

**MANUFACTURING MILK LAW OF 2001 (EXCERPT)**  
**Act 267 of 2001**  
Article 17

**288.730 Cheese; duties of manufacturer or processor.**

Sec. 170.

A person that manufactures or processes cheese shall do all of the following:

- (a) Equip and maintain starter rooms or areas for the propagation and handling of starter cultures.
- (b) Prevent contamination of starter cultures, starter rooms and equipment, and the air within each starter room.
- (c) Ensure that the room in which cheese is manufactured is of adequate size with both of the following:
  - (i) Vats adequately spaced to permit movement around each vat.
  - (ii) Presses that are designed for proper cleaning and satisfactory working conditions.
- (d) If cheese is to be coated or saturated with paraffin, provide a drying room of adequate size to accommodate the maximum amount of cheese that the plant can produce at its peak of operation and ensure that the drying room has adequate shelving and air circulation for proper drying and suitable temperature and humidity controls.
- (e) For production of rind cheese, provide a separate room or compartment for paraffining and boxing the cheese and ensure that the room or compartment is of adequate size and the temperature maintained near the temperature of the drying room to avoid sweating of the cheese prior to paraffining.
- (f) For rindless blocks, provide a suitable space for wrapping and boxing of the cheese and ensure that the area is free from dust, condensation, mold, or other conditions that may contaminate the surface of the cheese or contribute to an unsatisfactory packaging of the cheese.
- (g) Maintain clean coolers or curing rooms where cheese is held for curing or storage and ensure each of the following:
  - (i) That the proper uniform temperature and humidity are kept to adequately protect the cheese.
  - (ii) That proper circulation of air is maintained at all times.
  - (iii) That the coolers or rooms are free from rodents, insects, and pests.
  - (iv) That shelves are kept clean and dry.
- (h) If small packages of cheese are cut and wrapped, provide a separate room for the cleaning and preparation of the bulk cheese, a separate room for the cutting and wrapping operation and ensure that the rooms are well lighted, ventilated, provided with filtered air, and engineered to move air outward.
- (i) If bulk starter vats are used, ensure that each is constructed of stainless steel or an equally corrosion resistant material, is in good repair, equipped with a tight-fitting lid, and contains adequate controls such as valves, indicating thermometers, and recording thermometers that meet the requirements for vat pasteurization unless pasteurization of the starter culture is completed prior to entry into the bulk starter vat.
- (j) Ensure that each new bulk starter vat that is used is constructed according to standards established or approved by the department.
- (k) Ensure that each vat used for making cheese is of metal construction and meets each of the following requirements:
  - (i) The vat has adequate jacket capacity for uniform heating.
  - (ii) The inner liner of the vat is a minimum 16-gauge stainless steel or other equally corrosion resistant material, properly pitched from side to center and from rear to front for adequate drainage.
  - (iii) The liner of the vat is smooth, free from excessive dents or creases, and extends over the edge of the outer jacket.
  - (iv) The outer jacket of the vat, if metal, is constructed of stainless steel or other material that can be kept clean and sanitary.
  - (v) The junction of the liner and outer jacket of the vat is constructed to prevent milk or cheese from entering the inner jacket.
  - (vi) The vat is equipped with a suitable sanitary outlet valve.
  - (vii) Each vat is equipped with effective valves that are properly maintained to control the application of heat to the vat.
- (l) Ensure that mechanical agitators are of sanitary construction and contain each of the following:
  - (i) A carriage and track constructed to prevent the dropping of dirt or grease into the vat.
  - (ii) Metal blades, forks, or stirrers constructed of stainless steel or of material approved by the department and free from rough or sharp edges or any surface that may scratch the equipment or remove metal particles.
- (m) Ensure that curd mill knives, hand rakes, shovels, paddles, strainers, and miscellaneous equipment are stainless steel or constructed of a material approved by the department.
- (n) Ensure that the product contact surfaces of a curd mill, including the wires in curd knives, are stainless steel

and that each piece of equipment is constructed so that it may be kept clean.

