

Chapter ATCP 80

DAIRY PLANTS

Subchapter I — Definitions

ATCP 80.01 Definitions

Subchapter II — Dairy Plant License and Fees

ATCP 80.02 Dairy plant license

ATCP 80.04 Dairy plant fees

ATCP 80.06 Grade A dairy plant; permit

Subchapter III — Dairy Plant Facilities and Operations; General

ATCP 80.08 Construction and maintenance

ATCP 80.10 Personnel; sanitation standards

ATCP 80.12 Equipment and utensils

ATCP 80.14 C-I-P systems

ATCP 80.16 Dairy product packages

ATCP 80.18 Sanitizers and sanitizing methods

ATCP 80.20 Receiving milk and dairy products

ATCP 80.22 Storing and handling milk and dairy products

Subchapter IV — Milk Quality; Testing

ATCP 80.24 Milk quality standards

ATCP 80.26 Milk quality testing

ATCP 80.28 Persons authorized to perform milk quality tests

ATCP 80.30 Test samples

ATCP 80.32 Test methods

ATCP 80.34 Milk component testing devices

ATCP 80.36 Milk quality test records and reports

ATCP 80.38 False samples, test results or reports

Subchapter V — Pasteurization

ATCP 80.40 Pasteurization required

ATCP 80.42 Labeling pasteurized and unpasteurized products

ATCP 80.44 Pasteurization time and temperature

ATCP 80.46 Batch pasteurization

ATCP 80.48 High-temperature short-time (HTST) pasteurization

ATCP 80.50 Pasteurization records

ATCP 80.52 Pasteurizer testing

Subchapter VI — Dairy Plant Records and Reports

ATCP 80.54 Dairy plant records

ATCP 80.56 Dairy plant reports to department

ATCP 80.58 Confidential information

Subchapter VII — Inspection and Enforcement

ATCP 80.60 License suspension or revocation

ATCP 80.62 Grade A dairy plants; compliance monitoring

Appendix A: 3-A Sanitary standards and accepted practices

Note: See also chs. ATCP 60 (Dairy Farms), ATCP 82 (Milk Haulers) and ATCP 100 (Dairy Plant Payments to Milk Producers; Security)

Subchapter I — Definitions

ATCP 80.01 Definitions. In this chapter:

(1) "Bulk milk tanker" has the meaning specified under s. ATCP 82.01 (1).

(2) "Certifying agency" means the state of Wisconsin department of health and social services.

(3) "C-I-P system" means equipment that is designed, constructed and installed to be cleaned in place by the internal circulation of cleaning and sanitizing solutions onto product contact surfaces.

(4) "Composite sample" means a sample of milk which is collected from 2 or more milk shipments from the same milk producer, and which is compiled and preserved according to s. ATCP 80.30 (4).

(5) "Dairy plant" means any place where a dairy product is manufactured or processed for sale or distribution as human food, and includes a receiving station or transfer station.

(6) "Dairy plant operator" means a person who operates a dairy plant and who is required to be licensed under s. ATCP 80.02 (1).

(7) "Dairy product" means all of the following:

(a) Raw or processed milk.

(b) A milk product or by-product, including all dairy and nondairy ingredients incorporated into that milk product or by-product.

(c) A commodity in which milk or any milk product or by-product is a principal ingredient.

(8) "Department" means the state of Wisconsin department of agriculture, trade and consumer protection.

(9) "Equipment" means an implement, vessel, pipeline, machine or apparatus, other than a utensil, that has one or more product contact surfaces and is used in moving, handling, storing or processing dairy products at a dairy plant. "Equipment" includes C-I-P systems.

(10) "Fluid milk product" means cream, sour cream, half-and-half, sour half-and-half, whipped cream, concentrated milk, concentrated milk products, low fat milk, skim milk, flavored milk, buttermilk, cultured buttermilk, cultured milk, yogurt, low fat yogurt, nonfat yogurt, egg nog, holiday nog, nog flavored milk, vitamin and mineral fortified milk or milk products, and any other fluid product made by adding any substance to milk or any of these products.

(11) "Frozen dessert" means ice cream, French ice cream, artificially sweetened ice cream, frozen custard, frozen concentrates, ice milk, sherbet, water ice, quiescently frozen confection, quiescently frozen dairy confection, manufactured frozen dessert mix and frozen whipped cream confections. "Frozen dessert" includes frozen dessert mix.

(12) "Frozen dessert mix" means a mixture of frozen dessert ingredients that has not yet been processed and frozen to create a frozen dessert. "Frozen dessert mix" includes a mix of previously pasteurized dry dairy ingredients that is combined with potable water to create a liquid mix.

(13) "Grade A dairy plant" means a dairy plant required to hold a permit under s. ATCP 80.06.

(14) "Grade A dairy product" means a fluid milk product that is produced from grade A milk and processed and distributed in compliance with grade A standards under this chapter.

(15) "Grade A milk" means milk produced, processed and distributed in compliance with grade A requirements under this chapter and ch. ATCP 60.

(16) "Grade B dairy plant" means a dairy plant other than a grade A dairy plant.

(17) "Grade B dairy product" means a dairy product other than a grade A dairy product.

(18) "Grade B milk" means milk other than grade A milk.

(19) "Milk" means the lacteal secretion of cows, sheep or goats, and includes skim milk and cream.

(20) "Milk component test" means a test that determines the amount of milkfat, protein, total solids, solids-not-fat or other components in milk, and that may affect the price which a dairy plant operator pays a milk producer for milk.

(21) "Milk component testing device" means an automated testing device used to perform milk component tests.

(22) "Milk producer" means any person who owns or operates a dairy farm, and sells or distributes milk produced on that farm.

(23) "Milk quality test" means a bacteria count, somatic cell count, drug residue test, milk component test, or other analytical test which is used to determine compliance with milk quality standards under s. ATCP 60.15 or 80.24, or which may affect the price that a dairy plant operator pays a milk producer for milk.

(24) "Multi-use package" means a returnable bottle or other package that is designed for repeated use.

(25) "Package" means a container or wrapping, having one or more product contact surfaces, that is designed or used to enclose a dairy product sold or shipped from a dairy plant. "Package" includes package covers and other package components. "Package" includes all of the following:

- (a) A returnable bottle or other multi-use package.
- (b) A single-service package.

(c) A bulk or shipping container, other than a bulk milk tanker, that has one or more product contact surfaces and is used for the sale or shipment of a dairy product from a dairy plant.

(26) "Pasteurize" means to thermally process a dairy product, according to subch. V, in order to destroy pathogenic microbes in that dairy product. "Pasteurize" includes batch pasteurization, high-temperature short-time (HTST) pasteurization, ultrapasteurization, and other equally effective pasteurization processes that are approved by the department in writing.

(27) "Person" means an individual, corporation, partnership, cooperative, association, or any other business organization or entity. "Person" includes the state of Wis-

consin, and any subunit or agency of the state, to the extent that the state or its subunit or agency is engaged in operating a dairy plant.

(28) "Potable water" means water that is bacteriologically and chemically safe to drink, and that is free from harmful parasites.

(29) "Potentially hazardous food" means any food that consists wholly or in part of milk, milk products, eggs, meat, poultry, fish, shellfish, edible crustacea or other ingredients, and that is capable of supporting rapid and progressive growth of pathogenic or toxigenic microorganisms. "Potentially hazardous food" does not include foods having a Ph level of 4.6 or below, foods having a water activity value of 0.85 or less under standard conditions, or foods that are processed to prevent spoilage and packaged in hermetically sealed containers.

(30) "Processing" means pasteurizing, manufacturing, blending or packaging dairy products, or cooling processed dairy products.

(31) "Processing plant" means a dairy plant at which dairy products are processed.

(32) "Product contact surface" means a surface of equipment, or a surface of a utensil or package, with which a dairy product normally comes in direct contact, or from which materials may drain, drip or be drawn into a dairy product.

(33) "Receiving station" means a facility which is designed for the receipt and bulk storage of milk, and which is used to receive or store milk in bulk. "Receiving station" does not include a processing plant or a facility used to distribute pasteurized milk in bottled or packaged form to consumers.

(34) "Safe temperatures" as applied to potentially hazardous refrigerated foods means temperatures of 40° F. (5° C.) or below. As applied to potentially hazardous heated foods, "safe temperatures" means temperatures of 150° F. (65° C.) or above. As applied to frozen foods, "safe temperatures" means temperatures of 0° F. (-17° C.) or below.

(35) "Sanitize" means to destroy pathogens and other microorganisms by applying, to a clean product contact surface, a sanitizing procedure that complies with s. ATCP 80.18.

(36) "Shipping container" means a box, carton or similar container in which packaged dairy products are shipped in bulk from a dairy plant.

(37) "Single-service utensil" means a utensil that is designed to be used only once prior to disposal.

(38) "Single-service package" means a package that is designed to be used only once prior to disposal.

(39) "Standard of identity" means a dairy product standard of identity adopted or incorporated by reference under s. 97.09, Stats.

(40) "Transfer station" means a facility that is designed and used solely to transfer milk from one bulk milk tanker to another without intervening storage.

(41) "Ultrapasteurize" means to thermally process a dairy product according to s. ATCP 80.44 (3).

(42) "Utensil" means a hand-held or similarly portable container or device, such as a knife, spatula, strainer or scoop, that has one or more dairy product contact surfaces and is used in processing or handling milk or dairy products at a dairy plant.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter II — Dairy Plant License and Fees

ATCP 80.02 Dairy plant license. (1) LICENSE REQUIRED. Except as provided under sub. (2), no person may operate a dairy plant without a valid license issued by the department for that dairy plant. A dairy plant license expires on April 30 annually and is not transferable between persons or locations.

