

**RULES
OF
TENNESSEE DEPARTMENT OF AGRICULTURE
DAIRY DIVISION**

**CHAPTER 0080-3-1
REGULATIONS GOVERNING FROZEN DESSERTS**

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0080-3-1-.01 DEFINITIONS.

- (1) MEANING OF WORDS, Words used in the singular form shall be deemed to import the plural, and vice versa, as the case may demand.
- (2) TERMS DEFINED. Unless otherwise required by context, the following terms shall be construed, respectively, to mean:
 - (a) Regulation. The regulation to govern the manufacturing, packaging and distribution of frozen desserts.
 - (b) Adulterated or Misbranded Frozen Desserts or Mix. Any frozen dessert or mix which contains any unwholesome substance, or which, if defined in this regulation, does not conform with its definition, or which does not comply with the provision of the Federal Food, Drug, and Cosmetic Act, or General Regulation for its enforcement shall be deemed adulterated and or misbranded.
 - (c) C-I-P or Cleaned -in- Place. The procedure by which sanitary pipelines or pieces of dairy equipment are mechanically cleaned-in-place by circulation.
 - (d) Commissary or Depot. The terms "commissary" or "depot" shall mean any place, premise or establishment in which pasteurized mix, ingredients, containers, or supplies are prepared or stored for the servicing of one or more mobile units and where facilities are provided for the cleaning of the vehicle and the cleaning and bactericidal treatment of equipment and utensils.
 - (e) Dairy Plant. Any place, premise, or establishment where milk or dairy products are received or handled for processing or manufacturing. When "plant" is used in connection with the production, transportation, classifying, or use of milk, it means any plant that handles or purchases milk for manufacturing purposes; when used in connection with specifications for plants or licensing of plants, it means only those plants that manufacture mix and/or frozen desserts.
 - (f) Dairy Products. Butter, cream (fluid, dry, or plastic), dry whole milk, nonfat dry milk, dry buttermilk, dry whey, evaporated milk (whole or skim), condensed whole milk and condensed skim milk (plain or sweetened), and such other products derived from milk, as may be defined under the Federal Standards of Identity as ingredients for frozen desserts.
 - (g) Fieldman. A person qualified and trained in the sanitary methods of production and handling of milk as set forth herein and generally employed by a processing or manufacturing plant for the purpose of dairy farm inspections and quality control work.

(Rule 0080-3-1-.01, continued)

- (h) Frozen Desserts. Are the foods which conform to the provisions of "Definitions and Standards of Identity for Frozen Desserts," U.S. Food and Drug Administration; and those food products defined in (i) through (k) of this section.
- (i) Quiescently Frozen Confections. Quiescently frozen confections mean a clean and wholesome frozen, sweetened, flavored product in the manufacture of which freezing has not been accompanied by stirring or agitation (generally known as quiescent freezing). This confection may be acidulated with food grade acid, may contain milk solids, water, may be made with or without added harmless pure or imitation flavoring, with or without harmless coloring. The finished product may contain not more than one-half (½%) of 1 percent by weight of stabilizer composed of wholesome edible material. The finished product shall contain not less than seventeen (17%) percent by weight of total food solids. In the production of this confection, no processing or mixing prior to quiescent freezing shall be used that develops in the finished confection mix any physical expansion in excess of ten (10%) percent.
- (j) Quiescently Frozen Dairy Confections. Quiescently frozen dairy confections mean a clean and wholesome frozen product made from water, milk products and sugar, with added harmless pure or imitation flavoring, with or without added harmless coloring, with or without added stabilizer and with or without added emulsifier; and in the manufacture of which freezing has not been accompanied by stirring or agitation (generally known as quiescent freezing). It contains not less than thirteen (13%) percent by weight of total milk solids, not less than thirty-three (33%) percent by weight of total food solids, not more than one-half (½%) percent by weight of stabilizer, and not more than one-fifth (1/5%) of 1 percent of weight by emulsifier. Stabilizer and emulsifier must be composed of wholesome, edible material. In the production of quiescently frozen dairy confections, no processing or mixing prior to quiescently freezing shall be used that develops in the finished confection mix any physical expansion in excess of ten (10%) percent.
- (k) Frozen Dietary Dairy Dessert and Frozen Dietary Desserts. Frozen Dietary Dairy Dessert and Frozen Dietary Dessert is a food for any special dietary use, prepared by freezing, with or without agitation, composed of a pasteurized mix which may contain fat, protein, carbohydrates, natural and/or artificial sweeteners, flavoring, stabilizers, emulsifiers, vitamins and minerals.
- (l) Frozen Desserts Manufacturer. A frozen desserts manufacturer is any person who manufacturers, processes, converts, partially freezes or freezes any mix or frozen desserts for distribution or sale.
- (m) Frozen Desserts Plant. A frozen desserts plant is any place or premises where frozen desserts or mix are manufactured, processed or frozen for distribution or sale at wholesale.
- (n) Frozen Desserts Retail Establishment. A frozen desserts retail establishment is any place or premises including retail stores, stands, hotels, restaurants and vehicles or mobile units where frozen desserts are frozen or partially frozen and/or dispensed for sale at retail.
- (o) Inspector. An employee of the regulatory agency qualified, trained, and authorized to perform dairy farm or plant inspections, and raw milk grading.
- (p) License. A license issued under the regulation by the regulatory agency.
- (q) Mobile Unit. The term mobile unit shall mean any vehicle or temporary establishment that shall travel from place to place in which a frozen desserts processor freezes, partially freezes and/or dispenses frozen desserts for sale.
- (r) Milk Sampler. A person licensed by the regulatory agency as described in Section 52-305, TCA, who is qualified and trained for the classifying of raw milk.