(o) Ensure that curd knives are kept tight and replaced when necessary.

(p) Ensure that each hoop, form, and follower is constructed of stainless steel or heavy tinned steel, and that a tinned hoop, form, or follower is kept tinned and free from rust.

(q) Ensure that each hoop, form, and follower is kept in good repair and that drums or other special forms used to press and store cheese are clean and sanitary.

(r) Ensure that each cheese press is constructed of stainless steel with all of the following:

(i) All joints welded and all surfaces, seams, and openings readily cleanable.

(ii) A continuous pressure device.

(iii) Press cloths maintained in good repair and in a sanitary condition.

(s) Ensure that single-service cheese press cloths are used only once.

(t) Ensure that the press used to heat seal the wrapper applied to rindless cheese shall have square interior corners and reasonably smooth interior surface and have controls that shall provide uniform pressure and heat equally to all surfaces.

(u) Ensure that each paraffin metal tank is adequate in size, has wood rather than metal racks to support cheese, and has heat controls and an indicating thermometer.

(v) Ensure that paraffin tank cheese wax is kept clean.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

### **288.731 Manufacturing or processing cheese; pasteurization temperature and time standards; equipment.**

Sec. 171.

(1) A person that manufactures or processes cheese shall pasteurize milk to be used for making cheese or cheese culture by subjecting every particle of the milk to a minimum temperature of 161°F (72°C) for not less than 15 seconds or to other pasteurization temperature and time standards listed in section 137, except as provided for in section 138. A person that manufactures or processes cheese shall equip high temperature short-time pasteurization units with the proper controls and equipment to assure pasteurization. Milk held more than 2 hours between time of receipt or pasteurization and culturing shall be cooled to 45°F (7°C) or lower, until the time of culturing.

(2) A person that manufactures or processes cheese and engages in vat pasteurization shall use only equipment meeting the requirements of sanitary standards.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

### **288.732 Cheese; additional duties of manufacturer or processor.**

Sec. 172.

In addition to the requirements imposed under section 170, a person that manufactures or processes cheese shall do all of the following:

(a) Provide adequate sanitary facilities for the disposal of whey and take precautions to minimize flies, insects, and the development of objectionable odors at disposal sites.

(b) Handle whey or whey products intended for human food at all times in a sanitary manner in accordance with the procedures specified in this act for handling milk and dairy products.

(c) Conduct the packaging of rindless cheese or the cutting and repackaging of all styles of bulk cheese under rigid sanitary conditions and ensure that the atmosphere of the packaging rooms, the equipment, and the packaging material are free from mold and bacterial contamination.

(d) Legibly mark each bulk cheese with the name of the product, code or date of manufacture, name and address of manufacturer, and vat number or code number of the manufacturer.

(e) Legibly mark each consumer-sized container with the name and address of the manufacturer, packer, or distributor and legibly mark the net weight of the contents, the name of product, and any other information required by the department.

(f) Ensure that conveyors are constructed of material approved by the department and maintained in good repair.

