior to milking.*
  - (c) The determination of what constitutes a dry udder and cleaned and dried teats will be made by the Department.
- (5) **Wet Hand Milking.** Wet hand milking is prohibited.

#### **40-2-16-.19 PROTECTION FROM CONTAMINATION**

- (1) **Suitably Located.** Equipment and operations must be so located within the milking barn and milkhouse as to prevent overcrowding and contamination of cleaned and sanitized containers, utensils, and equipment by splash, condensation, or manual contact.
- (2) **Effective Separation.** During milking and milkhouse operations, pipelines and equipment used to contain or conduct milk must be effectively separated from tanks/silos and/or circuits containing cleaning and/or sanitizing solutions.
- (3) **Discarding Milk.** All milk that has overflowed, leaked, spilled, or been improperly handled must be discarded.

(4) **Preventing Contamination from the Premises.**

- (a) All product-contact surfaces of containers, utensils, and equipment must be covered or otherwise protected to prevent the access of insects, dust, condensation, and other contamination.
- (b) All openings, including valves, and piping attached to milk storage tanks, pumps, or vats must be capped or otherwise properly protected.
- (c) *Gravity type strainers used in the milkhouse do not have to be covered.*
- (d) Milk pipelines used to convey milk from pre-coolers to the bulk milk tank must be fitted with effective drip deflectors.

(5) **Receiving Receptacle.**

- (a) The receiving receptacle must be raised above the floor, as on a dolly or cart, or placed at a distance from the lactating animals to protect it against manure and splash when milk is poured and/or strained in the milking barn, stable, or parlor.
- (b) Such receptacle must have a tight-fitting cover, which must be closed except when milk is being poured.

(6) **Immediate Transfer.** Each pail or container of milk must be transferred immediately from the milking barn, stable, or parlor to the milkhouse.

(7) **Covered During Transfer.** Pails, cans, and other equipment containing milk must be properly covered during transfer and storage.

(8) **Air Under Pressure.** Whenever air under pressure is used for the agitation or movement of milk or is directed at a milk-contact surface it must be free of oil, dust, rust, excessive moisture, extraneous materials, and odor.

(9) **Sanitized Surfaces Protected.** Sanitized product-contact surfaces, including bulk milk tank openings and outlets, must be protected against contact with unsanitized utensils and equipment, hands, clothing, splash, condensation, and other sources of contamination.

(10) **Recleaning and Sanitizing.** Any sanitized product-contact surface which has been otherwise exposed to contamination must be cleaned and sanitized again before being used.

**40-2-16-.20 DRUG AND CHEMICAL CONTROL**

(1) **Properly Identified.** Cleaners and sanitizers used on dairy farms must be:

- (a) Purchased from the manufacturer or distributor in containers that properly identify the contents; or

(b) If bulk cleaners and sanitizers are transferred from the manufacturer's or distributor's container:

1. The transfer only occurs into a dedicated end-use container which is specifically designed and maintained according to the manufacturer's specifications for that specific product.
2. The label on the dedicated end-use container must include the product name, chemical description, use directions, precautionary and warning statements, first aid instructions, container storage and maintenance instructions, and the name and address of the manufacturer or distributor.

(2) **Equipment to Administer Drugs.** Equipment used to administer drugs:

- (a) Must not be cleaned in the wash vats; and
- (b) Must be stored so as not to contaminate the milk or milk-contact surfaces of equipment.

(3) **Adequate Separation.**

- (a) Drugs intended for the treatment of non-lactating dairy animals must be separated from those drugs used for lactating dairy animals.
- (b) *Separate shelves in cabinets, refrigerators, or other storage facilities satisfy this Rule.*

(4) **Drug Labels, Declaration of Responsibility.**

- (a) Drugs must be properly labeled to include the name and address of:
  1. The manufacturer or distributor for over-the-counter (OTC) drugs, or
  2. The veterinary practitioner dispensing the product for prescription (Rx) and extra label use drugs.
- (b) If the drug is dispensed by a pharmacy on the order of a veterinarian, the labeling must include:
  1. The name of the prescribing veterinarian, and
  2. The name and address of the dispensing pharmacy.