Note: See ss. 97.20 and 100.06, Stats.

(2) **LICENSE EXEMPTIONS.** A dairy plant license is not required under sub. (1) for any of the following:

(a) A farm manufacturing or processing dairy products solely for consumption by the owner or operator of the farm, members of the farm household, or nonpaying farm guests or employees.

(b) The retail preparation or processing of meals for sale directly to consumers or through vending machines, if the preparation and processing is covered under a restaurant permit or other permit issued under s. 254.64, Stats.

(c) A retail food establishment licensed under s. 97.30, Stats., if the establishment processes dairy products solely for retail sale at the establishment.

(d) A milk receiving station or transfer station operated at the same location, and by the same person, as a processing plant licensed under sub. (1).

(e) A milk transfer station operated at the same location, and by the same person, as a milk receiving station licensed under sub. (1).

(3) **LICENSE APPLICATION.** An application for a dairy plant license shall be made on a form provided by the department and shall be accompanied by each applicable fee required under s. ATCP 80.04. The application shall include the following information, and any other information reasonably required by the department for licensing purposes:

(a) The correct legal name of the dairy plant operator and any trade name used by the operator.

(b) The address and telephone number of the dairy plant to which the license application pertains, and the name of a responsible person who may be contacted at that address.

(c) A statement indicating whether the dairy plant is a processing plant, receiving station or transfer station.

(d) A description of the processing operations, if any, conducted at the dairy plant.

(e) All information required under s. ATCP 100.05.

(4) **ACTION ON LICENSE APPLICATION; DEADLINE.** The department shall grant or deny a license application under sub. (3) within 40 days after the department receives a complete application, or before the expiration date of any temporary license issued under sub. (6), whichever occurs later.

(5) **PREREQUISITES FOR LICENSING.** The department may not issue or renew a dairy plant license, or issue a temporary license under sub. (6), unless all of the following conditions are met:

(a) The license applicant has paid all fees and surcharges, set forth in a statement from the department, that are due and payable by the applicant under s. ATCP 80.04. The department shall refund a fee or surcharge paid under protest if the department determines that the fee or surcharge is not due and payable under s. ATCP 80.04.

(b) The license applicant has filed all financial information and security which the department requires of that applicant under ch. ATCP 100. If an applicant has not filed required financial information or security, the department may issue a conditional license that prohibits the licensed operator from buying milk or fluid milk products from producers or their agents, but allows the operator to buy milk or fluid milk products from other sources.

(c) The department has inspected the dairy plant under sub. (7) (b) if the dairy plant is not currently licensed.

(6) **TEMPORARY LICENSE.** (a) Except as provided under par. (c), the department may issue a temporary dairy plant license to an applicant under sub. (3) pending the department's final action on that person's license application. A temporary license may be issued for a period of not more than 40 days. If the department denies a license application before the applicant's temporary license expires, the temporary license is automatically terminated when the applicant receives written notice of the denial.

(b) The holder of a temporary license under par. (a) acquires no rights beyond those conferred by the temporary license. The holder of a temporary license may not purchase milk or fluid milk products from milk producers or their agents, but may purchase milk or fluid milk products from other sources.

(c) The department may not issue a temporary license under par. (a) in response to a license renewal application by the holder of an existing license.

(7) **PRE-LICENSE INSPECTION.** (a) The department may inspect a dairy plant, as the department deems necessary, before issuing a license for that dairy plant.

(b) The department may not issue a dairy plant license under sub. (1) or a temporary license under sub. (6) for a dairy plant that is not currently licensed until the department inspects that dairy plant for compliance with this chapter.

Note: The department is not required to inspect a currently licensed dairy plant before renewing the license of the current operator, or before issuing a license to a new operator of that dairy plant.

(8) **ADDED OPERATIONS.** No dairy plant operator may add a new category of operations at a licensed dairy plant during the time period for which the license was issued unless the operator notifies the department and obtains

written authorization for the new category of operations. In this subsection, "new category of operations" includes the manufacture or processing of any of the following which was not identified in the operator's most recent license application under sub. (3):

- (a) Fluid milk products.
- (b) Cheese and cheese products.
- (c) Ice cream or frozen desserts.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.04 Dairy plant fees. (1) **DAIRY PLANT LICENSE FEE.** (a) *Annual license fee.* 1. An applicant for a dairy plant license shall pay the annual license fee specified under par. (b). Except as provided under subd. 2, license fees under par. (b) are based on the dairy plant's milk receipts or production during the previous calendar year, regardless of who operated that dairy plant in that previous calendar year.

2. If a dairy plant had no milk receipts or production during the previous calendar year, license fees under par. (b) shall be based on projected milk receipts or production during the license year for which application is made. At the end of that license year, the license holder shall report the actual milk receipts or production during the license year, and the department shall determine the appropriate fee under par. (b) based on actual receipts or production. If the fee based on actual receipts or production differs from the fee based on projected receipts or production, the license holder shall pay the balance due or receive a credit from the department on the next year's license fee.

(b) *License fee amounts.* An applicant for a dairy plant license shall pay a basic license fee of \$80 plus a supplementary license fee as follows:

1. For a grade A processing plant, a supplementary license fee of \$650 if the plant received more than 2,000,000 pounds of milk from milk producers, or a supplementary license fee of \$500 if the plant received 2,000,000 pounds or less of milk from producers.

2. For a grade B processing plant that manufactured or processed more than 1,000,000 pounds of dairy products or more than 200,000 gallons of frozen dairy products, a supplementary license fee of \$270.

3. For a grade A receiving station, a supplementary license fee of \$250.

(c) *Surcharge and past fees for operating without license.* 1. An applicant for a dairy plant license shall pay a license fee surcharge if the department determines that, within 365 days prior to submitting the license application, the applicant operated the dairy plant without a license in violation of s. ATCP 80.02 (1). The amount of the surcharge is \$100, or \$500 if the dairy plant operator procured milk or fluid milk products from milk producers or their agents.

2. In addition to paying the license fee surcharge under subd. 1, an applicant who violated s. ATCP 80.02 (1) shall pay all fees, set forth in a statement from the department, that are due for the license year in which the applicant violated s. 80.02 (1).

Register, November, 1994, No. 467

3. Payment of the license fee surcharge and past fees under subd. 1 and 2 does not relieve the applicant of any other civil or criminal liability that results from the unlicensed operation of a dairy plant, but does not constitute evidence of any violation of law.

(2) **MILK PROCUREMENT FEE; MONTHLY PAYMENT.** (a) *Monthly fee required.* On or before the 18th day of each month, a dairy plant operator shall pay a milk procurement fee in the amount specified under par. (b). The monthly fee shall be based on the amount of milk that was delivered to the dairy plant from milk producers in the month preceding the month when the fee payment is due, regardless of who operated that dairy plant during that preceding month.

(b) *Fee amounts.* Milk procurement fees required under par. (a) are as follows:

1. For each 100 pounds of grade A milk received from milk producers, 0.4 cent.

2. For each 100 pounds of grade B milk received from milk producers, 0.2 cent.

(c) *Out-of-state milk shipments.* A milk producer who ships milk to an out-of-state dairy plant shall pay a monthly milk procurement fee under par. (a) on that milk, in the amount specified under par. (b), unless the operator of that out-of-state dairy plant voluntarily pays that fee for the milk producer.

(3) **REINSPECTION FEE.** (a) *Fee required.* If the department reinspects a dairy plant because the department has found a violation of this chapter, the department shall charge the dairy plant operator the reinspection fee specified under par. (b). A reinspection fee is payable when the reinspection is completed, and is due upon written demand from the department. The department may issue a demand for payment when it issues a license renewal application form to the dairy plant operator, or at any other time after the fee payment becomes payable.

(b) *Fee amounts.* The reinspection fee required under par. (a) includes, for each reinspection, a basic reinspection fee of \$40 plus a supplementary reinspection fee as follows:

1. For a grade A processing plant, a supplementary reinspection fee of \$160 if the plant received more than 2,000,000 pounds of milk from milk producers during the previous calendar year, or a supplementary reinspection fee of \$125 if the plant received 2,000,000 pounds or less of milk from milk producers during the previous calendar year.

2. For a grade B processing plant, a supplementary reinspection fee of \$140.

3. For a grade A receiving station, a supplementary reinspection fee of \$60.

(4) **MILK PRODUCER FEES.** A dairy plant operator shall pay milk producer license and reinspection fees on behalf of milk producers, as required by ss. ATCP 60.02 (4) and 60.04 (3). A milk producer reinspection fee is payable by a dairy plant operator when a dairy farm reinspection is completed, and is due upon written demand from the department. The department may issue a demand for payment when it issues a license renewal application to the

dairy plant operator, or at any other time after the reinspection fee becomes payable.

Note: Under s. ATCP 60.02 (4), a dairy plant operator who pays milk producer license fees may charge those fees back to those producers in a nondiscriminatory fashion after giving prior notice to the producers, but may not deduct the license fees from the producers' milk checks. Under s. ATCP 60.04 (3), a dairy plant operator who pays milk producer reinspection fees must charge those reinspection fees back to milk producers.

(5) **DAIRY PRODUCT GRADING FEE.** (a) *General requirement.* Except as provided under par. (b), an applicant for a license for a grade B dairy plant that produces butter or cheese shall pay a grading fee of 1.09 cents for each 100 pounds of gradable butter or cheese produced by that dairy plant during the previous calendar year, regardless of who operated that dairy plant during the previous calendar year.