- (g) Ensure that the grinders or shredders used in the preparation of trimmed and cleaned natural cheese for cookers are adequate in size, with product contact surfaces of corrosion resistant material, and constructed to prevent contamination of the cheese and allow thorough cleaning of all parts and product contact surfaces.
- (h) Ensure that each cooker is all of the following:
  - (i) Steam jacketed or of direct steam type.
  - (ii) Constructed of stainless steel or other equally corrosion resistant material with all product contact surfaces readily accessible for cleaning.
  - (iii) Equipped with an indicating thermometer.
  - (iv) Equipped with a temperature recording device.
  - (v) Equipped with a recording thermometer stem placed in the cooker if time charts satisfactory to the department are used or placed in the hotwell or filler hopper.
- (i) Ensure either that steam check valves on direct steam type cookers are mounted flush with cooker wall, constructed of stainless steel, and designed to prevent the backup of product into the steam line or that each steam line is constructed of stainless steel pipes and fittings that can be readily cleaned.
- (j) If direct steam is applied to the product, ensure that only culinary steam is used.
- (k) Ensure each of the following:
  - (i) That except for sight ports, the hoppers of all fillers are covered.
  - (ii) That if the department determines necessary, the hopper has an agitator to prevent buildup on side walls.
  - (iii) That the filler valves and head are kept in good repair and capable of accurate measurements.
  - (iv) That natural cheese is cleaned free of all nonedible portions.
  - (v) That paraffin, wrappings, rind surface, mold, or unclean areas or any other part of natural cheese that is by department standards unwholesome or unappetizing is removed.
  - (vi) That each batch of cheese within a cooker, including optional ingredients, is thoroughly commingled and pasteurized at a temperature of at least 161°F (72°C) for not less than 30 seconds.
  - (vii) That cheese particles or ingredients do not enter the cooker batch after the cooker batch of cheese has reached the final heating temperature.
  - (viii) After holding for the required period of time, that the hot cheese is emptied from the cooker as quickly as possible.
  - (ix) That containers either lined or unlined are assembled and stored in a sanitary manner to prevent contamination.
  - (x) That filler crews handle containers with extreme care and observance of personal cleanliness.
  - (xi) That preforming and assembling of pouch liners and containers are kept to a minimum and the supply rotated to limit the length of time a product is exposed to possible contamination prior to filling.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

### **288.733 Supplying processed cheese to filler or slice former; requirements.**

Sec. 173.

Hot fluid cheese from cookers may be held in hotwells or hoppers to assure a constant and even supply of processed cheese to the filler or slice former. A person that manufactures or processes cheese shall ensure all of the following:

- (a) That filler valves effectively measure the desired amount of product into a pouch or container in a sanitary manner and shall cut off sharply without drip or drag of cheese across the opening.
- (b) That an effective system is used to maintain accurate and precise weight control.
- (c) That damaged or unsatisfactory packages are removed from production and that cheese is, at the plant's option, salvaged into sanitary containers and added back to the cookers.
- (d) That pouches, liners, or containers having product contact surfaces after filling are folded or closed and sealed in a sanitary manner approved by the department to prevent contamination.
- (e) That, in addition to other required labeling, each container is coded in a manner as to be easily identified as to date of manufacture by lot or subplot number.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

### **288.734 Evaporated, condensed, or sterilized dairy products; systems and equipment requirements.**

Sec. 174.

(1) A person that manufactures, processes, or packages evaporated, condensed, or sterilized dairy products shall ensure that the equipment and utensils used for processing and packaging evaporated, condensed, or sterilized dairy products comply with sections 135 through 143 and each of the following requirements:

(a) All equipment used in the removal of moisture from milk or dairy products for the purpose of concentrating the solids meets sanitary standards.

(b) Gravity and vacuum-type fillers are of sanitary design and, except as provided in subdivision (c), all product contact surfaces, if metal, are made of stainless steel or an equally corrosion resistant material approved by the department.

(c) Nonmetallic product contact surfaces meet standards established or approved by the department.

(d) Fillers are designed to prevent contamination of, or detract from, the quality of the product being packaged.

(e) Batch or continuous in-container sterilizers are equipped with accurate temperature controls and effective valves for regulating the sterilization process and the equipment is maintained to assure control of the length of time of processing, and to minimize the number of damaged containers.

(2) If applicable, a person who owns or operates a plant described in section 140 or 141 shall use homogenizers to reduce the size of fat particles and to evenly disperse those particles in the product and ensure that each homogenizer meets sanitary standards.

(3) Pasteurization shall be performed by systems and equipment meeting the requirements identified in section 139.