(Rule 0080-3-1-.01, continued)

- (s) Milk. The normal lacteal secretion, practically free from colostrum, obtained by the complete milking of one or more healthy cows. The word "milk" used herein includes only milk for manufacturing purposes in frozen dessert plants.
- (t) Milk for Manufacturing Purposes. Milk produced and used for processing and manufacture of mix, frozen desserts or other dairy products defined herein and meeting the requirements of 0080-3-1-.07(3). However, milk produced for use in fluid milk products but diverted for use in the manufacture of mix and frozen desserts, may be included, provided such milk meets the requirements of 0080-3-1-.07(3).
- (u) Miscellaneous Frozen Dessert Products. All products containing frozen desserts other than those defined in this subpart, and which may hereafter be designated as frozen dessert products by the regulatory agency.
- (v) Mix. Mix is the pasteurized unfrozen combination of two or more ingredients permitted in a frozen dessert with or without fruits, fruit juices, candy, baked goods and confections, nut meats, or other harmless flavor and/or color.
- (w) Official Methods. Official Methods of Analysis of the Association of Official Agricultural Chemists, a publication of the Association of Official Analytical Chemists, Box 540, Benjamin Franklin Station, Washington, D.C. 20044.
- (x) Pasteurization. The term "pasteurization," "pasteurized," or a similar term is the process of heating, in approved and properly operated equipment, every particle of mix to any one of the following temperatures and holding at the temperature for the specified time:
 - 155°F. and holding at such temperature for at least 30 minutes.
 - 175°F. and holding at such temperature for at least 25 seconds.Provided that nothing contained in this definition shall be construed as barring any other method of process, or combination of times and temperatures as may be demonstrated to be equally efficient.
- (y) Person. The word "person" as used in this regulation shall mean any individual, partnership, corporation, company, firm, trustee, or association.
- (z) Regulatory Agency. The Commissioner of Agriculture is authorized by law to administer the regulation.
- (aa) Rules and Regulations. The provisions of sections herein.
- (bb) Standard Methods. Standard Methods for the Examination of Dairy Products, a publication of the American Public Health Association, 1790 Broadway, New York, N.Y.
- (cc) 3-A Sanitary Standards and Accepted Practices. The standards for dairy equipment and accepted practices formulated by the 3-A Sanitary Standards Committees representing the International Association of Milk, Food and Environmental Sanitarians, The U. S. Public Health Service, and the Dairy Industry Committee. Published by the International Association of Milk, Food and Environmental Sanitarians, Box 437, Shelbyville, Indiana.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.

0080-3-1-02 SPECIFICATIONS FOR LICENSED FROZEN DESSERT PLANTS, PREMISES, BUILDINGS, FACILITIES, EQUIPMENT AND UTENSILS.

- (1) PREMISES. The plant area and surroundings shall be kept clean, orderly, and free from refuse and rubbish, smoke, excessive dust and air pollution, and strong or foul odors. A drainage system shall be provided for rapid drainage of all water from plant buildings including surface water around the plant and on the premises.
- (2) BUILDINGS.
 - (a) Construction and Maintenance. Buildings shall be of sound construction, and the exterior and interior shall be kept clean and in good repair to protect against dust, dirt, and mold, and to prevent the entrance or harboring of insects, rodents, vermin, and other animals.
 - (b) In processing areas, outside doors, windows, skylights, and transoms shall be screened or otherwise covered. Such outside doors shall not open inward and shall be self-closing; and doors leading to processing rooms shall be sound and tight fitting. Window sills on new construction shall be sloping. Outside conveyor openings and other special type outside openings shall be protected by doors, screens, flaps, fans, or tunnels; outside openings for sanitary pipelines shall be covered when not in use; and service-pipe openings shall be completely cemented around the pipe opening or have tight metal collars.
 - (c) All rooms, compartments, coolers, freezers, and dry storage space in which any raw material, packaging or ingredient supplies, or finished products are handled, processed, manufactured, packaged, or stored shall be so designed and constructed as to assure clean and orderly operations. Rooms for receiving milk shall be separated from the processing area by a partition or suitable arrangement of equipment or facilities to avoid contamination of milk or dairy products. Boiler and tool rooms shall be separated from other rooms. Toilet and dressing rooms shall be conveniently located and shall not open directly into any room in which milk, dairy products, or ingredients are handled, processed, packaged or stored. Doors of all toilet rooms shall be self-closing; and fixtures shall be kept clean and in good repair.
 - (d) Plans for new plant construction or major remodeling of existing plants shall be submitted to the regulatory agency for approval prior to such new construction or remodeling.
 - (e) Interior Finishing. In all rooms, in which milk or dairy products are received, handled, processed and where mix and frozen desserts are manufactured, packaged, or stored, except dry storage of packaging materials, or in which equipment or utensils are washed, the walls, ceilings, partitions, and posts shall be smoothly finished with a washable material of light color that is substantially impervious to moisture. A wainscoting of a suitable material of a darker color may be used to a height not exceeding 60 inches from the floor. The floors in these rooms shall be of concrete or other impervious material and shall be smooth, properly graded to drain, and have drains trapped, except that freezers used for storing frozen desserts, frozen fruits, frozen eggs and comparable ingredients need not be provided with floor drains but the floors shall be sloped to drain to one or more exits, and shall be kept clean. The plumbing shall be so installed as to prevent backup of sewage into the plant. On new construction or extensive remodeling, the floors shall be joined and coved with the walls to form watertight joints. Sound, smooth, wood floors may be used in certain packaging rooms where the nature of the product permits. Toilet and dressing rooms shall have impervious floors and smooth walls.
 - (f) Ventilation and Lighting. All rooms and compartments (including storage space and toilet and dressing rooms) shall be ventilated to maintain sanitary conditions, prevent undue condensation of water vapor, and minimize or eliminate objectionable odors.