(b) *New dairy plant.* If a dairy plant under par. (a) was not operated in the previous calendar year, the license applicant shall estimate the amount of gradable butter and cheese that will be produced at that dairy plant during the calendar year in which the license application is made, and shall pay an estimated grading fee of 1.09 cents for each 100 pounds of estimated production. At the end of the license year, the license holder shall report the actual calendar year production which the license holder had previously estimated, and the department shall recompute the grading fee based on actual production. If the fee based on actual production differs from the estimated fee, the license holder shall pay the balance due or receive a credit from the department on the next year's grading fee.

(6) **MILK PRODUCER SECURITY FEE; MONTHLY PAYMENTS.** A dairy plant operator shall pay the monthly milk producer security fee specified under s. ATCP 100.06. The dairy plant operator shall pay the fee on each month's milk deliveries on or before the 18th day of the following month.

(7) **DAIRY TRADE PRACTICES FEE; MONTHLY PAYMENTS.** A dairy plant operator shall pay a monthly dairy trade practice fee if required under s. 100.201 (6), Stats.

Note: A dairy plant operator is required to pay a monthly dairy trade practice fee under s. 100.201 (6), Stats., if the operator sells milk, fluid milk products, ice cream or other frozen desserts at wholesale or retail, in consumer package form, to persons in this state.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.06 Grade A dairy plant; permit. (1) **GRADE A PERMIT REQUIRED.** (a) Except as provided under sub. (2), no person operating a dairy plant at which milk or fluid milk products are received, transferred or processed may sell or distribute that milk or those fluid milk products as grade A milk or grade A milk products unless that person holds a valid grade A dairy plant permit issued by the department for that dairy plant. If a grade A receiving station or transfer station is operated at the same location as a grade B processing plant, a grade A permit is required for that receiving station or transfer station.

(b) A grade A dairy plant permit expires on April 30 annually and is not transferable between persons or locations. A grade A dairy plant permit may be issued in the form of an endorsement on a dairy plant license under s. ATCP 80.02 (1).

(2) **PERMIT EXEMPTIONS.** A grade A permit is not required under sub. (1) for any of the following:

(a) A grade A receiving station or transfer station operated at the same location, and by the same person, as a grade A processing plant covered by a permit under sub. (1).

(b) A grade A transfer station operated at the same location, and by the same person, as a grade A receiving station covered by a permit under sub. (1).

(3) **PERMIT APPLICATION.** An application for a grade A dairy plant permit shall be made on a form provided by the department. A grade A permit application may be made in conjunction with a dairy plant license application under s. ATCP 80.02 (3).

(4) **SURCHARGE FOR OPERATING WITHOUT A PERMIT.** An applicant for a grade A dairy plant permit shall pay a permit surcharge of \$100 if the department determines that, within 365 days prior to submitting the permit application, the applicant operated the dairy plant as a grade A dairy plant without a grade A permit in violation of sub. (1). Payment of the surcharge does not relieve the applicant of any other civil or criminal liability that results from the operation of a grade A dairy plant without a grade A permit, but does not constitute evidence of any violation of law.

(5) **ACTION ON PERMIT APPLICATION; DEADLINE.** The department shall grant or deny a permit application under sub. (3) within 40 days after the department receives a complete application, or before the expiration of any temporary permit issued under sub. (6), whichever occurs later.

(6) **TEMPORARY PERMIT.** The department may issue a temporary grade A permit to an applicant under sub. (3) pending final action on that person's permit application. A temporary permit may be issued for a period of not more than 40 days, and may not exceed the term of the dairy plant license or temporary license. If the department denies a permit application before the term of the temporary permit expires, the temporary permit is automatically terminated when the applicant receives notice of the denial. The department may not issue a temporary permit in response to a permit renewal application by the holder of an existing permit.

(7) **PREREQUISITES FOR PERMIT.** The department may not issue or renew a grade A dairy plant permit, or issue a temporary permit under sub. (6), unless all of the following conditions are met:

(a) The permit applicant holds a dairy plant license under s. ATCP 80.02, or the department issues the permit and license simultaneously. The department may issue a temporary grade A permit under sub. (6) to an applicant holding a temporary dairy plant license under s. ATCP 80.02 (6), or may issue the temporary permit and temporary license simultaneously.

(b) The department inspects the dairy plant if the dairy plant is not currently covered by a grade A dairy plant permit.

(c) The applicant pays any surcharge, set forth in a statement from the department, that is due and payable by the applicant under sub. (4). The department shall

refund a surcharge paid under protest if the department determines that the surcharge was not due and payable under sub. (4).

(8) **GRADE A STANDARDS.** A grade A dairy plant shall comply with standards applicable to the receipt, testing, transfer, processing and distribution of grade A milk and grade A milk products under this chapter and ch. ATCP 60. A grade A dairy plant may not receive, transfer or process grade B milk unless the receipt, transfer or processing is authorized by the department in writing.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter III — Dairy Plant Facilities and Operations; General

ATCP 80.08 Construction and maintenance. (1) GENERAL.

(a) Buildings, facilities and equipment used in the operation of a dairy plant shall be soundly constructed, and shall be capable of being maintained in a clean and sanitary condition. The interior and exterior portions of a dairy plant, and the premises on which a dairy plant is located, shall be kept free of unhealthful and unsanitary conditions, and shall be maintained in compliance with this chapter.

(b) The department may issue a written waiver granting a variance from a construction standard under this subchapter if the department finds that the variance is reasonable and necessary under the circumstances, and will not compromise the purpose served by the construction standard. A waiver under this paragraph may be issued by the administrator of the division of food safety, or the administrator's designee.

(2) **FLOORS.** The floors of all rooms in which dairy products are processed, handled or stored, or in which dairy product containers, equipment or utensils are washed, shall be all of the following:

(a) Kept clean and in good repair.

(b) Smooth enough to be easily cleanable.

(c) Constructed of concrete or equally impervious and easily cleanable materials. This paragraph does not prohibit tightly joined wooden floors in storage rooms used solely for the storage of dry ingredients or packaging materials, or both.

(d) Sloped to provide adequate drainage. This paragraph does not apply to floors in storage rooms used solely for the storage of dry ingredients or packaging materials, or both.

(e) Equipped with an adequate number of trapped floor drains, so that any liquids draining onto the floors are promptly removed. Floors in refrigerated storage rooms need not have floor drains if the floors are sloped to drain to one or more exits to prevent pooling of liquids.

(3) **WALLS AND CEILINGS.** (a) Walls and ceilings of rooms in which dairy products are handled, processed or stored, or in which dairy product containers, equipment or utensils are washed, shall have a smooth, washable and light-colored surface, and shall be kept clean and in good repair. Suspended ceiling panels are prohibited in any

Register, November, 1994, No. 467

room where powdered dairy products are packaged or processed if that room is constructed or substantially altered after December 1, 1994.

Note: Walls and ceilings may consist, for example of smooth finished concrete construction panels or cement plaster.

(b) If condensation may accumulate on overhead pipes, ducts or other fixtures, those fixtures shall be arranged or shielded so that condensation does not drop into dairy products or onto product contact surfaces.

(c) In rooms constructed or substantially altered after the effective date of this chapter, the junctions of walls and floors in processing areas shall be coved to facilitate cleaning.

(4) **DOORS, WINDOWS AND OTHER OPENINGS.** (a) Doors, conveyor openings, and other openings to the outside environment shall be kept closed when not in use, and shall at all times be protected against the entry of insects, rodents and excessive dust. Doors to the outside, other than overhead doors and electronic sliding doors in delivery areas, shall be self-closing.

Note: Air curtains, strip curtains and similar devices may be used to prevent insects and excessive dust from entering through doors and other openings while those openings are in use. Emergency exit doors need not be self-closing unless they are routinely used by dairy plant personnel.

(b) Windows, if not permanently closed, shall be screened against flying insects, rodents and birds. In dairy plants constructed or substantially altered after the effective date of this chapter, window ledges shall be sloped to an angle of at least 45° to facilitate cleaning.

(c) Outside openings of dairy product pipelines shall be tightly capped when not in use. When a pipeline is in use, the pipeline cap shall be tethered or placed on a sanitary hanger or rack to protect it from contamination. Pipeline openings through walls shall be completely cemented or fitted with tight metal collars.

(d) At each doorway leading from a nonprocessing area to a processing area in which exposed dairy products are processed, a dairy plant operator shall provide a sanitizing footbath, disposable footwear, dedicated footwear or other facilities to ensure that footwear worn in the processing area is clean and sanitary.

(5) **LIGHTING.** (a) Lighting in every area of a dairy plant shall be fully adequate for the purpose for which the area is used. Except as provided under par. (b) or (c), there shall be at least 5 foot candles (54 lux) of illumination, measured at 30 inches above the floor, in every part of a dairy plant.

(b) Except as provided under par. (c), there shall be at least 30 foot candles (323 lux) of illumination at every place where dairy products are processed, and at every place where equipment or utensils are washed.

(c) There shall be at least 50 foot-candles (538 lux) of illumination on every surface where dairy products are graded or examined for condition and quality, and on every surface where multi-use packages are inspected before being reused.

(d) Light bulbs, fluorescent tubes, skylights and other overhead glass fixtures shall be shielded to prevent broken glass from falling into dairy products or onto dairy product contact surfaces.

(6) **VENTILATION.** (a) Every room in a dairy plant shall be adequately ventilated, and adequately controlled for temperature and humidity, to keep the room reasonably free of fumes, odors, mildew and excessive condensation.