(4) A person shall fill and hermetically seal containers with product in a sanitary manner, and ensure that each container does not contaminate or detract from the quality of the product.

(5) A person shall ensure that bulk containers or retail containers for unsterilized product meet department standards to protect a product in storage or transit. Each bulk container, including bulk tankers, shall be cleaned and sanitized before filling and filled and closed in a sanitary manner.

(6) A previously sterilized product shall be filled under conditions which prevent contamination of the product by living organisms or spores. Prior to being filled, a container shall be sterilized and maintained in a sterile condition. A filled container shall be sealed in a manner that prevents contamination of the product.

(7) All sterilized or aseptically processed product must comply with the requirements set forth by the scheduled process and the food and drug administration under 21 C.F.R. part 113.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

### **288.735 Frozen dessert; pasteurization.**

Sec. 175.

(1) A person who manufactures frozen desserts shall maintain and operate the plant with strict regard for the purity and wholesomeness of the frozen desserts produced.

(2) A frozen dessert shall be manufactured, processed, sold, offered for sale, or delivered only if it has been made from a mixture that has been properly pasteurized by heating every particle of the mixture pursuant to subsection (3)(a) or (b).

(3) A frozen dessert mixture, including sweeteners, emulsifiers, and stabilizers, described in subsection (2) shall be pasteurized to either of the following:

(a) To a temperature and time standard listed in section 137, but not lower than 155°F (69°C) and holding at such temperature continuously for not less than 30 minutes and promptly cooling to a temperature of 45°F (7°C) or lower.

(b) To a temperature not lower than 175°F (80°C) for not less than 25 seconds or 180°F (83°C) for 15 seconds in equipment meeting the requirements of the department and those set forth in sanitary standards and promptly cooling to a temperature of 45°F (7°C) or lower.

(4) A frozen dessert mixture described in subsection (2) shall be pasteurized in equipment provided with an indicating thermometer and approved recording thermometer, the charts for which shall be dated and held for a period of at least 180 days. This subsection does not prohibit the use of another pasteurization process that has

been recognized by the department to be equally efficient and that is approved by the department.

(5) All frozen dessert mixes shall be pasteurized at the final freezing location unless the pasteurized mix is packaged in approved single service containers of 5 gallons or less, or as approved by the director. Frozen dessert plants that transport pasteurized bulk mix in bulk milk tankers dedicated to hauling pasteurized products on the effective date of this act may continue this practice with the written approval of the director on a case-by-case basis.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

**Compiler's Notes:** In subsection (3), "sweetners" evidently should read "sweeteners."

#### **288.736 Equipment; compliance with sanitary standards.**

Sec. 176.

A person shall ensure that all new equipment meets applicable sanitary standards. Equipment and utensils coming in contact with milk, dairy products, mix or frozen desserts, including sanitary pumps, piping, fittings, and connections, shall be constructed of stainless steel or other equally corrosion-resistant material. However, where the use of stainless steel is not practicable, or in old equipment, other metals properly coated or plated may be approved in writing by the director on a case-by-case basis. Nonmetallic parts having product contact surfaces shall be of material that meets sanitary standards.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

#### **288.737 Frozen desserts; temperature of dairy products received in fluid form; rerun standards; packaging; labeling.**

Sec. 177.

(1) A person shall ensure that milk, cream, and dairy products in fluid form received at a frozen dessert plant for use in mixes are immediately cooled to a temperature of 45°F (7°C) or less and maintained at that temperature until pasteurized. Mixes shall be assembled and pasteurized in a dairy plant.

(2) A person shall ensure that spilled frozen desserts and ingredients are discarded. Rerun shall be handled in sanitary containers properly covered and stored at or below 45°F (7°C) or shall be piped directly back to vats. Rerun which has been strained to remove nuts, fruits, or other ingredients shall be repasteurized and shall be used only as mix for products which contain the same ingredients. Frozen desserts that have been distributed shall not be returned to the manufacturer for repasteurization and processing. Flavoring and bulky ingredients may be added to mix after pasteurization.

