

(c) If horses, dry cows, calves, or bulls are stabled therein, they shall be confined in stalls, stanchions, or pens.

(d) Adequate natural or artificial light, or both, well distributed for day or night milking shall be provided.

(e) Dust-tight covered boxes or bins, or separate storage facilities for ground, chopped, or concentrated feed are required.

(f) Airspace and air circulation shall be sufficient to prevent condensation and excessive odors. Overcrowding shall be avoided.

(3) **MILKING BARN, STABLE, OR PARLOR—CLEANLINESS.** (a) The interior shall be kept clean. Floors and gutters, pens, stalls, walls, ceilings, pipelines, and equipment shall be clean and free of litter or filth.

(b) No swine, sheep, goats, or fowl shall be housed or permitted in the milking stable or parlor.

(4) **COWYARD.** (a) The cowyard shall be graded, drained, and shall have no standing pools of water or accumulations of organic wastes.

(b) In loafing or pen type stables, manure droppings shall be removed or clean bedding added at sufficiently frequent intervals to prevent the accumulation of manure on cows' udders and flanks and the breeding of flies.

(c) Swine, sheep and goats shall be kept out of the cowyard.

(d) Manure shall be removed and stored or disposed of in such manner as best to prevent the breeding of flies therein and the access of cows to piles thereof.

(5) **MILKHOUSE OR ROOM—CONSTRUCTION AND FACILITIES.** (a) *Facilities.* A milkhouse or room of sufficient size shall be provided in which cooling, handling, and storing of milk and the washing, sanitizing and storing of milk containers, utensils, and equipment other than that which is cleaned in place shall be done.

(b) *Floors.* 1. The milkhouse shall be provided with a smooth floor constructed of concrete or equally impervious material and shall be maintained in good repair.

2. The milkhouse floor shall be graded to drain properly.

3. All floor drains shall be accessible and shall be trapped if connected to a sanitary sewer system.

(c) *Walls and ceilings.* 1. The walls and ceilings shall be constructed of smooth material, well painted, or finished in an equally suitable manner.

2. The walls, ceilings, windows, doors, and hose port shall be maintained in good repair.

(d) *Lighting and ventilation.* 1. The milkhouse or room shall have adequate natural or artificial light, or both, properly distributed.

2. Sufficient ventilation shall be provided to prevent condensation and excessive odors.

3. Doors and windows shall be kept closed during dusty weather.

(e) *Miscellaneous requirements.* 1. The milkhouse shall be used for no other purpose than milkhouse operations.

2. It shall not open directly into a stable or any room used for domestic purposes except as may be approved by the department. A direct opening between the milkhouse and milking barn, stable or

parlor may be approved when a tight-fitting, self-closing, solid door hinged to be single or double-acting is provided.

3. Liquid wastes shall be disposed of in a sanitary manner.

(f) *Cleaning facilities.* 1. The milkhouse shall be equipped with a two-compartment wash vat. Cleaning and other operations shall be located and conducted so as to prevent any contamination of the milk or of cleaned equipment.

2. It shall have adequate facilities for heating water and for cleaning.

3. Water under pressure shall be piped into the milkhouse.

(6) **MILKHOUSE OR ROOM—CLEANLINESS.** (a) The floors, walls, ceilings, windows, and equipment of the milkhouse or room shall be kept clean. Means necessary for the control of flies, other insects, and rodents shall be used.

(b) Only articles directly related to milkroom activities shall be permitted in the milkroom. Animals and fowl shall be excluded.

(c) Pesticides or medicinals shall not be stored in the milkhouse.

(7) **TOILET.** (a) Every dairy farm shall have one or more sanitary toilets conveniently located.

(b) Toilets shall be constructed and maintained so that the waste is inaccessible to flies and does not pollute the ground surface or contaminate any water supply.

(8) **WATER SUPPLY.** (a) Water for milkhouse and milking operations shall be from a supply properly located, protected, and operated, and shall be easily accessible and adequate in quantity.

(b) Water shall be of a safe sanitary quality.

(c) There shall be no connection between safe and unsafe supplies; and there shall be no submerged inlets.

(d) Samples of farm water supplies shall be analyzed at least biennially.