(b) Ventilation systems, including exhaust fans, intake fans and ventilation ducts shall be kept clean and in good repair, and shall be screened or louvered to prevent contamination of dairy products by dust, insects or other contaminants. Intake fans shall be equipped with filters that are readily removable for cleaning and replacement. Air intake filters shall be capable of removing at least 85 percent of particulate matter which is 5 microns or larger in size.

(c) Ventilation systems in a dairy plant shall be positioned so that exhaust air does not contaminate exposed dairy products, clean dairy product packages or clean equipment or utensils.

(7) **ROOM SEPARATION.** (a) Within a dairy plant, none of the following areas may be located in the same room with any of the other areas:

1. Raw milk unloading areas. Except as provided under par. (b) or (c), this does not prohibit a dairy plant operator from cooling, separating, clarifying or storing raw milk in the same area where raw milk is unloaded.

2. Processing areas. Except as provided under par. (b) or (c), this does not prohibit a dairy plant operator from cooling, separating, clarifying or storing raw milk in the same area where raw milk is unloaded.

3. Areas used to clean or sanitize milk cans, bottles or containers.

4. Areas used to store dairy product ingredients or packaging materials, other than raw milk. Ingredients and packaging materials required for each day's processing operations may be kept in the processing area for that day.

5. Areas used for boiler, heating plant, utility or tool storage facilities.

6. Employee toilet areas.

7. Employee locker areas, dressing areas, break areas or lunch areas.

8. Areas, if any, that are used as living quarters.

(b) Raw milk may not be cooled, separated, clarified or stored in the same area where raw milk is unloaded from bulk milk tankers unless both of the following apply:

1. The raw milk unloading area is located in a fully enclosed room.

2. The storage tanks and equipment used in cooling, separating, clarifying or storing the raw milk are equipped with air filters to preclude contamination of milk, or are vented to a processing area or tank gallery room that complies with processing area sanitation standards under this chapter.

(c) Raw milk may not be cooled, separated, clarified or stored in the same area where raw milk is unloaded from bulk milk tankers if any of the following applies:

1. The dairy plant is constructed after December 1, 1994.

2. The dairy plant is a grade A dairy plant that was constructed on or after July 1, 1980.

3. The raw milk cooling, separation, clarification or storage operation is initiated after December 1, 1994.

(d) In dairy plants constructed after December 1, 1994, raw milk shall be unloaded in a fully enclosed room.

(e) Bulk milk tankers may be cleaned and sanitized in the same room where milk is unloaded from those bulk milk tankers.

Note: See s. ATCP 82.08 (2).

(f) Rooms are considered separate, for purposes this subsection, if they are fully separated by permanent floor-to-ceiling partitions and if doorways between the rooms are equipped with solid, tight-fitting, self-closing doors.

(8) **WATER SUPPLY.** (a) Water used in dairy plant operations, or as an ingredient in dairy products, shall be obtained from a source that complies with ch. NR 811 or 812, administered by the Wisconsin department of natural resources. All water obtained for use in a dairy plant shall comply with the health related drinking water standards in ch. NR 809. Water shall be available in consistently adequate quantity for all dairy plant operations, including processing, cleaning, handwashing and drinking.

(b) If water is obtained from a privately owned water system, the dairy plant operator shall, at least once every 6 months, collect and analyze a sample of the water for compliance with the microbiological standards under NR 809.30. Microbiological analyses shall be conducted in a laboratory certified under s. 252.22, Stats.

(c) At the department's request, a dairy plant operator who receives water from a municipal source shall provide the department with documentation showing that the water complies with the microbiological standards under s. NR 809.30.

(d) Recirculated water used in a cooler or heat exchanger shall be all of the following:

1. Obtained from a safe source that complies with par. (a).

2. Bacteriologically safe.

3. Protected from contamination.

4. Tested by the department at least semiannually.

(e) If a recirculating water system under par. (d) becomes contaminated, that system may not be used until it is properly treated and retested to ensure that the contamination has been eliminated. Freezing point depressants used in recirculating water systems under par. (d) shall be nontoxic.

(f) Water reclaimed from milk or dairy products may be used as rinse water or cleaning solution make-up water if all of the following conditions are met:

1. The department inspects and approves the reclamation system before it is used.

ATCP 80.09

2. The reclaimed water is free of coliform bacteria.
3. The standard plate count of the reclaimed water does not exceed 500 per ml.
4. The organic content of the reclaimed water is less than 12 mg. per liter.
5. The reclaimed water has no off odors, flavors or slime formations.
6. Chemicals used to suppress bacterial growth, tastes or odors in the reclaimed water are approved by the department and are added to the water by means of an automatic proportioning device. Reclaimed water shall be tested at least daily for each added chemical.
7. The reclaimed water is tested organoleptically at least weekly.
8. Reclaimed water is tested at least semi-annually for bacteriological and organic content. Reclaimed water shall be tested daily for at least 2 weeks following approval of the reclamation system under subd. 1, and for at least one week following any repairs or alterations to the system.
9. There are no cross-connections between reclaimed water lines and any public or private water system.

(9) PLUMBING SYSTEM; DISPOSAL OF SEWAGE AND LIQUID WASTE. (a) All dairy plant plumbing, plumbing fixtures and equipment shall comply with state and local plumbing codes, and shall be designed, installed and maintained to prevent backflow, backsiphonage and cross-connections.

(b) Sewage and liquid waste from a dairy plant shall be removed in a sanitary manner, in compliance with applicable state and local regulations.

Note: Plumbing and plumbing fixtures must comply with applicable rules of the Wisconsin department of industry, labor and human relations under chs. ILHR 82 to 86.

(10) CLEANING FACILITIES. (a) If equipment or utensils in a dairy plant are cleaned or sanitized manually, the dairy plant shall be equipped with wash and rinse sinks that are suitable for all manual cleaning and sanitizing operations. Sinks shall be conveniently located and adequate in number, and shall comply with all of the following requirements:

1. Every sink shall be constructed of stainless steel or other materials approved by the department.
2. Every sink shall have at least 2 compartments. If a dairy plant is also engaged in food processing as defined under s. 97.29 (2) (b), Stats., every sink installed in a food processing area after December 1, 1994 shall have at least 3 compartments for washing, rinsing and sanitizing equipment and utensils unless the dairy plant operator uses an alternative method for sanitizing equipment and utensils.
3. Every sink compartment shall be large enough so that the largest item cleaned or sanitized in the sink can be halfway immersed in the sink. Every sink compartment shall be served by hot and cold running water, and shall be cleaned prior to each use.

(b) Sinks used to clean and sanitize equipment and utensils may not be used as handwashing sinks.

(c) Brushes and other cleaning tools used to clean equipment and utensils shall be cleaned after each use and sanitized prior to their next use. Single-service disposable towels, if used to clean equipment or utensils, shall be discarded after a single use.

(d) If a mechanical system is used to clean or sanitize equipment or utensils, the mechanical system shall be designed, installed and maintained so that it is fully effective for the purpose used.

(e) A dairy plant shall be equipped with conveniently located hose connections to facilitate cleaning operations in the dairy plant. When hoses are not in use, they shall be neatly stored off the floor on racks or reels.

(11) TOILET FACILITIES. (a) Every dairy plant shall have toilet facilities that comply with ss. ILHR 52.50 to 52.64 and 54.12, administered by the Wisconsin department of industry, labor and human relations.

(b) Toilet rooms shall be conveniently located, but shall not open directly into any room where milk or dairy products are processed. Every toilet room shall be completely enclosed and shall have a tight-fitting, solid, self-closing door. The door shall be kept closed except when the toilet room is being cleaned or repaired.

(c) Toilet rooms and fixtures shall be kept clean, sanitary and in good repair. A supply of toilet tissue shall be provided at each toilet at all times.

(d) Every toilet room shall be equipped with handwashing facilities with hot and cold running water, soap, and single service towels or air drying equipment. Common towels are prohibited. Easily cleanable, covered receptacles shall be provided for waste materials.

(e) One or more conspicuous signs, directing personnel to wash their hands before returning to work, shall be prominently posted in every toilet and dressing room. Signs shall be clearly printed in a language or languages that can be understood by all dairy plant personnel.

(12) LOCKER AND LINEN FACILITIES. (a) Clothing and personal items of dairy plant personnel, when not being worn or carried, shall be neatly stored in lockers or comparable facilities provided for that purpose. Clothing and personal items may not be stored in areas where milk, dairy products or ingredients are received, processed, handled or stored, or in areas where dairy product containers, equipment or utensils are cleaned or stored.

(b) Work clothing, when not being worn by dairy plant personnel, shall be stored in an orderly and sanitary manner. Soiled linen and clothing shall be kept in nonabsorbent containers or laundry bags until removed for laundering or disposal. Soiled linen and clothing shall be removed as often as necessary to prevent unsanitary conditions.

(13) HANDWASHING SINKS IN PROCESSING AREAS. (a) Handwashing sinks with available hot and cold running water shall be provided for use by all dairy plant personnel working in processing areas. The sinks shall be conveniently accessible, and shall be kept in a clean and sanitary condition.

(b) A supply of soap or detergent, and a sanitary single-service means for drying hands, shall be provided at each handwashing sink at all times. Common towels are pro-

hibited. If disposable towels are used, a clean covered waste receptacle shall be provided for their disposal.

(c) A handwashing sink may not be used to clean or sanitize equipment or utensils.