(5) **Drug Labels, Required Elements.** Drug labels must also include:

- (a) Directions for use;
- (b) Prescribed withholding times;
- (c) Cautionary statements, if needed; and



- (d) Active ingredient(s) in the drug.
- (6) **Unapproved or Improperly Labeled.** Unapproved and/or improperly labeled drugs:
  - (a) Must not be used to treat dairy animals, and
  - (b) Cannot be stored in the milkhouse, milking barn, stable, or parlor.
- (7) **Separation.** Drugs must be stored in such a manner that they cannot contaminate milk or milk product-contact surfaces of containers, utensils, or equipment.
- (8) **Exemption from Labeling.** Topical antiseptics and wound dressings, *unless intended for direct injection into the teat*, vaccines and other biologics, and dosage form vitamins and/or mineral products are exempt from labeling and storage requirements *except when the Department determines that they are stored in such a manner that they may contaminate the milk or milk product-contact surfaces of containers, utensils or equipment.*

#### **40-2-16-.21 PERSONNEL – HANDWASHING FACILITIES**

- (1) **Handwashing Sinks, Conveniently Located.** Handwashing facilities must be located convenient to the milkhouse, milking barn, stable, parlor, and flush toilet.
- (2) **Characteristics and Use Restrictions.**
  - (a) Handwashing facilities must include:
    1. Soap or detergent;
    2. Hot and cold, or warm running water;
    3. Individual sanitary towels or other approved hand-drying devices; and
    4. A lavatory fixture.
  - (b) Utensil wash and rinse vats will not be considered as handwashing facilities.

#### **40-2-16-.22 PERSONNEL – CLEANLINESS**

- (1) **When to Wash.** Hands must be washed, cleaned, and dried with an individual sanitary towel or other approved hand-drying device:
  - (a) Immediately before milking;
  - (b) Before performing any milkhouse function; and
  - (c) Immediately after the interruption of any of these activities.

- (2) **Clean Outer Garments.** Milkers must wear clean outer garments while milking or handling milk containers, utensils, or equipment.

#### **40-2-16-.23 RAW MILK COOLING**

(1) **Cooling.**

- (a) Raw milk must be cooled to 10°C (50°F) or less, within four (4) hours after starting the milking operation.
- (b) The milk must then be cooled to 7°C (45°F) or less, within two (2) additional hours.
- (c) The start of the milking operation is the moment when milk is first transferred to an empty, clean, and sanitized farm bulk milk tank, silo, or direct load milk tank truck.
- (d) The blend temperature after the first milking and subsequent milkings must not exceed 10°C (50°F).

(2) **Recirculation Systems.**

- (a) Recirculated cooling water used in plate or tubular coolers and/or heat exchangers, including those systems in which a freezing point depressant is used, must be:
1. From an approved system as outlined in 40-2-16-.13(1);
  2. Protected from contamination; and
  3. Tested for coliforms and *E. coli* at least once every six (6) month period.
- (b) Recirculated cooling water systems which become contaminated through repair work or otherwise must be properly treated and tested for coliforms and *E. coli* before being returned to use.
- (c) Freezing point depressants and other chemical additives when used in recirculating cooling water systems:
1. Must be non-toxic under conditions of use.
  2. Propylene glycol and all additives must be either USP Grade, Food Grade or generally-recognized-as-safe (GRAS).
- (d) To determine if recirculated cooling water samples have been taken at the frequency established in this Rule, the interval must include the designated six (6) month period plus the remaining days of the month in which the sample is due.

- (3) **Temperature Recording Device.** All farm tanks manufactured after January 1, 2000, must be equipped with an approved temperature recording device.

(a) The device must be:

1. Installed in an area convenient to the bulk tank.
2. The sensor must be located to permit the registering of the temperature of the contents when the tank contains no more than twenty (20)% of its capacity.
3. Operated continuously.
4. Maintained in a proper functioning manner.
5. Circular charts must not overlap.
6. Must be verified every six (6) months and documented in a manner acceptable to the Department.
7. Records must be kept on premise for review for a minimum of six (6) months.

(b) Recording charts must properly identify:

1. The producer,
2. The date installed on the recorder, and
3. The initials of the person installing the chart.

(4) **Appropriate Refrigeration.**

- (a) No process or manipulation other than appropriate refrigeration can be applied to raw milk for human consumption for the purpose of removing or deactivating microorganisms.
- (b) All finished, processed, and packaged raw milk for human consumption must be maintained at 7°C (45°F) or less after processing, during storage, and during transportation.