(Rule 0080-3-1-.02, continued)

- (g) Lighting, whether natural or artificial, shall be of good quality and well distributed in all rooms and compartments. All rooms where milk, dairy products or mix and frozen desserts are handled, processed, manufactured, or packaged, or where equipment or utensils are washed, shall have at least 30 foot-candles of light intensity on all working surfaces; areas where dairy products are examined for condition and quality, at least 50 foot-candles of light intensity; and all other rooms, at least 5 foot-candles of intensity measured 30 inches above the floor. Light bulbs and fluorescent tubes shall be protected against breakage.
- (h) Laboratory. An adequate laboratory shall be provided, maintained, and properly staffed with qualified and trained personnel for quality control and analytical purposes. It shall be located reasonably close to the processing activity in a well lighted and ventilated room of sufficient size to permit proper performance of the tests necessary to evaluate the quality of raw and finished products. A central or commercial laboratory that serves more than one plant and that provides the same services may be utilized.

(3) FACILITIES.

- (a)
 - 1. Water supply. Both hot and cold water of safe and sanitary quality shall be available in sufficient quantity for all plant operations and facilities. Water from other lines, when officially approved, may be used for boiler feed water and condenser water, if such water lines are completely separated from the water lines carrying the sanitary water supply, and the equipment is so constructed and controlled as to preclude contamination of any product or product contact surface. There shall be no cross-connections between safe and unsafe water lines or between private and public supply.
 - 2. Bacteriological examination shall be made of the plant sanitary water supply at least once every 6 months by an authorized laboratory to determine purity and safety for use in processing or manufacturing dairy products.
- (b) Employee facilities. In addition to toilet and dressing rooms, the plant shall provide the following employee facilities: conveniently located sanitary drinking water; a locker or other suitable facility for each employee; hand washing facilities, including hot and cold running water, soap or other detergents, and sanitary towels or air dryers, in or adjacent to toilet and dressing rooms and at other places where necessary for the cleanliness of all personnel handling products; and self-closing containers for used towels and other waste.
- (c) A durable, legible sign shall be posted conspicuously in each toilet and dressing room directing employees to wash their hands before returning to work.
- (d) Steam. Steam shall be supplied in sufficient volume and pressure for satisfactory operation of each applicable piece of equipment. Steam that may come into direct contact with milk or dairy products shall be culinary steam. Culinary steam shall comply with the recommended practices for "Producing Culinary Steam for Processing Milk and Milk Products" as published by the National Association of Dairy Equipment Manufacturers, Washington, D. C., April, 1963.
- (e) Disposal of Wastes, The plant sewage system shall have sufficient slope and capacity to remove readily all waste from processing operations. Where a public sewer is not available, wastes shall be disposed of by methods approved by the regulatory agency. Containers for the collection and holding of wastes other than dry waste paper shall be constructed of metal or other equally impervious material, kept covered with tight-fitting lids, and placed outside the plant on a concrete slab or on a rack raised at least 12 inches, however, waste containers may be kept inside a suitably enclosed, clean

(Rule 0080-3-1-.02, continued)

and fly proof room. Solid wastes shall be disposed of regularly and the containers cleaned before reuse, and dry waste paper shall be burned at the plant in an incinerator approved by the regulatory agency or compressed or bagged and hauled away.

(4) EQUIPMENT AND UTENSILS.