(d) A handwashing sink installed to serve a processing area after December 1, 1994 shall be located in that processing area. The sink shall be served by potable tempered water, or by potable hot and cold water delivered through a mixing valve or combination faucet. The sink shall not be hand operated. If a self-closing, slow-closing or metered faucet is used, the faucet shall provide an uninterrupted flow of water for at least 15 seconds before it becomes necessary to reactivate the faucet.

(e) An automatic handwashing device may be substituted for a handwashing sink under this subsection if the automatic handwashing device provides a safe and effective means for washing hands.

(14) **INTERIOR PREMISES; CLEANLINESS.** Every room of a dairy plant shall be kept in a clean and orderly condition.

(15) **EXTERIOR PREMISES; CLEANLINESS.** (a) The premises surrounding a dairy plant shall be well drained and shall be kept in an orderly condition. The premises shall be kept free of accumulated trash, garbage and other sanitation hazards. Driveways and parking lots shall be surfaced or maintained to minimize airborne dust and dirt.

(b) Every outdoor storage tank used for liquid food ingredients shall be located on a drained impermeable surface. All loading and unloading of liquid food ingredients from that storage tank shall be conducted over a drained impermeable surface.

(16) **GARBAGE AND SOLID WASTE DISPOSAL.** (a) Garbage and solid waste shall be removed from the dairy plant premises as often as necessary to keep the premises in a clean and sanitary condition.

(b) Garbage and solid waste storage areas shall be constructed and maintained so that they do not attract or harbor insects, rodents or other animals.

(c) Garbage and solid waste shall be held in durable, leakproof, easily cleanable and pest-resistant containers. Containers shall be covered with tight-fitting lids, and shall be cleaned when necessary to prevent unsanitary conditions. Waste containers receiving solid waste from packaging and bottle washing operations may be uncovered, if necessary, when those operations are in progress.

(d) No garbage or solid waste may be burned on the dairy plant premises, except in compliance with state and local regulations. No garbage or solid waste may be burned on the premises if the burning may contaminate dairy products.

(17) **PEST CONTROL.** A dairy plant shall be free of any evidence of insect, rodent or other pest infestation. A dairy plant operator shall take effective measures to prevent and, if necessary, control pest infestations. No pesticide may be stored, handled or used in a manner inconsistent with label directions, in a negligent manner, or in a manner that may contaminate dairy products.

Note: Pesticides must be handled, stored and used in compliance with ss. 94.67 to 94.71, Stats., and ch. ATCP 29.

(18) **CONSTRUCTION PLANS; NOTIFICATION; REVIEW.** Before constructing, substantially reconstructing or extensively altering a dairy plant, a dairy plant operator shall provide the department with complete plans and specifications for the construction, reconstruction or alteration. Within 30 days after a dairy plant operator files plans with the department under this subsection, the department shall return its comments or objections, if any, in writing.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.10 Personnel; sanitation standards. (1) **CLEANLINESS AND SANITATION; GENERAL.** (a) Within a dairy plant, access to processing areas shall be restricted to dairy plant employees and other authorized personnel.

(b) Persons who handle or process dairy products shall maintain a high degree of personal cleanliness, and shall observe good hygienic practices during all working periods.

(c) Persons who handle or process dairy products shall thoroughly wash their hands before beginning work and before returning to work after using toilet facilities, eating, smoking, or engaging in other activities that may contaminate their hands.

(d) No person having a discharging or infected wound, sore or lesion on his or her hands or exposed arms may handle or process unpackaged dairy products.

(e) Persons who handle or process dairy products shall keep their fingernails clean and neatly trimmed. They shall not wear fingernail polish unless they wear sanitary gloves at all times when working.

(f) No person infected with a disease communicable by food handling may work in a dairy plant in any capacity that may contaminate dairy products.

(2) **CLOTHING AND JEWELRY.** (a) Whenever any person is in a processing area, or is engaged in handling unpackaged milk or dairy products, that person shall wear clean washable outer garments and an effective hair restraint, including an effective hair restraint for any beard longer than ¼ inch. Hair restraints may include hair nets, caps and snoods, but do not include hairsprays, visors or headbands.

(b) No person may wear any jewelry while working in a processing area or handling unpackaged dairy products. This paragraph does not apply to plain band wedding rings.

(3) **CONSUMPTION OF FOOD, BEVERAGES AND TOBACCO.** No person may consume food, beverages or tobacco in any processing area, or in any area where food processing equipment or utensils are cleaned or stored. Employees may not consume food, beverages or tobacco except in designated areas that are separated from food processing areas. This subsection does not prohibit a sanitary water fountain in a processing area, nor does it prohibit on-line quality control sampling according to written quality control procedures established by the dairy plant operator.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.12 Equipment and utensils. (1) **CONSTRUCTION AND MAINTENANCE.** (a) Equipment and utensils, including C-I-P systems, shall be of sanitary design and con-

struction. Equipment and utensils, including C-I-P systems installed after the effective date of this chapter, shall comply with applicable "3-A Sanitary Standards" and "3-A Accepted Practices" listed in APPENDIX A to this chapter.

Note: The "3-A Sanitary Standards" and "3-A Accepted Practices" listed in APPENDIX A are published jointly by the International Association of Milk, Food and Environmental Sanitarians, Inc., and the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services. Copies are on file with the department, the secretary of state and the revisor of statutes. Copies may be purchased from the International Association of Milk, Food and Environmental Sanitarians, Inc., 6200 Aurora Avenue, Suite 200 W., Des Moines, Ia 50322.

(b) Equipment and utensils shall be readily accessible for cleaning and inspection, and shall be designed and constructed so that they can be easily cleaned. Equipment and utensils shall be kept clean and in good repair.

(c) Tanks, vats, separators and other containers used to store or process dairy products shall be designed or equipped with appropriate devices to prevent surface condensation and drainage from entering the container.

(d) Pipeline systems used to convey dairy products shall contain no dead ends in which dairy products may collect. Pipelines and other equipment shall be designed and constructed to preclude cross-contamination between pasteurized dairy products, unpasteurized dairy products, and cleaning and sanitizing solutions.

(e) If it is necessary to disassemble any equipment or utensil to inspect a product contact surface, all tools needed for the disassembly shall be readily available at the dairy plant.

(f) Water hoses used to wash dairy products or add ingredient water to dairy products shall be constructed of approved food grade materials and shall be used and stored in a sanitary manner.

(2) **PRODUCT CONTACT SURFACES.** (a) Product contact surfaces of equipment and utensils shall be made of materials that are smooth, impervious, nontoxic, noncorrosive, nonabsorbent and durable under foreseeable use conditions. A product contact surface shall be constructed of one or more of the following materials unless another material is specifically authorized by the department in writing:

1. Stainless steel of the American Iron and Steel Institute 300 series, or an equally corrosion resistant metal.

2. Heat resistant glass.

3. Plastic, rubber or rubber-like materials that are fat resistant and insoluble; that are resistant to scratching, scoring, decomposition, crazing, chipping and distortion under normal use conditions; that do not impart chemicals, flavor or odor to milk; and that maintain their original properties under repeated use conditions.

(b) Product contact surfaces shall be easily cleanable, and shall be free of breaks, open seams, cracks or similar defects. Product contact surfaces shall not impart any odor, color, taste or adulterating substance to food. Product contact surfaces, other than product contact surfaces of approved C-I-P systems, shall be readily accessible for manual cleaning. Joints and fittings shall be of sanitary design and construction.

(3) **LOCATION AND INSTALLATION OF EQUIPMENT.** (a) Equipment shall be located and installed to prevent overcrowding and to prevent contamination of dairy products or product contact surfaces by splash, condensation or manual contact.

(b) Equipment that cannot be easily moved shall be installed in a manner that prevents liquid or debris from accumulating under or around the equipment.

(c) Equipment shall be installed so that there is adequate clearance on all sides for cleaning and maintenance. This does not apply to that portion of a tank or container that is designed to protrude into or through the wall or ceiling of a dairy plant.

(4) **BULK STORAGE TANKS; VENTING.** A tank used for the bulk storage of milk, whey or liquid food products shall be equipped with an air filter to prevent contamination of tank contents, or shall be vented only to one of the following:

(a) A processing area.

(b) A tank gallery room that complies with processing area sanitation standards under this chapter.

(5) **MEASURING DEVICES AND CONTROLS.** (a) Every storage tank, freezer and cold storage compartment used to hold milk or dairy products shall be equipped with a thermometer or other device that accurately indicates the temperature in the storage tank, freezer or compartment.

(b) Each of the following bulk storage tanks shall be equipped with a 7-day temperature recording device that shows the temperature of dairy products stored in that bulk storage tank over the immediately preceding period of at least 7 days:

1. Every bulk storage tank used to store grade A milk or grade A dairy products for longer than 24 hours.

2. A silo tank installed after December 1, 1994.

(c) Instruments and controls used for measuring, regulating and recording temperatures, pH, acidity, water activity or other conditions that control or prevent the growth of undesirable microorganisms in milk or dairy products shall be accurate, fully functional, and adequate for their intended use.

(6) **LUBRICATION.** Equipment shall be designed and constructed so that gear and bearing lubricants do not come in contact with milk or dairy products, or with product contact surfaces. Food grade lubricants shall be used if there is any chance that lubricants may come in contact with milk or dairy products, or with product contact surfaces.

(7) **CLEANING AND SANITIZING EQUIPMENT AND UTENSILS; GENERAL.** (a) Except as provided under pars. (b) and (c), all product contact surfaces of equipment and utensils shall be cleaned after each day's use, sanitized before each day's use, and cleaned and sanitized before any change in use that may result in cross-contamination of dairy products. Product contact surfaces shall be cleaned and sanitized more frequently, as necessary, to keep them in a sanitary condition. Sanitizing methods shall comply with s. ATCP 80.18.