**40-2-16-.24 INSECT AND RODENT CONTROL**

(1) **Maintaining the Premises.**

- (a) The surroundings must be kept neat, clean, and free of conditions which might harbor or be conducive to the breeding of insects and rodents.
- (b) During fly season, manure:
  1. Must be spread directly on the fields;
  2. Stored for not more than four (4) days in a pile on the ground surface and then spread on the fields;

3. Stored for not more than seven (7) days in an impervious-floored bin or on an impervious-curbed platform and then spread;
  4. Stored in a tight-screened and trapped manure shed;
  5. Effectively treated with larvicides; or
  6. Disposed of in any other manner which controls insect breeding.
- (2) **Manure Packs.** Manure packs in loafing areas, stables without stanchions, pen stables, resting barns, wandering sheds, and free-stall housing must be properly bedded and managed to prevent insect breeding.
- (3) **Controlling Pests.** Milkhouses must be free of insects and rodents.
- (4) **Effectively Screened.** Milkhouses must be effectively screened or otherwise protected against the entrance of vermin.
- (5) **Outer Doors.**
- (a) Outer milkhouse doors must be tight and self-closing.
  - (b) Screen doors must open outward.
- (6) **Preventing Contamination.**
- (a) Effective measures must be taken to prevent the contamination of milk, containers, utensils, and equipment:
    1. By insects and rodents, and
    2. By chemicals used to control such vermin.
  - (b) Insecticides and rodenticides not approved for use in the milkhouse must not be stored in the milkhouse.
- (7) **Approved for Use.** Only insecticides and rodenticides approved for use by the Department and/or registered with the EPA may be used for insect and rodent control.
- (8) **Conditions of Use.** Insecticides and rodenticides must only be used:
- (a) In accordance with the manufacturer's label directions, and
  - (b) In such a manner as to prevent the contamination of milk, milk containers, utensils, equipment, feed, and water.

- (9) **Ground, Chopped, or Concentrated Feeds.** Covered boxes, bins, or separate storage facilities for ground, chopped, or concentrated feeds must be provided.
- (10) **Feed Storage.**
- (a) Feed stored in the milking portion of the barn must be held in such a manner as will not attract birds, insects, or rodents.
  - (b) Open feed dollies or carts may be used for distributing feed.
  - (c) Storing feed on dollies and carts is prohibited in the milking barn.
  - (d) Feed dollies, carts, fully automated feeding systems, or other feed containers may be exempt from the use of covers, provided they do not attract birds, insects, or rodents.

#### **40-2-16-.25 ANIMAL HEALTH**

- (1) **Healthy Animals.** All raw milk for human consumption within the State of Georgia must be from healthy animals.
- (2) **Prohibited Use.** Raw milk from unhealthy animals must not be offered for sale, given away, or combined with other milk.
- (3) **Brucellosis and Tuberculosis Testing.** All animals (cow, sheep, goat, and other hooved mammals) producing raw milk for human consumption must be tested for brucellosis and tuberculosis every 12 months.
- (4) **Positive Results.** Animals with lesions or that test positive for brucellosis or tuberculosis must be reported to the Department within 24 hours of observation of such lesions or receipt of the positive test result and must be separated and kept separate from the remainder of the herd.
- (a) A test certificate identifying each animal and signed by a licensed veterinarian as well as the director of the laboratory making the test must be provided to the Department.
  - (b) Animals must be retested by a licensed veterinarian at a frequency specified by the USDA, and the retest results must be provided to the Department.
  - (c) Disposition of diseased animals must be conducted in accordance with guidelines published by the USDA and reported to the Department.
- (5) **Other Diseases.** For diseases other than brucellosis and tuberculosis:
- (a) The Department will require such physical, chemical, or bacteriological tests as it deems necessary.
  - (b) The diagnosis of other diseases in dairy animals must be based upon the findings of a licensed veterinarian.

- (c) Any diseased animal disclosed by such test must be disposed of as the Department directs.
- (6) **Entry into Georgia.** Animals shipping into Georgia for the purpose of milking must be tested for tuberculosis and brucellosis within thirty (30) days prior to being brought into the state. Brucellosis testing is not required for any cattle that have been vaccinated for brucellosis and are under 30 months of age.
- (7) **Records Available.** Records supporting the tests required within this Rule, validated with the signature of a licensed veterinarian, must be made available to the Department upon request.
- (8) **Raw Milk Tested by the Producer.** Raw milk samples must be tested annually for tuberculosis and brucellosis on all milking animals in the herd. The testing must be conducted at a certified third-party lab, and the test results must be provided to the Department.