- (a) Construction and Installation. New equipment shall meet applicable 3-A 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; except that, where the use of stainless steel is not practicable, or in old equipment, other metals properly coated or plated may be approved temporarily. Nonmetallic parts having product contact surfaces shall be of material that meets 3-A Sanitary Standards for Plastic or Rubber and Rubber Like Materials.
- (b) Bulk storage and distribution equipment for handling liquid sweetening agents shall consist of suitable metals, alloys, or other materials which will withstand corrosive action by the ingredient; and the equipment and ingredients shall be protected from contamination.
- (c) All equipment and piping shall be so designed and installed as to be easily accessible for cleaning and shall be kept in good repair and free from cracks and corroded surfaces. Milk pumps shall be of a sanitary type and easily dismantled for cleaning or shall be of specifically approved construction to allow cleaning in place. New or rearranged equipment shall be set away from any wall or spaced in such a manner as to facilitate proper cleaning and to maintain good housekeeping. All parts or interior surfaces or equipment, pipes (except certain piping cleaned-in-place), or fittings, including valves and connections, shall be accessible for inspection. Cleaned -in-place sanitary piping and welded sanitary pipeline systems when used will be acceptable if properly engineered and installed according to 3-A Accepted Practices for Permanently installed Sanitary Product-Pipelines and Cleaning Systems.
- (d) Pasteurization Equipment. Pasteurization equipment shall be in accordance with 3-A Accepted Practices for Sanitary Construction, Installation, Testing, and Operation of High Temperature Short-Time Pasteurizers and 3-A Sanitary Standards for Non-Coiled Type Batch Pasteurizers.
- (e) Heat treating equipment used to reach temperatures higher than commonly used for pasteurization shall meet appropriate sanitary construction and operating procedures approved by the regulatory agency.
- (f) Cleaning and Sanitizing. Equipment, sanitary piping, and utensils used in receiving, storing, processing, manufacturing, packaging, and handling of milk, dairy products, mix or frozen desserts and all product contact surfaces of homogenizers, high-pressure pumps, and high-pressure lines shall be kept clean.
- (g) The packing glands on all agitators, pumps, and vats shall be inspected at regular intervals and kept clean,
- (h) After being cleaned and immediately before use all equipment coming in contact with milk, dairy products, mix or frozen desserts shall have an effective bactericidal or sanitizing treatment
- (i) Before use, equipment not designed for C-I-P cleaning shall have been disassembled and thoroughly cleaned and sanitized. Dairy cleaners, wetting agents, detergents, sanitizing agents, or other similar material may be used that will not contaminate or adversely affect dairy products. Steel wool or metal sponges shall not be used in the cleaning of any dairy equipment or utensils.

(Rule 0080-3-1-.02, continued)

- (j) C-I-P cleaning shall be used only on equipment and pipelines systems that are designed and engineered for that purpose. Installation and cleaning procedures shall be in accordance with 3-A Accepted Practices for Permanently Installed Sanitary Product-Pipelines and Cleaning Systems. An outline of the cleaning procedures to be followed shall be posted near the C.I.P. equipment.
- (k) Applicable equipment and areas in the plant shall be thoroughly vacuumed regularly with a heavy-duty industrial vacuum cleaner and the material picked up shall be disposed of by burning or other means to destroy any insects present.
- (1) Exhaust stacks, elevators, and conveyors shall be inspected at regular intervals and kept clean.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June. 5, 1974.

0080-3-1-.03 PERSONNEL CLEANLINESS AND HEALTH.

(1) CLEANLINESS.

- (a) Plant employees shall wash their hands before beginning work and upon returning to work after using toilet facilities, eating, smoking, or otherwise soiling their hands. They shall keep their hands clean and follow good hygienic practices while on duty. Expecterating or use of tobacco in any form shall be prohibited in rooms and compartments where milk, dairy products, mix or frozen desserts are unpacked or exposed. Clean white or light colored washable outer garments and caps (paper caps or hairnets are acceptable) shall be worn by all persons engaged in processing milk, dairy products, mix or frozen desserts.
- (b) In addition, employees engaged in manual molding, wrapping, and touching any product contact surface shall treat their clean hands with a bactericide of approved strength before beginning such work and after each interruption. Rubber or plastic gloves may be used if sanitized as above.

- (2) HEALTH. No person afflicted with a communicable disease shall be permitted in any room or compartment where milk, dairy products, mix or frozen desserts are prepared, processed, or otherwise handled. No person who has a discharging or infected wound, sore, or lesion on hands, arms or other exposed portions of the body shall work in any plant processing or packaging rooms or in any capacity resulting in contact with milk, dairy products, mix, or frozen desserts.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.

0080-3-1-.04 PLANT OPERATIONS.

- (1) PASTEURIZATION OF FROZEN DESSERT MIX. After formulation the entire mix except for flavoring ingredients shall be pasteurized. Pasteurized mix or frozen desserts shall not be permitted to come in contact with equipment or containers with which unpasteurized mix, frozen desserts, milk or milk products have been in contact, unless such equipment has first been properly washed and subjected to a satisfactory bactericidal treatment.
- (2) COOLING. Processed fluid milk products including mix, except sterilized mix in hermetically sealed containers, shall be cooled promptly after heat treatment or pasteurization to 45°F. or lower and maintained thereat until used. This does not preclude holding fluid milk products at higher temperatures for a short period of time immediately prior to freezing where applicable to particular manufacturing or processing practices.
- (3) STORAGE.

(Rule 0080-3-1-.04, continued)