(b) The department may authorize alternative cleaning, sanitizing and processing procedures, including extended run procedures, if all of the following apply:

1. The alternative procedures are fully adequate to prevent the contamination of dairy products and to ensure the microbiological safety of dairy products.

2. There is adequate control and monitoring to ensure that the alternative procedures are working effectively.

3. The dairy plant operator submits detailed plans and specifications which demonstrate compliance with subd. 1 and 2.

4. The dairy plant operator collects and maintains data, on an ongoing basis, that demonstrate continuing compliance with subd. 1 and 2.

(c) Tanks used to store milk or liquid dairy products shall be cleaned when emptied. Tanks used to store raw milk or grade A milk or dairy products shall be emptied at least once every 72 hours.

(8) **STORING CLEAN EQUIPMENT AND UTENSILS.** Clean equipment and utensils, unless stored in an approved sanitizing solution, shall be stored so that they drain dry. Utensils and equipment components disassembled for cleaning shall be stored above the floor in metal racks or other suitable storage facilities. Clean equipment and utensils shall be protected from contamination prior to use.

(9) **SINGLE-SERVICE UTENSILS.** Single-service utensils shall be stored in the original containers in which they were received, or in other closed containers that will protect them from contamination until they are used. Single-service utensils shall not be reused.

(10) **CLEANING COMPOUNDS, DETERGENTS AND SANITIZERS; STORAGE AND LABELING.** Cleaning compounds, detergents and sanitizers used in a dairy plant shall be clearly labeled. When they are not being used, they shall be stored in designated areas and in an appropriate manner so that they do not contaminate dairy products, ingredients, equipment or utensils.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.14 C-I-P systems. (1) CONSTRUCTION AND MAINTENANCE; GENERAL. (a) C-I-P systems shall be designed, constructed, installed and maintained in compliance with s. ATCP 80.12.

(2) **CLEANING AND SANITIZING C-I-P SYSTEMS.** (a) A dairy plant operator shall clean and sanitize all C-I-P systems in compliance with s. 80.12 (7). Surfaces that cannot be cleaned and sanitized by C-I-P procedures shall be cleaned and sanitized manually.

(b) A dairy plant operator shall keep records on the cleaning and sanitizing of all C-I-P systems. The records shall identify every C-I-P system that has been cleaned or sanitized, the date and time when each C-I-P system was cleaned and sanitized, the temperature of the cleaning and sanitizing solution, and the length of time for which the C-I-P system was exposed to the cleaning and sanitizing solution. Records shall be signed or initialed by a responsible person at the dairy plant.

(3) **CONSTRUCTION PLANS.** (a) Before installing or modifying any C-I-P system, the person responsible for installing or modifying the system shall submit to the department a plan for the installation or modification. The plan shall clearly describe each C-I-P circuit in the installed or modified system, including the size and length of piping, fittings, pitch, drain points, access points, relative elevations, locations and specifications of circulating units, and other features of the system.

(b) Plans for a C-I-P system under par. (a) shall include the manufacturer's specifications for the system, including the manufacturer's specifications for operating, maintaining, cleaning and sanitizing the system.

(c) Within 30 days after any person files plans with the department under this subsection, the department shall return its comments or objections, if any, in writing.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.16 Dairy product packages. (1) GENERAL. (a) Dairy product packages shall be of sanitary design and construction. Packages shall be designed and constructed to protect packaged dairy products from reasonably foreseeable risks of contamination.

(b) Product contact surfaces of dairy product packages shall be smooth, nontoxic, noncorrosive, nonabsorbent and durable under foreseeable use conditions. Product contact surfaces shall not impart any odor, color, taste or adulterating substance to packaged dairy products.

(c) Dairy product packages shall be clean, sanitary, and free of any extraneous or deleterious substance. Dairy products shall not be sold or distributed in packages that are damaged to the extent that package contents may be adulterated as a result of the damage. A sealed package is excessively damaged if the seal is broken.

(d) Single-service packages shall be made of clean and sanitary materials, shall be protected from contamination prior to use, shall be handled in a sanitary manner, and shall be clean and sanitary at the time of use. Single service packages shall not be re-used.

(2) **GRADE A DAIRY PRODUCT PACKAGES.** (a) The residual bacteria count on product contact surfaces of grade A dairy product packages shall not exceed one per milliliter of capacity when the rinse test is used, or 50 colonies per 8 square inches (one per square centimeter) when the swab test is used, in 3 out of 4 samples taken at random on a given day. Product contact surfaces shall be free of coliform organisms.

(b) A grade A dairy product package shall be designed so that the product, the package pouring lip if any, and the package opening rim and area are protected from contamination during handling, storage and initial opening. A grade A dairy product package shall be designed so that it cannot be opened without breaking the cap or closure seal, or leaving other readily apparent evidence that the package has been opened.

(c) Product contact surfaces of multi-use packages used for grade A milk or dairy products shall be constructed of one or more of the following materials unless another material is specifically authorized by the department in writing:

ATCP 80.18

1. Stainless steel of the Iron and Steel Institute 300 series or an equally corrosion resistant metal.

2. Heat resistant glass.

3. Plastic materials that maintain their original properties under repeated use conditions; that are fat resistant and insoluble; and that are resistant to scratching, scoring, decomposition, crazing, chipping and distortion under normal use conditions.

(d) Product contact surfaces of multi-use packages used to contain grade A milk or dairy products shall have rounded corners, and shall be easily cleanable.

(e) Multi-use packages used to contain grade A milk or dairy products shall be effectively cleaned and sanitized before being reused. Cleaning and sanitizing procedures shall remove all extraneous matter and potential adulterants from each package. Sanitizing procedures shall comply with s. ATCP 80.18. If returnable glass bottles are sanitized in an automatic bottle washer by soaking those bottles in a caustic solution, the sanitizing procedure shall comply with sub. (3).

(f) Multi-use packages used to contain grade A milk or dairy products shall be inspected before they are reused. Inspection shall be adequate to detect extraneous materials, adulterants and damage to product contact surfaces. Inspection shall be performed on surfaces lighted in compliance with s. ATCP 80.08 (5) (c).

(g) No multi-use package may be reused for grade A milk or dairy products unless that package is tested for the presence of volatile organic compounds before the package is filled. An automatic testing device, capable of detecting volatile organic compounds at levels of public health significance, shall be used to test each package. The testing device shall be installed in conjunction with the dairy product packaging apparatus so that no packages can be filled unless the testing device is operating properly, and so that packages containing unsatisfactory levels of volatile organic compounds are automatically made unusable. The dairy plant operator shall test the system daily with a test solution consisting of 0.5 ppm

petroleum distillate or another test solution approved by the department.

(h) No plastic multi-use package may be used to contain grade A milk or dairy products unless all of the following requirements are met:

1. The package is identified to show the plant at which the package was manufactured, the date of manufacture, and the type and class of plastic material used. This information may be coded if the code is provided to the department.

2. The phrase "Use only for food" appears on the package.

3. The department has approved a prototype of the package.

(i) Single-service packages used to contain grade A milk or dairy products shall be manufactured by a manufacturer listed in the current quarterly "Interstate Listing of Single-Service Containers" published by the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services.

Note: A copy of the current quarterly "Interstate Listing of Single-Service Containers" is on file at the department, and can be obtained from the United States Food and Drug Administration, 200 "C" Street, S.W., Washington, D.C. 20204.

(j) Packaged grade A milk and dairy products shall be conspicuously labeled as grade A milk or dairy products.

(3) AUTOMATIC BOTTLE WASHING. Returnable glass bottles cleaned in an automatic bottle washer shall be sanitized while in the washer. Bottles cleaned in an automatic bottle washer may be sanitized by being soaked in a caustic solution. The causticity of the sanitizing solution shall be monitored and maintained at an appropriate level in relation to solution temperature and soaking time. The following table shows minimum causticity levels required for sanitizing solutions (expressed in terms of percent concentration of sodium hydroxide, NaOH, in the sanitizing solution), based on applicable soaking times and temperatures:

TABLE 1.
MINIMUM CAUSTICITY LEVELS REQUIRED FOR SANITIZING SOLUTIONS (% CONCENTRATION OF NaOH), BASED ON SOAKING TIME AND TEMPERATURE

Time in Minutes	Temperature (Degrees)						
	F 170 C 77	160 71	150 66	140 60	130 54	120 49	110 43
3	0.57	0.86	1.28	1.91	2.86	4.27	6.39
5	0.43	0.64	0.96	1.43	2.16	3.22	4.80
7	0.36	0.53	0.80	1.19	1.78	2.66	3.98

(4) **PACKAGING GRADE A DAIRY PRODUCTS.** (a) Grade A dairy products shall be packaged in a sanitary manner at the dairy plant where they are pasteurized.

(b) Grade A dairy products shall be mechanically packaged with equipment approved by the department. Hand capping is prohibited.

(c) A drip deflector, designed and adjusted to deflect condensation away from open packages, shall be installed on each filler valve.

(d) Conveyors that feed packages to packaging machines shall have overhead shields to protect open packages from contamination.

(e) If a filled package is imperfectly sealed, the contents of that package shall be emptied into a sanitary container. The contents shall be discarded, or shall be repasteurized before being repackaged.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.18 Sanitizers and sanitizing methods. (1) **SANITIZING METHODS.** Product contact surfaces may be sanitized by any of the following methods:

(a) Complete and continuous exposure to clean water at a temperature of at least 170° F. (70° C.) for at least 5 minutes.