#### **40-2-16-.26 BOTTLING, PACKAGING, AND CONTAINER CLOSURE**

- (1) **Sanitary Manner and Approved Equipment.** Bottling, packaging, and container filling of raw milk for human consumption must be done at the place of production in a sanitary manner by approved mechanical equipment.
- (2) **Filling Room.** Bottling, packaging, and container filling of raw milk for human consumption must be conducted in a filling room that is separate from the milking room.
- (3) **Pump Out Procedures.** Once the sampling is completed, with the agitator still running:
- (a) Open the outlet valve and drain a small amount of milk from the valve into the drain.
  - (b) Sanitize the outlet valve and end of hose.
  - (c) Hook up hose and start the pump.
  - (d) Turn off the agitator when the level of milk has reached the agitator blade.
  - (e) When the milk has been removed from the tank, disconnect the hose from the outlet valve and cap the hose.
  - (f) With the outlet valve open, thoroughly rinse the entire inside of the tank with warm water.
- (4) **Covers.** Bottling or packaging machine supply tanks and bowls must have covers which are smooth and easily cleanable and must be constructed to prevent any contamination from reaching the inside of the filler tank or bowl. All covers must be in place during operation.
- (5) **Drip Deflectors.** A drip deflector must be installed on each filler valve. The drip deflector must be designed and adjusted to divert condensation away from the open container.
- (6) **Protection Against Contamination.** All containers, seals, and caps must be handled in a sanitary manner and protected against exposure during the operation.

- (7) **Food Grade Lubricants.** When any lubricant is applied to the filler equipment or other milk contact surfaces, the lubricant must be food grade and applied in a sanitary manner.
- (8) **Immediate Closure.** Containers must be closed immediately after being filled.
- (9) **Protection During Storage.** All container caps, sealers, and closures shall be stored in a clean, dry place protected from insects, rodents, dust, splash, or other contamination.
- (10) **Containers.**
- (a) Except as described in subparagraph (b), only new containers, container caps, sealers, and closures must be used.
- (b) Reusable containers require specialized equipment for proper cleaning and sanitizing. The Department will require properly prepared plans and specifications for review prior to authorizing the use of reusable containers. Such plans must include:
1. Facilities in which containers are washed manually must be equipped with a two (2)-compartment wash-and-rinse vat for this purpose.
  2. In facilities utilizing automatic bottle washers, such washers must provide for bactericidal treatment by means of steam, hot water, or chemical treatment.
  3. All multi-use containers, utensils, and equipment must be sanitized before use.
  4. These requirements are not all-inclusive of the plans required for submittal. The Department may adopt additional standards or requirements that must be addressed prior to approval of a reusable container plan.
- (11) **Single-Service Bottle Cleaning.** Single-service glass containers that are received at the processing plant in an unclean and/or unprotected state must be properly cleaned and sanitized immediately prior to packaging.
- (a) This cleaning/sanitizing operation must be conducted in a room separate from case washing operations and rooms used for the filling of milk.
- (b) Facilities in which containers are washed manually must be equipped with a two (2)-compartment wash-and-rinse vat for this purpose.
- (c) In facilities utilizing automatic bottle washers, such washers must provide for bactericidal treatment by means of steam, hot water, or chemical treatment.
- (d) Equipment and procedures used for the cleaning of single-service glass bottles must meet all the requirements of this Rule, including sanitization efficacy tests required by the Department.
- (12) **Mechanical Closure and Sealing.** All container closure/sealing must be done at the place of production in a sanitary manner by approved mechanical equipment.