- (a) **Utensils and Portable Equipment.** Utensils and portable equipment used in processing operations shall be stored above the floor in clean, dry locations, and in self-draining position on racks constructed of impervious, corrosion-resistant material.
 - (b) **Raw Milk and Cream.** Bulk milk, cream and fluid dairy products within the processing plant or receiving station shall be handled in such a manner as to minimize bacterial increase and shall be maintained at 45°F. or lower until processing begins.
 - (c) **Overflow and Spillage.** Product drip or spilled mix or frozen desserts or their ingredients, shall not be sold for human consumption.
 - (d) **Non-refrigerated Products.** Dairy products, mix or frozen dessert ingredients in dry storage shall be arranged in aisles, rows, sections, or lots or in such a manner as to be orderly and easily accessible for inspection and to permit adequate cleaning of the room. Dunnage or pallets shall be used when applicable. Dairy products, mix or frozen dessert ingredients shall not be stored with any product that would damage them or impair their quality. Open containers shall be carefully protected from contamination.
 - (e) **Refrigerated Products.** All products requiring refrigeration except where otherwise specified, shall be stored under such optimum temperatures and humidity as will maintain their quality and condition. Products shall not be placed directly on wet floors or be exposed to foreign odors or conditions such as dripping or condensation that might cause package or product damage.
 - (f) **Supplies.** Items in supply rooms shall be kept clean and protected and be so arranged as to permit inspection of supplies and cleaning and spraying of the room. Insecticides and rodenticides shall be properly labeled, segregated, and stored in a separate room or cabinet away from milk or dairy products or packaging supplies. Cans, parchment papers, wrappers, liners, gaskets and single service sticks, spoons, covers, and containers for frozen desserts, mix or their ingredients shall be purchased and stored only in sanitary tubes, wrappings, or cartons; shall be kept therein in a clean, dry place until used; and shall be handled in a sanitary manner.
- (4) **LABORATORY CONTROL TESTS.** Quality control tests shall be made by the laboratory on flow samples as often as necessary to check the effectiveness of processing in order to correct processing deficiencies. Routine analyses shall be made on raw materials and finished products to assure adequate composition and quality control.
- (5) **PACKAGING AND LABELING.**

- (a) **Packaging.** Frozen desserts and mix shall be packaged in commercially acceptable containers and packaging material that will protect the quality of the contents in regular channels of trade. Metal containers shall be free from rust, cracks, or unsanitary conditions. Prior to use, closures, covers, wrappers and containers shall be protected against dust, mold and other possible contamination. 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.
- (b) **Labeling.** Mix in commercial bulk shipping containers shall be tagged or legibly marked with the name of the product, pasteurization date or code, net contents, name and address of processor, manufacturer or distributor and plant code number. Containers for frozen desserts shall be labeled in accordance with the provisions of the U. S. Food and Drug Administration Standards of Identity for Frozen Desserts and/or the regulatory agency having jurisdiction.

(Rule 0080-3-1-.04, continued)

(c) General Labeling Requirements for Frozen Dietary Dairy Dessert and Frozen Dietary Dessert. All labels for frozen dietary dairy dessert or frozen dietary dessert shall list all ingredients in order of decreasing predominance.

1. If a frozen dietary dairy dessert or frozen dietary dessert purports to be or is represented for any special dietary use by man, its label shall bear a statement of the dietary properties upon which such use is based in whole or in part. Such statement shall show the presence or absence of any substance, any alteration of the quantity or character of any constituent, and any other dietary property of such food upon which such use is so based.
2. If a frozen dietary dairy dessert or frozen dietary dessert purports to be or is represented for special dietary use by reason of its use for treating any disease resulting from a dietary deficiency in man, its label shall bear, in addition to the information required under (c) of this section, adequate directions for such use.
3. If a frozen dietary dairy dessert or frozen dietary dessert purports to be or is represented for special dietary use by man by reason of its use as a means of regulating the intake of protein, fat, carbohydrate, or calories, for the purpose of controlling body weight, or for the purpose of dietary management with respect to disease, the label shall bear a statement of:

(i) The percent by weight of protein, fat, and available carbohydrates in such food; and

(ii) The number of available calories supplied by a specified quantity of such food.

(d) If a frozen dietary dairy dessert or frozen dietary dessert purports to be or is represented for special dietary use by man by reason of the presence of any constituent which is not utilized in normal metabolism, the label shall bear a statement of the percent by weight of such constituent, and, in juxtaposition with the name of such constituent, the word "nonnutritive". But if such constituent is saccharin or a saccharin salt, the label shall bear, in lieu of such statement and word, the statement "Contains saccharin (or saccharin salt, as the case may be), a nonnutritive, artificial sweetener which should be used only by persons who must restrict their intake of ordinary sweets," the blank to be filled in with the percent by weight of saccharin or saccharin salt in such food. The provisions of this section shall not be construed as authorizing the use of saccharin or its salts in any food other than one for use by persons who must restrict their intake of carbohydrates.

(6) RETURNS. Mix or frozen desserts in broken, opened or partially full containers may after delivery be returned to the plant for inspection, but shall not be sold or used for making mix or frozen desserts.

(7) LUBRICANTS. Lubricants approved for use on milk product contact surfaces that are applied to filling machine pistons and cylinders, pumps, and valves shall be sterile and shall be applied in a sanitary manner.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.

0080-3-1-.05 RECORDS REQUIRED TO BE KEPT BY PLANTS.

- (1) AVAILABILITY. All records required herein - (Secs. 19 thru 21) to be kept by plants shall be available for examination by the regulatory agency at reasonable times.
- (2) WATER SUPPLY TEST RECORDS. The results of all plant water supply tests shall be kept on file at the plant for at least 12 months.
- (3) RAW MILK BACTERIAL AND SEDIMENT RECORDS. Records of bacterial and sediment tests on raw milk shall be kept on file at the plant for at least 12 months.

(Rule 0080-3-1-.05, continued)

- (4) PASTEURIZATION RECORDER CHARTS. Recorder charts showing the pasteurization record for each day shall be appropriately marked with the name of the product, date, and signature of the operator. The charts shall be kept on file at the plant for at least 6 months.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.

0080-3-1-.06 MISCELLANEOUS.

(1) VEHICLES.