(b) Complete and continuous exposure to steam at a temperature of at least 170° F. (70° C.) for at least 15 minutes, or at a temperature of at least 200° F. (93° C.) for at least 5 minutes.

(c) Complete and continuous exposure for at least 2 minutes to a sanitizing solution containing at least 100 ppm of available chlorine, and having a pH not higher than 8.3, at a temperature not less than 75° F. (24° C.) nor more than 110° F. (44° C.)

(d) Complete and continuous exposure for at least one minute to a sanitizing solution containing at least 12.5 ppm of available iodine, and having an acid pH not higher than 5.0, at a temperature of not less than 75° F. (24° C.) nor more than 110° F. (44° C.)

(e) Complete and continuous exposure to a caustic sanitizing solution according to s. ATCP 80.16 (4).

(f) Application, according to manufacturer's instructions, of a chemical sanitizer or sanitizing method that has been shown to be as effective as the methods specified under pars. (a) to (d), and that has been approved by the department under sub. (3).

(2) **SANITIZERS; MAXIMUM CONCENTRATIONS.** The use of a sanitizer shall leave no toxic residue on a product contact surface. Sanitizing solutions shall not exceed the maximum concentrations specified by the food and drug administration, United States department of health and human services, under 21 CFR 178.1010. A test kit or other device that measures the concentration of sanitizing solutions in parts per million shall be used as necessary to ensure compliance with this subsection at all times.

(3) **SANITIZERS; DEPARTMENT APPROVAL.** The department shall approve sanitizers and sanitizing methods which the department finds to be safe and effective for sanitizing equipment, utensils and multi-use dairy prod-

uct packages. The department may deny or withdraw approval of any sanitizer or sanitizing method, whether or not approved by any other state or federal agency, if the department determines that the sanitizer or sanitizing method is not safe or effective for the purposes or under the conditions used, or that it adversely affects the sanitary characteristics of equipment, utensils or dairy product packages.

Note: Sanitizers approved by the Wisconsin department of health and social services under subchapter VII of chapter 254, Stats., are approved by the department.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.20 Receiving milk and dairy products. (1) **MILK FROM LICENSED DAIRY FARMS.** No dairy plant operator may collect or receive milk from a dairy farm in this state unless the milk producer holds a current license for that dairy farm under s. 97.22 (2), Stats., and s. ATCP 60.02.

(2) **GRADE A MILK FROM DAIRY FARMS.** No dairy plant operator may collect or receive, as grade A milk, any of the following:

(a) Milk from a dairy farm in this state unless the milk producer holds a current grade A permit for that dairy farm under s. 97.22 (3), Stats., and s. ATCP 60.03.

(b) Milk from a dairy farm in any other state unless the milk producer holds a current grade A permit for that dairy farm from the responsible regulatory authority in that state.

(3) **BULK MILK TANKER DELIVERIES.** No dairy plant operator may receive, as grade A milk or grade A dairy products, any milk or fluid milk products transported in a bulk milk tanker unless the bulk milk tanker operator holds a current grade A permit for that bulk milk tanker under s. 97.21 (2) (b), Stats., and s. ATCP 82.02 (7).

(4) **GRADE A DAIRY PLANT MAY NOT RECEIVE GRADE B MILK.** A grade A dairy plant operator may not process grade B milk at a grade A dairy plant unless the department authorizes that processing in writing. A grade A dairy plant operator may not receive, transfer or process grade A milk or dairy products through the same equipment used to receive, transfer or process grade B milk or dairy products unless the dairy plant operator first cleans and sanitizes the equipment and makes a record of the cleaning and sanitization.

(5) **MANUFACTURED DAIRY INGREDIENTS; APPROVED SOURCES.** Manufactured dairy ingredients used in the manufacture or processing of dairy products shall originate from dairy plants licensed under s. 97.20, Stats., and this chapter, or licensed or inspected under equivalent laws of other states or nations.

(6) **RECEIVING FACILITIES.** A dairy plant's facilities for receiving milk shipments shall be constructed in compliance with s. ATCP 80.08, and shall be separated from other areas of the dairy plant as required by s. ATCP 80.08 (7).

(7) **CLEANING AND SANITIZING BULK MILK TANKERS.** A dairy plant operator shall do all of the following:

(a) Clean and sanitize bulk milk tankers after each day's use, as required by s. ATCP 82.08. A dairy plant operator shall clean and sanitize bulk milk tankers in a

fully enclosed cleaning and sanitizing facility that complies with s. ATCP 82.08 (2).

(b) Attach a tag to a bulk milk tanker each time the tanker is cleaned and sanitized, as required under s. ATCP 82.08 (4).

(c) Keep a record of each cleaning and sanitizing operation for each bulk milk tanker, as required under s. ATCP 82.08 (5).

(8) **CLEANING AND SANITIZING MILK CANS.** If a dairy plant operator receives raw milk in cans, the dairy plant operator shall clean, sanitize and thoroughly dry those cans before the cans are removed from the dairy plant for reuse. Can washing equipment shall be kept clean and in good repair.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.22 Storing and handling milk and dairy products.

(1) **GENERAL.** Dairy products shall be protected from contamination and decomposition while being received, processed, handled, conveyed or held at a dairy plant. Dairy products shall be received, processed, handled, conveyed and held in a manner that keeps the products in a safe, wholesome and unadulterated condition.

(2) **STORAGE TEMPERATURES.** (a) Raw grade A milk and grade A dairy products received for processing at a dairy plant shall be kept at a temperature of 45° F. (7° C.) or less until pasteurized or, if pasteurization is not required, until processed. This paragraph does not apply to raw grade A milk received at a dairy plant within 2 hours after milking, provided that the raw milk is held in compliance with par. (d).

(b) Except as provided under par. (a), raw milk and other dairy products received for processing at a dairy plant shall be kept at a temperature of 50° F. (10° C.) or less until pasteurized or, if pasteurization is not required, until processed. This paragraph does not apply to raw milk received at a dairy plant within 2 hours after milking, provided that the raw milk is held in compliance with par. (d).

(c) Pasteurized grade A dairy products, after being pasteurized, shall be cooled to a temperature of 45° F. (7° C.) or less, and shall then be kept at that temperature at all times. This paragraph does not apply to a grade A cultured dairy product while being cultured, to a dried milk product, or to a grade A dairy product that is sterilized and packaged in a hermetically sealed package.

(d) No milk or dairy product may be held at a dairy plant for more than 4 hours at a temperature that is higher than 45° F. (7° C.) and lower than 140° F. (60° C.). This paragraph does not apply to grade A cultured dairy products while being cultured, dried dairy products, butter micro-fixing, cheese while being cured or ripened, grade A dairy products that are sterilized and packaged in hermetically sealed packages, or other dairy products for which the department authorizes different holding temperatures in writing.

(3) **PASTEURIZATION.** Dairy products shall be pasteurized in compliance with subch. V.

(4) **STORING DAIRY PRODUCTS AND INGREDIENTS.** (a) Areas used to store dairy products and ingredients shall Register, November, 1994, No. 467

be kept in a clean, sanitary and orderly condition, free from conditions that may adulterate dairy products or dairy product ingredients.

(b) Dairy products shall be stored at temperatures specified under sub. (2). Other potentially hazardous foods, including potentially hazardous ingredients used in dairy products, shall be stored at safe temperatures.

(c) Dairy products and ingredients shall be stored in an orderly manner, so that storage areas can be easily inspected and cleaned. Dairy products and ingredients may not be stored under conditions that may cause adulteration. Storage areas shall be constructed and maintained so that waste liquids do not accumulate in those areas.

(d) Dairy products and ingredients may not be stored in a manner which may attract or harbor pests. No pesticides or other toxic materials may be stored in a manner that may contaminate dairy products, dairy product ingredients or packaging materials.

(5) **REPROCESSING AND DISPOSAL OF DAIRY PRODUCTS.**

(a) A dairy plant operator may not reprocess, for use in any dairy product, packaged grade A dairy products that have left the custody of the dairy plant or that have originated from another dairy plant. This does not prohibit either of the following:

1. The use, as ingredients, of packaged dairy products that are specifically manufactured and packaged for use as ingredients in other dairy products.

2. Reprocessing specifically authorized in writing by the department, under terms and conditions specified by the department.

(b) A dairy plant operator shall discard any packaged grade A dairy products that are returned to a dairy plant by a wholesaler or retailer. Pending disposal, returned grade A dairy products shall be kept in an area which is clearly designated as a holding area for returned products. The holding area shall be separate from other areas used for the receipt, storage or processing of dairy products.

(c) A dairy plant operator shall discard all milk and dairy products that have spilled, overflowed or leaked from equipment, utensils or packages. This paragraph does not apply to milk and dairy products caught and collected in a sanitary manner, in equipment specifically designed for that purpose.

(d) A dairy plant operator may reprocess dairy products collected from a packaging defoamer system, or drained from processing equipment at the end of a run, if those dairy products are collected and handled in a sanitary manner, held at a temperature of 45° F. (7° C.) or less, and repasteurized.

(6) **DAIRY PRODUCTS INTENDED FOR NON-FOOD USE.** Milk and dairy products not intended for human consumption shall be clearly and conspicuously labeled as being not for use as human food. No person may repack or sell, for use as human food, any milk or dairy products labeled or intended for non-food use.

Note: The manufacture and sale of animal feed is subject to separate licensing and regulation under s. 94.72, Stats.