- (13) **Hand Capping Prohibited.** Hand capping or sealing of containers is prohibited.
- (14) **Large Containers – Alternative Methods.** If suitable mechanical equipment for the capping or closing of specific container(s) of 12.8 liters (three gallons) or more is not available, other methods which eliminate all possibility of contamination may be approved by the Department. Approval of such methods must be obtained in writing prior to beginning operations.
- (15) **Rework.** Bottles and packages which have been imperfectly capped, sealed, or closed must have the contents emptied immediately into approved sanitary containers that are protected from contamination and maintained at 7°C (45°F) or less; when handled and stored properly, the contents may be repackaged in new containers at a later time.
- (16) **Tamper-Evident Seal.** All caps, seals, and closures must be designed and applied so that the sealed container is tamper- evident (removal cannot be made without detection), and the pouring lip must be protected to at least its largest diameter.
- (17) **End of Operating Period.** Caps, sealers, and closures must not be left in the equipment at the end of an operating period. Caps, sealers, and closures remaining in the chute between the hopper and the capping device must be discarded.
- (18) **Returned to Storage.** Loose caps, sealers, and closures may be returned to storage by enclosing them in a clean, protective wrap, plastic bag, or container approved, in writing, by the Department.
- (19) **Assembled Equipment, Sanitized Prior to Use.** Assembled equipment must be sanitized prior to each day's run *unless the Department has reviewed and accepted, in writing, information supporting the sanitizing of multi-use containers, utensils, and equipment at frequencies extending beyond one (1) day.*
- (20) **Efficacy Testing.** The Department will perform tests to verify the efficacy of sanitization at intervals sufficient to determine if the sanitization process is effective.
- (21) **Cleaning of Multi-use Containers, Utensils, and Equipment.** All multi-use containers and utensils must be thoroughly cleaned after each use and all equipment thoroughly cleaned at least once each day used *unless the Department has reviewed and accepted, in writing, information supporting the cleaning of multi-use containers and utensils at frequencies extending beyond one (1) day, or seventy- two (72) hours in the case of storage tanks.*
- (22) **Storage Tanks – Cleaning and Emptying.** Storage tanks must be cleaned when emptied and must be emptied at a minimum of once every seventy-two (72) hours.
  - (a) The seventy-two (72) hour period starts when milk first enters a cleaned and sanitized storage tank.
  - (b) Records must be available to document that milk storage in these tanks does not exceed seventy-two (72) hours.



- (23) **Filling and Capping Equipment, Cleaning.** Filling and capping equipment must be cleaned at intervals and by methods recommended by the manufacturer and approved by the Department. Such methods may include cleaning without water (dry cleaning) by the use of vacuum cleaners, brushes, or scrapers.
- (24) **Filling and Capping Equipment, Sanitizing.** Product-contact surfaces must be subjected to an effective sanitizing treatment immediately prior to use, *except where dry cleaning is permitted.*
- (25) **Storage Bins, Cleaned and Sanitized.** Storage bins used to transport milk must be cleaned after each usage and washed and sanitized at regular intervals.
- (26) **CIP Cleaning Requirements.** Pipelines and/or equipment designed for CIP cleaning must meet the following requirements:
- (a) An effective cleaning and sanitizing regimen for each separate cleaning circuit must be followed.
  - (b) A temperature-recording device or a recording device which provides sufficient information to adequately evaluate the cleaning and sanitizing regimen and which is approved by the Department, must be installed in the return solution line, or other appropriate area, to record the temperature and time which the line or equipment is exposed to cleaning and sanitizing solutions.
- (27) **Charts, Logs, and Records.** Cleaning charts, logs, and any stored records required by this Rule must be:
- (a) Identified with:
    - 1. The name and location of the facility;
    - 2. The date and time the monitoring/activity is performed; and
    - 3. The signature or initials of the person performing the monitoring/activity.
  - (b) Reviewed, dated, and signed or initialed by the person conducting the review;
  - (c) Onsite and available for review by the Department during each regulatory inspection for at least the previous three (3) months, or from the last regulatory inspection, whichever is longer. *Offsite storage of these cleaning records is permitted if such records can be retrieved and provided onsite within twenty-four (24) hours of a request for official review. Electronic records are considered to be onsite if they are accessible from an onsite location;* and
  - (d) Retained for at least two (2) years after the date they were created.
- (28) **Holding.**