- (a) All vehicles used for the transportation of mix, frozen desserts, cream, milk and dairy products shall be constructed and operated so as to protect their contents from heat, sun and contamination. Such vehicles shall be kept clean, and no substance capable of contaminating mix, frozen desserts, cream, milk and dairy products shall be transported therein. Vehicles transporting frozen desserts and/or mix to wholesale or retail outlets shall have the name of the distributor prominently displayed thereon.
- (b) Cleaning and Sanitizing. A covered or enclosed washing dock and other facilities shall be available for all plants that receive or ship milk in tanks. Milk transport tanks, sanitary piping, fittings and pumps shall be cleaned and sanitized at least once each day, after use: provided; that if they are not to be used immediately after emptying a load of milk, they shall be washed promptly after use and given bactericidal treatment immediately before use. After being washed and sanitized, each tank shall be identified by a tag attached to the outlet valve, bearing the following information: plant and specific location where cleaned, date and time of day of washing and sanitizing, and name of person who washed and name of person who sanitized the tank. The tag shall not be removed until the tank is again washed and sanitized.

(2) Frozen Desserts Retail Establishments (Including Commissaries and Depots).

- (a) Retail establishments shall only receive quality frozen dessert mixes that have been manufactured by a source that has met the requirements of these, or comparable, regulations.
- (b) Storage of equipment and mixes shall be followed as written in rule 0080-3-1-.04(3). Liquid mixes shall be stored at temperatures below 45°F.
- (c) Equipment used in the manufacturing and/or reconstitution of frozen desserts shall meet applicable 3-A Sanitary Standards.
- (d) Equipment used in the manufacturing and/or reconstitution of frozen desserts shall be kept clean.
- (e) After being cleaned and immediately before use all equipment coming in contact with the frozen dessert mix or frozen dessert shall have an effective bactericidal or sanitizing treatment.
- (f) Before use equipment shall have been disassembled and thoroughly cleaned and sanitized. Dairy cleaners, wetting agents, detergents, sanitizing agents, or other similar material may be used that will not contaminate or adversely affect the product. Steel wool or metal sponges shall not be used.
- (g) Dry or powdered frozen dessert mixes shall be reconstituted with cold potable tap water in a sanitary manner and cool the resulting product to a temperature of between 33°F and 45°F within four hours of reconstitution. The produce shall meet the quality standards for frozen desserts as stated in rule 0080-3-1-.07(3) of this regulation.
- (h) Frozen dessert mixes which contain no milk or other dairy product ingredients but contain dry whey, reduced minerals whey, whey protein concentrate, reduced lactose whey and/or optional caseinates

(Rule 0080-3-1-.06, continued)

approved by the Commissioner or those frozen desserts which result in a pH of 4.6 or below, or a water activity of 0.85, or below, in its final state before freezing are exempt from the pasteurization requirements of the regulation. The wheys, caseinates or egg ingredients used in the formulation of these mixes shall have been pasteurized or subject to any other method of process demonstrated to be equally efficient. Powder or dry non-dairy frozen dessert mixes shall contain no ingredients except those which are generally recognized as safe by the Federal Food and Dairy Administration or those which are permitted by these regulations in a frozen dessert. The fact that the product offered for sale is a non-dairy frozen dessert shall be conspicuously displayed to the consumer, or the product offered for sale be declared by its standard of identity as described in Title 21, Part 135 of the Code of Federal Regulations.

Authority: T.C.A. §52-304. **Administrative History:** Original rule certified June 5, 1974. Amendment filed August 12, 1987; effective September 29, 1987.

0080-3-1-.07 PRODUCT TEST PROCEDURES AND QUALITY REQUIREMENTS.

- (1) The examination of Frozen Desserts and Their Ingredients.
 - (a) At irregular intervals during any 6 month period at least five samples of frozen desserts, pasteurized mix, and milk, cream, and dairy ingredients from each plant, shall be taken and examined by the regulatory agency. Provided, that the regulatory agency may accept the test results of laboratories which have been checked periodically and found satisfactory. Samples of the frozen desserts or mix may be taken at any time prior to final delivery. Samples of milk, cream, and dairy products shall be taken upon their arrival at the frozen desserts plant.
 - (b) The products shall be tested in accordance with tests and examinations contained in Standard Methods for the Examination of Dairy Products or Official Methods of Analysis of the Association of Official Agricultural Chemists.
 - (c) No ingredients shall be used in processing frozen desserts which are adulterated within the meaning of the Federal Food, Drug and Cosmetic Act, as amended, and General Regulations for its Enforcement.
- (2) Quality Standards for Raw Milk and Dairy Products Used as Ingredients in Frozen Desserts. All milk and milk products used for the manufacture of frozen desserts shall meet all the requirements of regulations promulgated by the Commissioner which regulate the production, transportation and processing of manufactured milk.
- (3) Quality Standards for Pasteurized Dairy Ingredients, Mix, or Frozen Desserts. Pasteurized* mix, dairy ingredients and frozen desserts shall comply with the following standards:

*The phenol value shall be no greater than the minimum specified for the particular product, as determined by the phosphatase test of the latest edition of "Standard Methods."