(9) **UTENSILS AND EQUIPMENT—CONSTRUCTION.** (a) All multi-use containers, equipment and utensils used in the handling, storage, or transportation of milk shall be made of smooth, non-absorbent, non-corrodible, non-toxic material, and shall be so constructed as to be easily cleaned. Joints and seams shall be smooth and flush. All milk pails used for hand milking and stripping shall be seamless and of the hooded type.

(b) All containers, utensils, and equipment shall be in good repair and shall be easily accessible for inspection.

(c) Single-service articles shall have been manufactured, packaged, transported, stored and handled in a sanitary manner. Articles intended for single-service use shall not be reused.

(d) Multiple-use woven material shall not be used for straining milk.

(e) Dairy equipment intended to be cleaned-in-place shall be of approved construction.

(10) **UTENSILS AND EQUIPMENT—CLEANING.** The product-contact surfaces of all multi-use containers, equipment (including that which is cleaned-in-place) and other utensils used in the handling, storage, or transportation of milk shall be cleaned after each usage.

(11) **BACTERICIDAL TREATMENT.** The product-contact surfaces of all multi-use containers, equipment (including that which is cleaned-in-place) and utensils used in the handling, storage, or transportation of milk shall be sanitized before each usage.

(12) **UTENSILS AND EQUIPMENT—STORAGE.** (a) All containers, utensils and equipment used in the handling, storage or transportation of milk, unless stored in sanitizing solutions, shall be stored to assure complete drainage, and shall be protected from contamination prior to use.

(b) Single-service articles shall be stored in the original container in a manner to protect them from contamination prior to use.

(13) **UTENSILS AND EQUIPMENT—HANDLING.** After bactericidal treatment, all containers and equipment shall be handled in such a manner as to prevent contamination of any product-contact surface.

(14) **MILKING—FLANKS, UDDERS, AND TEATS.** (a) Brushing shall be completed before milking begins.

(b) The flanks, udders, bellies and tails of all milking cows shall be free from visible dirt at the time of milking and shall be clipped as often as necessary.

(c) The udders and teats of all milking cows shall be cleaned and treated with sanitizing solution just prior to the time of milking and shall be relatively dry before milking.

(d) Wet hand milking is prohibited.

(15) **MILKING—SURCINGLES, MILK STOOLS, AND ANTI-KICKERS.** (a) Milk stools, surcingles, and anti-kickers shall be kept clean and stored above the floor.

(b) Milk stools shall be of easily cleanable construction and shall not be padded.

(16) **MILKING—TRANSFER AND PROTECTION OF MILK.** (a) Each pail or can of milk shall be removed immediately from the milking barn, stable, or parlor to the milkhouse.

(b) No milk shall be strained, poured, or transferred in the barn unless it is properly protected from contamination.

(17) **MILKING AND MILK HANDLING EQUIPMENT.** (a) All milking and milk handling systems and equipment hereafter installed, reconstructed or extensively altered for use in the milking of cows and the transfer of the milk from the cow to containers, in which or from which the milk is removed from the dairy farm, shall conform to the following standards of construction and installation:

1. All product contact surfaces of permanently mounted pipelines shall be of stainless steel or heat resistant glass, except that rubber, rubber-like, or plastic materials may be used for sealing applications. Paper gaskets shall not be used.

2. All joints of permanently mounted pipelines, including solution lines, shall be welded or equipped with CIP (clean-in-place) fittings. Welded joints shall be smooth and free from pits, cracks or other defects. Demountable fittings shall be of such design as to form substantially flush interior joints. Appurtenances, such as milker claws, pumps or receiver jars with product contact surfaces, shall be readily cleanable, either when assembled or disassembled. Removable

parts shall be readily demountable. Non-product contact surfaces shall have a smooth finish and be readily cleanable.

3. Permanently mounted pipelines shall be supported so that they remain in constant alignment and position. They shall be self-draining with a minimum slope of one inch per 10 feet. The support system shall be so designed as to preclude electrolytic action between supports and pipeline.

4. Transparent plastic tubing used in conjunction with transfer stations or systems shall be in one continuous length and be supported off the floor at all times. The opening through which tygon tubing enters the milk room shall be provided with a closure which is to be kept closed when the transfer unit is not in use. Equipment for mechanically air drying the tygon tubing shall be provided. The pouring station receptacle shall be of smooth stainless steel and be equipped with an overlapping self-closing cover. The receptacle shall be mounted off the floor on a readily cleanable stainless steel framework and be washed and stored in the milk room. Wire mesh or materials which are not readily cleanable may not be used as a support for the filter medium.