- (a) Post-fill, all raw milk for human consumption must be maintained at a temperature of 7°C (45°F) or less.
- (b) Equipment in which raw milk for human consumption is stored or held must be equipped with an accurate indicating thermometer, temperature measuring device, or temperature-recording device.
  - 1. The probe of the thermometer or temperature measuring/recording device must be located in the warmest zone of the equipment.
  - 2. If a temperature recorder is used, the recorder must:
    - (i) Be operated continuously,
    - (ii) Be maintained in a proper functioning manner,
    - (iii) Not be allowed to overlap circular charts,
    - (iv) Be verified every six (6) months and documented in a manner acceptable to the Department, and
    - (v) Have records kept on the premise for review for a minimum of six (6) months and provided to the Department upon request.
  - 3. In lieu of a temperature-recording device, paper logs may be used.
    - (i) The temperature monitoring log must be completed by an employee of the facility every four (4) hours while raw milk is being held under refrigeration.
    - (ii) The log must identify:
      - (I.) The specific refrigerated equipment where the milk is stored,
      - (II.) The date and time the monitoring is performed,
      - (III.) The initials of the employee performing the monitoring,
      - (IV.) The actual temperature observed at the time of monitoring, and
      - (V.) Any action(s) taken when a temperature reading exceeds 7°C (45°F).

#### **40-2-16-.27 LABELING**

- (1) **Compliance with Federal Requirements.** All bottles, containers, and packages enclosing raw milk for human consumption must be labeled in accordance with the applicable requirements of the Federal Food, Drug and Cosmetic Act as amended, the Nutrition Labeling and Education Act (NLEA) of 1990 and regulations developed thereunder, and the Code of Federal Regulations, and must comply with the applicable requirements of these regulations.

- (2) **Required Elements.** All bottles, containers, and packages enclosing raw milk for human consumption must be conspicuously marked with:
- (a) The words “Grade A Raw” on the exterior surface. Acceptable locations include the principal display panel, the secondary or informational panel, or the cap/cover.
  - (b) The identity of the farm where packaged. This identity must include the name, address, and Department permit or license number.
  - (c) The lot code, bottling date, or an approved comparable system to identify and differentiate products in the event of a recall.
  - (d) The following information statement, in print no smaller than twelve (12) point font, must be included on the package: “Warning: this is a raw milk product that is not pasteurized and may increase your risk of foodborne illness.”
  - (e) The common name of the hooved mammal producing the milk must precede the name of the milk when the product is other than cattle milk. For example, “Goat Milk,” “Sheep Milk,” “Water Buffalo Milk,” etc., respectively.
- (3) **Misleading Information Prohibited.** The use of any misleading marks, words, or endorsements upon the label is prohibited.
- (4) **Trade Designs.** The Department may permit the use of registered trade designs or similar terms on the bottle cap or label when, in its opinion, they are not misleading and are not used to obscure the labeling.
- (5) **Prohibited Terms.** Descriptive labeling terms such as “wholesome” or “healthy” are prohibited.

#### **40-2-16-.28 EXAMINATION OF RAW MILK**

- (1) **Prior to Permitting or Licensing.** Samples of raw milk for human consumption must be collected and tested prior to a permit or license being issued.
- (2) **Scientific Examination.** Samples of raw milk for human consumption may be taken for scientific examination for public health purposes, at any reasonable time or place, and examined bacteriologically or for any other public health reason by agents of the Department. These samples will be obtained by the Department or by each producer under the direction of the Department and delivered as directed by the Department.
- (3) **Sample Collection Points.** The Department will collect official samples of raw milk:
- (a) From each bulk milk tank and/or silo, or
  - (b) From a properly installed and operated in-line-sampler or aseptic sampler.

1. An in-line or aseptic sampler is used to collect representative samples prior to transfer, or during the transfer, of milk from a bulk milk tank and/or silo, truck, or other container.
  2. An in-line or aseptic sampler must be approved by the Department, in writing, prior to installation and use.
- (4) **Sampling as Often as Necessary.** Raw milk for human consumption will be examined by the Department as often as necessary to determine that it is not adulterated or misbranded.
- (5) **Tests Performed.** The Department will examine raw milk for human consumption for:
  - (a) Bacterial counts,
  - (b) Somatic cell counts,
  - (c) Coliform determinations,
  - (d) Cooling temperature,
  - (e) Pathogens, and
  - (f) Drug residues.
- (6) **Sampling Frequency.** During any consecutive six-month period,
  - (a) The Department will collect at least four (4) samples of raw milk for human consumption from each permit or license holder.
  - (b) The Department will test for bacterial count, somatic cell count, coliform determinations, and cooling temperature.
  - (c) These samples must be from at least four (4) separate months.
  - (d) When advantageous or as otherwise necessary, the Department may collect two (2) samples from a permit or license holder during the same calendar month. To satisfy the requirements of subparagraph (a) above, these samples must be separated by no fewer than twenty (20) calendar days.
  - (e) In addition, drug tests on each producer's milk must be conducted at least four (4) times during any consecutive six (6) months. These samples may be obtained separately from, or in conjunction with, samples obtained pursuant to subparagraph (b) above.
- (7) **Multiple Tanks.** When multiple samples of the same raw milk for human consumption are collected from the same producer from multiple tanks on the same day, the laboratory results will be averaged arithmetically by the Department and recorded as the official results for that day. This is applicable for bacterial, including standard plate count and coliform, somatic cell count, and temperature determinations only.