	Bacteria count standard plate count not more than—1	Coliform determination not more than—1	Storage temperature
Milk	50,000/ml	10/ml	45° F
Cream	50,000/ml	10/ml	45° F
Fluid dairy ingredient	50,000/ml	10/ml	45° F
Mix	50,000/ml	10/ml	45° F
Frozen dessert	50,000/gr	10/gr	45° F
Dry Dairy ingredient ⁵	50,000/gr	10/gr ⁴	45° F ²³

(Rule 0080-3-1-.07, continued)

- 1 In 3 out of the last 5 consecutive samples taken by the regulatory agency.
- 2 This does not preclude holding mix at higher temperatures for a short period of time immediately prior to freezing where applicable to particular manufacturing or processing practices.
- 3 This does not apply to sterilized mix in hermetically sealed containers.
- 4 20/gr. for chocolate, fruit, nuts or other bulky flavored frozen desserts.
- 5 Extra Grade or better as defined by U.S. Standards for Grades for the particular product.

(4) PLANT INSPECTION.

- (a) Each plant shall be inspected by an inspector of the Tennessee Department of Agriculture or by any other inspector acceptable to the Commissioner. If, upon initial inspection, the inspector finds that the plant meets the requirements for licensing described in 0080-3-1-.02(1) to 0080-3-1-.07(3) as indicated by the Plant Inspection Report Form 0080-3-1-.08(2), a license shall be issued to the plant as described in Section 52-306, Tennessee Code Annotated. If the plant does not meet the requirements for licensing, the plant shall be reinspected by an inspector within 30 days of the initial inspection. A longer time may be allowed if major changes or new equipment is required. If at this time the plant meets the requirements for licensing, a license shall be issued. If the plant does not meet the requirements for licensing, it shall not be licensed, and its authorization to handle, purchase, or receive milk or to manufacture mix or frozen dessert products therefrom shall be withheld until such time as the plant qualifies for a license.
- (b) Each completed Plant Inspection Report Form shall be kept by the Commissioner for a period of twelve (12) months, and a copy shall be given to the plant operator.

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.

0080-3-1-.08 SUPERVISION.

(1) REGULATORY AGENCY.

- (a) The regulatory agency to insure compliance with the provisions of the Tennessee Dairy Law and the rules and regulations shall:
 1. Periodically inspect plant premises, buildings, equipment, facilities, operations, and sanitary practices.
 2. Perform such other services and institute such other supervisory procedures as may be necessary to insure compliance with the provisions of the Tennessee Dairy Law and the rules and regulations.

(2) PLANT INSPECTION REPORT FORM.

- (a) Periodically inspect plant premises, buildings, equipment, facilities, operations, and sanitary practices.
- (b) Perform such other services and institute such other supervisory procedures as may be necessary to insure compliance with the provisions of the Tennessee Dairy Law and the rules and regulations.

(3) PLANT INSPECTION REPORT FORM.

(Rule 0080-3-1-.08, continued)

(a) The following form shall be used by inspectors in determining eligibility for plant licensing:

PLANT INSPECTION REPORT

Date _____

Name of plant _____

Owner or manager _____

Address _____

License No. _____

Products manufactured _____

Time of inspection ____ p.m., ____ a.m. ____ before, during, after processing.

Plant licensing requires that not more than 10 percent of the patron cans (including lids) shall show open seams, cracks, rust, milkstone, or any unsanitary condition; when used, HTST units shall meet the 3-A Accepted Practices for Sanitary Construction, Installation, Testing and Operation of HTST Pasteurizers; and a safe water supply is required with no cross-connections between safe and unsafe lines or between public and private water supplies.

Also a rating of not less than 85 percent of the maximum score allowed for the total of each applicable numbered group of items preceded by an asterisk (19, 20, 21, 22, 29, 30, 31, 37, 38 and 39). The total score of all applicable numbered items, including those marked with an asterisk, shall be not less than 85 percent of the possible total score. Subitems may be rated in quarter points.

PLANT INSPECTION REPORT FORM		
Maximum Score	Applicable Score	Score Given ¹

PREMISES, BUILDINGS, AND FACILITIES

- | | | |
|---|--|---------|
| 1. Premises and surroundings | | 2 _____ |
| Clean, 0.5. | | |
| Orderly, 0.5. | | |
| Properly drained, 0.5. | | |
| Free from foul odors or smoke, 0.5. | | |
| 2. Buildings | | 2 _____ |
| Sound construction, 1. | | |
| Clean, good repair, 1 | | |
| 3. Doors and windows | | 2 _____ |
| Clean, 0.5 | | |
| Screened or protected, 1 | | |
| Processing room outer doors open and close properly, 0.5. | | |

4. Conveyor and service-pipe openings covered or protected..	1 _____
5. Floors.....	2 _____
Smooth and impervious, 1.	
Good repair, 1.	
6. Wall and ceilings.....	4 _____
Smooth, 1.	
Impervious, 1.	
Washable, 1.	
Light Color, 1.	
7. Processing rooms.....	6 _____
Adequate size, 1.	
Clean, 0.5	
Orderly, 0.5	
No undue condensation or objectionable odors, 1.	
Ample light, well distributed, 1.	
Free from unnecessary equipment or utensils, 1.	
Free from insects and rodents, 1.	
8. Coolers and freezers	5 _____
Adequate size, 1.	
Clean, 0.5.	
Dry, 0.5.	
Orderly, 0.5.	
Sufficient refrigeration and air circulation, 2.	
Adequately lighted, 0.5.	
9. Dry storage space (product).....	4 _____
Adequate size, 1.	
Clean, 0.5.	
Dry, 0.5.	
Orderly, 0.5.	
Adequately lighted and ventilated, 0.5.	
Free from insects and rodents, 1.	
10. Supply rooms	3 _____
Dry, 0.5.	
Orderly, 0.5.	
Adequately lighted and ventilated, 0.5.	
Free from insects and rodents, 1.	