5. The claw or milk cup shall be designed so that cleaning and sanitizing solutions will drain when the claw or milk cup is in the cleaning and sanitizing position.

6. A bucket type milking machine shall be provided with a check valve or other device which will prevent moisture or any contaminating substance from entering the milk from the vacuum system. The moveable portion of the check valve shall be of one piece construction or the parts shall be bonded together.

(b) Plans for the installation, construction, reconstruction or extensive alteration of milking and milk handling systems and equipment shall be submitted to the department for approval before work is begun, as required under section Ag 80.12. Upon completion of the work the installer shall furnish the purchaser with a signed written statement certifying that the system or equipment as installed is in full compliance with this subsection.

(18) **PERSONNEL—HAND-WASHING FACILITIES.** There shall be provided adequate hand-washing facilities, including running water, soap or detergent, and individual sanitary towels, in the milkhouse and in or convenient to the milking barn, stable, or parlor.

(19) **PERSONNEL—CLEANLINESS.** (a) Milkers' hands shall be washed clean and dried with an individual sanitary towel immediately before milking, before performing any milkhouse function, and following any interruption of the milking operation.

(b) Milkers and milk handlers shall wear clean outer garments while milking or handling milk, milk containers, utensils, or equipment.

(20) **COOLING.** Milk shall be cooled to 50°F. or less within 2 hours after milking and shall be maintained at that temperature until delivered.

(21) **VEHICLES.** (a) Vehicles used to transport milk from the dairy farm to the milk plant or receiving station shall be kept clean inside and out.

(b) They shall be so constructed and operated as to protect their contents from sun, freezing, and contamination.

(c) No substance capable of contaminating milk shall be transported with milk.

(22) INSECT AND RODENT CONTROL. (a) Effective measures shall be taken to prevent the contamination of milk, containers, equipment, and utensils by insects and rodents and by chemicals used to control such vermin. Fly breeding shall be minimized by approved manure disposal methods.

(b) Manure packs shall be properly maintained.

(c) All milkhouse openings shall be effectively screened or otherwise protected; doors shall be tight-fitting and self-closing; screen doors shall open outward.

(d) Milkrooms shall be free from insects and rodents.

(e) Only registered pesticides are to be used, and in such manner as to minimize the possibility of contamination of milk.

(f) Equipment and utensils shall not be exposed to pesticide contamination.

(g) Surroundings shall be kept neat, clean, and free of conditions which might harbor or be conducive to the breeding of insects and rodents or to any other health nuisance.

History: Cr. Register, August, 1967, No. 140, eff. 9-1-67; cr. (8) (d); renum. (17) through (21) to be (18) through (22); cr. (17), Register, December, 1972, No. 204, eff. 1-1-73.

Ag 80.08 Plant standards. (1) FLOORS. The floors of all rooms in which milk or milk products are processed, handled, or stored, or in which milk utensils are washed, shall be constructed of concrete or other equally impervious and easily cleaned material and shall be smooth, properly drained, provided with trapped drains and kept clean and in good repair, except that (a) Cold-storage rooms used for storing milk and milk products need not be provided with floor drains when the floors are sloped to drain to one or more exits, and (b) Storage rooms for storing dry ingredients or packaging materials, or both, need not be provided with drains and the floors may be constructed of tightly joined wood.

(2) WALLS AND CEILINGS. Walls and ceilings of rooms in which milk or milk products are handled, processed, or stored, or in which milk containers, utensils, and equipment are washed, shall have a smooth, washable, light-colored surface and shall be kept clean and in good repair.

(3) DOORS AND WINDOWS. (a) Unless other effective means are provided to prevent the access of flies, openings to the outer air shall be effectively screened.

(b) All openings to the outside shall have solid doors or glazed windows. Such doors shall be self-closing. All doors and windows shall be kept closed during dusty weather. Screen doors, if used, must open outward and be self-closing.

(4) LIGHTING AND VENTILATION. (a) All rooms in which milk and milk products are handled, processed, or stored or in which milk containers, equipment, and utensils are washed shall be well lighted.

(b) They shall be well ventilated to preclude odors and condensation.

(5) SEPARATE ROOMS. (a) There shall be a separate room for pasteurizing, processing, cooling, and packaging and a separate room