- (8) **Testing for Pathogenic Organisms.** Pathogenic testing for such organisms will be conducted with samples taken by the Department:
- (a) Quarterly.
  - (b) Prior to permitting.
  - (c) In association with any outbreak of a foodborne disease, and
  - (d) Prior to reinstatement of a permit or license that was suspended because of positive results of testing for pathogenic organisms in association with a suspected outbreak of disease.
- (9) **Resampling.** When raw milk for human consumption is found to be adulterated by the presence of drugs, pesticides, herbicides, or other poisonous substances, it will be impounded and additional samples analyzed.
- (10) **Freeze Point Testing.** The Department will conduct freezing point testing of raw milk for human consumption on an annual basis.
- (11) **Standards and Tolerances for Raw Milk for Human Consumption.** Individual producer raw milk for human consumption must meet the following criteria:
- (a) Bacterial Limits: Not to exceed 20,000 per mL.
  - (b) Coliforms: Not to exceed 10 per mL.
  - (c) Drug Residues: Negative, or no residues detected.
  - (d) Pathogens:
    - 1. *Brucella* spp.: Negative, or zero (0) organisms detected. See paragraph (14) below.
    - 2. *Campylobacter* spp.: Negative, or zero (0) organisms detected.
    - 3. *Escherichia coli* serotypes (including O157:H7): Negative, or zero (0) organisms detected.
    - 4. *Listeria monocytogenes*: Negative, or zero (0) organisms detected.
    - 5. *Mycobacterium bovis*: Negative, or zero (0) organisms detected. See paragraph (14) below.
    - 6. *Salmonella* spp.: Negative, or zero (0) organisms detected.
  - (e) Somatic Cell Counts:

1. Goat Milk: Not to exceed 1,000,000 per mL.
  2. All Other Milk: Not to exceed 500,000 per mL.
- (12) **For-Cause Inspections.** All violations of bacteria, coliform, drug residue, somatic cell count, and cooling temperature standards will be followed promptly by inspection to determine and correct the cause.
- (13) **Multiple Positive Test Results – Warning Letter.** Following the sampling regimen specified in paragraph (6) above, whenever two (2) of the last four (4) consecutive bacterial counts, somatic cell counts, coliform determinations, or cooling temperatures, taken on separate days exceed the standards referenced above in paragraph (11), the Department will:
- (a) Send a certified or hand-delivered written notice thereof to the permit or license holder, with advisement that further positive results will result in additional progressive compliance measures.
  - (b) The notice shall be in effect as long as two (2) of the last four (4) consecutive samples exceed the standard(s).
  - (c) Another sample will be taken within twenty-one (21) days of the notice, but no sooner than three (3) days post-delivery.
- (14) **Producer Testing.** In addition to annual Brucellosis and Tuberculosis testing required by 40-2-16-.25(3), the permit or license holder must test samples of raw milk for human consumption for the presence of *Brucella* spp. and *M. bovis* at least annually.
- (15) **Third-Party Laboratory Standards.** All sampling procedures and required laboratory examinations must be in substantial compliance with the latest edition of Standard Methods for the Examination of Dairy Products (SMEDP) of the American Public Health Association, and the latest edition of Official Methods of Analysis (OMA) of the Association of Official Agricultural Chemists (AOAC) International. Such procedures, including the certification of sample collectors, and examinations must be evaluated in accordance with the Evaluation of Milk Laboratories.
- (16) **Glassware Standards.** All glassware, including, but not limited to, bottles, pipettes, test tubes, burettes, and such other instruments as may be used in the testing of raw animal milk for human consumption must be appropriate for use in laboratory testing examinations in substantial compliance with the latest editions of the SMEDP of the OMA of the AOAC International.