- 11. Toilet and dressing rooms 3 _____
 - Properly located and separated, 0.5.
 - Good repair, 0.5.
 - Self-closing doors, 0.5.
 - Clean, 0.5.
 - Orderly, 0.5.
 - Adequately lighted and well ventilated, 0.5.

- 12. Boiler and tool rooms separated from other room
and adequately lighted..... 1 _____

- 13. Laboratory 4 _____
 - Sufficient work area, 1
 - Adequately equipped, 1
 - Adequately staffed, 1
 - Adequately lighted and ventilated, 1

- 14. Water supply 2 _____
 - Ample hot and cold water, 1.
 - Conveniently located, 0.5.
 - Current bacterial tests on file, 0.5.
(date tested)

- 15. Steam 2 _____
 - Clean and nontoxic, 1.
 - Adequate supply and pressure, 1.

- 16. Drinking-water facilities sanitary and convenient 1 _____

See footnote at end of table.

(Signature) (Inspector)

(Title)

Maximum Score	Applicable Score	Score Given ¹
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- 17. Hand-washing facilities 2 _____
 - Properly equipped and clean, 1.
 - Convenient, 0.5.
 - Self-closing waste containers provided, 0.5

18. Waste disposal	2 _____
Sewer of sufficient capacity, 0.5.	
Nonpublic disposal methods approved, 0.5.	
Refuse in covered containers, 0.5.	
Waste paper properly handled, 0.5	
*19. Construction and maintenance.....	7 _____
Product contact surfaces of stainless steel or other equally corrosion-resistant material, 3.	
Good condition, 2.	
Accessible for cleaning, 2.	
*20. Pasteurizers	2 _____
Good operating order, 1.	
Equipped with thermometers and recorders, 1.	
*21. Thermometers and recorders.....	4 _____
Adequate, 2.	
Sufficiently accurate, 1.	
Recorder charts in order and on file, 1.	
*22. C-I-P and welded sanitary lines properly engineered and installed.....	2 _____
23. Portable equipment and utensils suitably stored.....	1 _____
24. Can washers.....	2 _____
Operating properly, 1.	
Clean, good repair, 1.	
25. Exhaust stacks, elevators, conveyors in good condition ..	1 _____
26. Vacuum cleaner in good condition used regularly, refuse disposal satisfactory.....	1. _____
27. Farm trucks	1. _____
Enclosed type, 1.	
Clean, 1.	

- 28. Transport tanks..... 4. _____
 - Good condition, interior smooth, enclosed tight-fitting cabinet, 1.
 - Piping and tubing capped, 0.5.
 - Washing facilities available, 1.
 - Tanks clean, 0.5.
 - Bactericidal -treated before use, 0.5.
 - Current cleaning and sanitizing in place, 0.5.

PLANT OPERATIONS

- *29.Cleaning and sanitizing plant equipment and utensils 5 _____
 - Equipment not designed for C-I-P is disassembled and thoroughly cleaned, 2
 - C-I-P system operate proper; properly, 1.
 - Utensils and other equipment and in-place pipelines thoroughly cleaned, 1.
 - All equipment subjected to an effective bactericidal treatment immediately before use, 1.

- 30. Raw-product storage, proper temperature maintained until start of processing 2 _____

- *31. Pasteurization..... 2 _____
 - Milk and cream properly pasteurized, 1.
 - Recorder corresponds to indicating thermometer, 1.

- 32. Processed fluid products cooled promptly..... 2 _____

- 33. Laboratory..... 2 _____
 - Tests adequate, 1.
 - Records available, 1.

- 34. Product containers clean and sound..... 2 _____

- 35. Dry Storage..... 2 _____
 - Product and supplies placed on dunnage or pallets, 1.
 - Arranged in aisles, rows, or sections, 1

- 36 Refrigerated or freezer storage..... 2 _____
 - Proper temperature maintained to protect quality, 1
 - Products not placed directly on wet floors, 1.

- *37. Personnel cleanliness 3 _____
 - Clean outer garments, .
 - Caps or hairnets worn, 0.5.
 - No smoking, 0.5
 - Good hygiene practiced, 1

- *38. Personnel health 2 _____
 - No communicable disease, 1.
 - General good health, 0.5.
 - Current medical records on file, 0.5.

- *39. Plant drains and sewers 2 _____
 - Drains properly trapped, 1.
 - No sewage backflow, 1.

¹ Indicate under "Remarks" specific deficiency or reason for disrating.
 Remarks: On the basis of this survey, this plant (is) (is not) eligible for a license.
 Note: 85% of --

- 1—0.85
- 2—1.70
- 3—2.55
- 4—3.40
- 5—4.25
- 6—5.10
- 7—5.95

(Signature) (Plant official)

(Title)

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974,

0080-3-1-.09 FROZEN DESSERTS.

Title 1 - Food and Drug (Federal), Part 2, Section 2, Frozen Desserts; Definitions and Standards of identity are hereby adopted as a part of this regulation in their entirety. (21 CFR 20).

Authority: T.C.A. Section 52-304. Administrative History. Original Rule certified June 5, 1974.