(3) A person shall ensure that frozen desserts and mix are packaged in commercially acceptable containers and packaging material that will protect the quality of the contents in regular channels of trade. The packaging, cutting, molding, dispensing, and other handling or preparation of mix or frozen desserts and their ingredients shall be done in a sanitary manner. Plastic or rubber gloves shall be worn when handling frozen desserts for molding, cutting, or similar hand contact work.

(4) Frozen desserts shall be labeled as specified in section 143(2), (3), (4), (5), and (6). Bulk ice cream containers with removable lids, such as those used for hand dipping, shall be labeled on the body of the container.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

#### **288.738 Nonconforming new frozen dessert or mix; submission of label for review and approval.**

Sec. 178.

New frozen desserts not conforming to existing standards shall be manufactured in accordance with sanitation standards established in this act and shall also comply with the bacteria count standards, coliform determinations, and storage temperatures where applicable, set forth in section 70. A person, firm, or corporation, before manufacturing and marketing any frozen dessert or mix which varies from the standards set forth in this act, shall notify the department of its intent to manufacture or market a frozen dessert or mix and shall submit for review and approval a proposed copy of the label for the new frozen dessert or mix.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

#### **288.739 Vehicle to transport mix, frozen desserts, and ingredients; construction and operation; cleaning.**

Sec. 179.

A person shall ensure that a vehicle including a mobile frozen dessert plant used for the transportation of mix, frozen desserts, and their ingredients is constructed and operated so as to protect the contents from heat, sun, and contamination. The vehicle shall be kept clean, and no substance capable of contaminating mix, frozen desserts, and their ingredients shall be transported in the vehicle. Where applicable, a frozen dessert plant shall provide an area for unloading vehicles that can be maintained in a sanitary condition. This area should be surfaced with concrete or blacktop.

**History:** 2001, Act 267, Eff. Feb. 8, 2002

#### **288.740 Mobile frozen dessert plant; requirements.**

Sec. 180.

A person that owns or operates a mobile frozen dessert plant shall ensure all of the following:

- (a) A mobile frozen dessert plant meets all requirements of this act exclusive of toilet facilities.
- (b) A mobile frozen dessert plant has a potable water supply tank, of sufficient capacity, tilted toward a capped drain cock. The water inlet pipes shall be of removable flexible copper or other approved tubing with the nozzle for the hose connection capped and fully protected when not being used. A hose for connection to a potable water supply shall be provided and used exclusively for that purpose.
- (c) A mobile frozen dessert plant has a suitable waste tank with a capacity at least equal to the water supply tank that is tilted toward a drain cock with an adequate method of gauging the contents. It shall be emptied and flushed as often as necessary at an approved location, in order to maintain sanitary conditions.
- (d) A mobile frozen dessert plant has a refrigerated box of ample capacity for storage of the various ingredients carried that need refrigeration and constructed of noncorrosive material, the floor of which is pitched toward a drain. Temperature shall be maintained at 45°F (7°C) or lower in the refrigerated box, and it shall be equipped with an indicating thermometer.
- (e) Mix to be frozen in a mobile frozen dessert plant is packaged in a single service container of 5 gallons or less at the place of manufacture.
- (f) A mobile frozen dessert plant has a refrigerated syrup rail with a holding plate to maintain temperatures of 50°F (10 °C) or below.
- (g) A mobile frozen dessert plant has a refuse can located within the mobile plant and a waste can or container for deposit of cups, papers, and other refuse by customers outside the mobile plant. Both shall be kept clean and so located as not to create a nuisance.
- (h) Utensils, equipment, and multiuse containers in a mobile frozen dessert plant are washed and sanitized in the mobile plant after each day's use.

**History:** 2001, Act 267, Eff. Feb. 8, 2002