#### **40-2-16-.29 ADULTERATED AND MISBRANDED MILK**

- (1) **Embargo or Hold Order.** The Department may, upon written notice to the owner or person in charge, place a hold order (embargo) on any raw milk that it determines, or has probable cause to believe, to be unwholesome or otherwise adulterated or misbranded.
- (2) **Suitably Stored.** Raw milk under embargo may be suitably stored while awaiting Department resolution.

- (3) **Unlawful Acts.** It shall be unlawful:
- (a) For any person to remove or alter a hold order, notice, or embargo tag placed on raw milk by the Regulatory Agency; and
  - (b) To relabel, repack, reprocess, alter, dispose of, or otherwise destroy such raw milk, or containers thereof, without prior authorization from the Department.
  - (c) Subparagraphs (a) and (b) do not apply for actions taken under order from a court of competent jurisdiction.
- (4) **Raw Milk Adulterated by Drugs, Pesticides, Herbicides, or Other Toxic Substances.**
- (a) Raw milk found to be adulterated by drugs, pesticides, herbicides or other toxic substances shall be placed under embargo, and
  - (b) Additional samples from subsequent milkings shall be analyzed by the Department.
  - (c) Raw milk for human consumption found to be adulterated must be disposed of until analysis from a subsequent milking no longer shows the presence of the adulterant(s).
  - (d) Raw milk found to be adulterated by the presence of drug residue must be disposed of in a manner that completely removes it from the human and animal food chains.
- (5) **Added Water.** When Department testing finds the freezing point of raw milk is greater than -0.525°C (32.945°F):
- (a) The Department will issue a warning letter to the permit or license holder, indicating the presence of added water in the sample(s) analyzed;
  - (b) A second violation within two (2) years will result in a for-cause inspection, during which a definite freeze point standard for the permit or license holder's farm will be established; and
  - (c) Subsequent deviations of more than three (3%) percent from the farm's standard will result in a two-day permit or license suspension.

#### **40-2-16-.30 RECALL PROCEDURES**

- (1) **Recall Plan.** Every permit or license holder must, as a condition of retaining their license, develop a plan for recalling affected products that:
- (a) Identifies the adverse condition(s) that may affect the safety of the raw milk produced;
  - (b) Requires notifying the Department immediately upon discovery of the situation;
  - (c) Determines how long these conditions have been in effect at the farm;

- (d) Identifies, by the use of product codes and processing documents, the size, quantity, and type of products produced during the time period identified in subparagraph (c);
  - (e) Documents how affected products still in the permit or license holder's possession will be disposed;
  - (f) Compiles purchasing information allowing for consumer notifications to be sent to those who purchased the impacted raw milk(s); and
  - (g) Describes how consumer notifications are going to be circulated to the general public.
- (2) **Notifications.** When conditions exist that may affect the safety of their raw milk for human consumption, permit or license holders must immediately notify the Department and issue a consumer notice or product recall.
- (3) **Department Actions.** If the Department determines circumstances exist representing an imminent health hazard, the Department may order the permit or license holder to:
- (a) Initiate a product recall, or
  - (b) Issue a form of notification to consumers.

#### **40-2-16-31 ADMINISTRATION AND ENFORCEMENT**

- (1) **Actions and Remedies Available.** The Commissioner may pursue any and all actions and remedies available at law in order to administer and enforce these regulations, including, but not limited to, civil monetary penalties; suspension, denial, or revocation of a permit or license; and injunctive relief.
- (2) **Adoption by Reference.** The Department hereby adopts applicable standards and requirements from the following published documents to help determine policies, inform decision making, and to aid in the effective enforcement of these regulations:
- (a) The most current version of the Food and Drug Administration's Grade A Pasteurized Milk Ordinance, and supplements thereto;
  - (b) The Food and Drug Administration's Grade A Pasteurized Milk Ordinance With Administrative Procedures, Part II; and
  - (c) Retail Food Sales, Department regulations Chapter 40-7-1.
- (3) **Code of Federal Regulations - Adoption by Reference.** The Department hereby adopts the following parts from the Code of Federal Regulations by reference:
- (a) 21 CFR Part 101; and
  - (b) 21 CFR Part 178.