(7) **RECONSTITUTED OR COMMINGLED DAIRY PRODUCTS; PASTEURIZATION.** (a) A dairy plant operator shall pasteurize reconstituted or recombined dairy products after those dairy products are reconstituted or recombined, except where the resulting product is exempt from pasteurization under s. ATCP 80.40 (2).

(b) A dairy plant operator may not commingle pasteurized dairy products with unpasteurized milk or dairy products unless the dairy plant operator pasteurizes the resulting product or the resulting product is exempt from pasteurization under s. ATCP 80.40 (2).

(c) A dairy plant operator shall take effective measures to prevent cross contamination between pasteurized and unpasteurized dairy products.

(8) **PRESSURIZED AIR AND STEAM; CONTACT WITH DAIRY PRODUCTS.** Pressurized air and steam coming in contact with a dairy product or product contact surface shall be clean, safe and free of contaminants. The system used to generate and supply pressurized air and steam shall comply with applicable "3-A Sanitary Standards" and "3-A Accepted Practices" listed in APPENDIX A to this chapter.

Note: The "3-A Sanitary Standards" and "3-A Accepted Practices" listed in APPENDIX A are published jointly by the International Association of Milk, Food and Environmental Sanitarians, Inc., and the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services. Copies are on file with the department, the secretary of state and the revisor of statutes. Copies may be purchased from the International Association of Milk, Food and Environmental Sanitarians, Inc., 6200 Aurora Avenue, Suite 200 W., Des Moines, Ia 50322.

(9) **FIRE, FLOOD OR CASUALTY DAMAGE.** If a dairy product or ingredient is subjected to possible contamination in a fire, flood or other casualty, no person may sell or reprocess that product or ingredient for human consumption unless the department first inspects the product or ingredient and authorizes its sale or reprocessing for human consumption. A dairy plant operator shall notify the department whenever dairy products or ingredients in the operator's possession have been subjected to possible damage or contamination because of fire, flood or other casualty.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter IV — Milk Quality; Testing

ATCP 80.24 Milk quality standards. (1) RAW MILK FROM DAIRY FARMS. Raw milk from dairy farms shall comply with the milk quality standards specified under s. ATCP 60.15.

(2) **MILK HELD AT DAIRY PLANT; BACTERIAL COUNT.** The bacterial count of grade A milk held at a dairy plant prior to pasteurization may not exceed 300,000 per ml. The bacterial count of grade B milk held at a dairy plant prior to pasteurization or processing may not exceed 750,000 per ml.

(3) **PASTEURIZED DAIRY PRODUCTS.** (a) The bacterial count of pasteurized milk and dairy products may not exceed 20,000 per ml. This paragraph does not apply to cultured dairy products or frozen desserts containing nuts or other bulky flavors.

(b) The coliform count of pasteurized dairy products, other than cultured dairy products, may not exceed 10 per milliliter.

(c) In pasteurized milk or dairy products, there shall be less than one microgram of phosphatase per ml. as determined by the Sharer rapid method, or less than 500 milliunits of phosphatase per liter as determined by the fluorometric procedure.

(4) **FORTIFIED DAIRY PRODUCTS.** Whenever milk or a fluid milk product is fortified with vitamin A or D, the fortification shall comply with Appendix O to the "Grade A Pasteurized Milk Ordinance — 1993 Recommendations of the United States Public Health Service/Food and Drug Administration."

Note: Copies of Appendix O to the "Grade A Pasteurized Milk Ordinance — 1993 Recommendations of the United States Public Health Service/Food and Drug Administration" are on file with the department, the secretary of state and the revisor of statutes. Copies may be obtained from the department at cost.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.26 Milk quality testing. (1) REQUIRED TESTING. (a) A dairy plant operator shall test raw milk from dairy farms as required under subch. IV of ch. ATCP 60.

Note: Under subch. IV of ch. ATCP 60, a dairy plant operator must perform milk quality tests including bacteria counts, drug residue tests and somatic cell tests. A dairy plant operator or milk hauler must also screen milk for coarse sediments. A dairy plant operator must report test results and reject milk shipments as required.

(b) A dairy plant operator shall test milk and dairy products held or processed at a dairy plant for compliance with standards specified under s. ATCP 80.24 (2) and (3). The dairy plant operator shall test the milk and dairy products as often as necessary to provide reasonable statistical assurance of compliance.

(2) **PAYMENT BASED ON MILK COMPONENT TESTS.** No dairy plant operator may adjust the price paid to any milk producer based on the results of any milk component test or somatic cell test unless the dairy plant operator does both of the following:

(a) Bases the price adjustment on the arithmetic average of all test results obtained for that producer during the pay period to which the price adjustment applies.

(b) Tests at least 3 milk shipments from that producer at regular intervals throughout the pay period to which the price adjustment applies, or tests composite samples representing all milk shipments from that producer during that pay period.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.28 Persons authorized to perform milk quality tests. (1) GENERAL. (a) Except as provided under par. (b), milk quality tests shall be performed in a laboratory that is both of the following:

1. Approved by the department to conduct milk quality tests.

2. Certified by the state of Wisconsin department of health and social services under s. 252.22, Stats., or by an equivalent certifying agency in another state, to conduct milk quality tests.

ATCP 80.28

Note: A "milk quality test," as defined under s. ATCP 80.01 (23), means a bacteria count, somatic cell count, drug residue test, milk component test, or other analytical test which is used to determine compliance with milk quality standards under s. ATCP 80.24, or which may affect the price that a dairy plant operator pays a milk producer for milk.

Laboratory evaluation forms used in certifying laboratories under s. 143.15, Stats., may be obtained from the department or from the Laboratory Certification Officer, Wisconsin Department of Health and Social Services, 1414 E. Washington Avenue, Room 96, Madison, WI 53703.

(b) Bulk load tests for drug residues under s. ATCP 60.19 (2) shall be conducted at the receiving dairy plant by either of the following:

1. An individual approved by the department and certified by the Wisconsin department of health and social services to conduct drug residue tests.

2. An individual who performs drug residue tests only under the direct supervision of an individual approved and certified under subd. 1.

Note: Approval of individuals to perform drug residue tests will become effective only after a certification program for individuals is developed by the Wisconsin department of health and social services.

(c) The department may withdraw its approval under par. (a) or (b) for cause, regardless of whether the department of health and social services withdraws its certification. Cause may include false or inaccurate test results or reports, or failure to conduct tests according to required procedures.

(2) MILK COMPONENT TESTING; LICENSED TESTER. (a) No person may perform any milk component test unless that person is licensed to perform milk component tests, either as a buttermaker or cheesemaker under s. 97.17, Stats., or as a milk and cream tester under s. 98.145, Stats.

(b) No person may use an automated testing device to perform any milk component test unless that person is trained and qualified to use automated testing devices, and that fact is stated on his or her license under s. 97.17 or 98.145, Stats.

Note: A "milk component test," as defined under s. ATCP 80.01 (20), means a test which determines the amount of milkfat, protein, total solids, solids-not-fat or other valuable components in milk, and which may affect the price that a dairy plant operator pays a milk producer for milk.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.30 Test samples. (1) GENERAL. (a) Whenever a dairy plant operator performs a milk quality test on a bulk milk shipment from a milk producer, the dairy plant operator shall perform that milk quality test on a test sample collected under s. ATCP 82.12.

(b) Whenever a dairy plant operator performs a milk quality test on a can milk shipment from a milk producer, the dairy plant operator shall perform that milk quality test on a test sample collected under sub. (3).

(c) Notwithstanding pars. (a) and (b), a dairy plant operator may use a composite sample under sub. (4) to perform a Babcock test for milkfat, or to perform another milk quality test approved by the department under sub. (4). A composite sample shall be compiled from fresh milk samples collected under par. (a) or (b).

(d) This subsection does not apply to a bulk load test for drug residues under s. ATCP 60.19 (2),

Register, November, 1994, No. 467

(2) TEST SAMPLES REFRIGERATED. At all times prior to testing, a test sample under sub. (1) shall be kept refrigerated at a temperature of 32 to 40° F. (0 to 4° C.). Test samples kept at a dairy plant or testing laboratory shall be kept in a refrigerated storage facility used only for storing test samples and laboratory supplies.

(3) COLLECTING TEST SAMPLES FROM CAN MILK SHIPMENTS. (a) If a producer ships milk to a dairy plant in cans, rather than in bulk, the dairy plant operator shall collect a test sample from each milk shipment immediately after that milk shipment is transferred to the weigh tank at the dairy plant, and before it is commingled with any other milk shipment. The weigh tank shall be constructed so that milk poured into the weigh tank is completely mixed.

(b) If a weigh tank is not large enough to accommodate a producer's entire milk shipment, so that multiple weighings are needed, the dairy plant operator shall divide the shipment as evenly as possible between weighings and collect a sample from each weighing. The samples, which shall be of equal volume, shall be combined to form a single sample representing the entire shipment from the producer. The dairy plant operator may not split the contents of any single can of milk between weighings, but shall include all of the contents of that can in the same weighing.

(4) COMPOSITE SAMPLES. (a) A dairy plant operator may use a composite sample to perform a Babcock test for milkfat, but may not perform any other milk quality test on a composite sample except with the department's written authorization. A composite sample shall be compiled according to this subsection.

(b) A composite sample shall include a representative sample of milk from each of 2 or more milk shipments represented by the composite sample. No composite sample may include milk from more than 16 milk shipments. Each component sample included in the composite sample shall have the same volume, and shall include at least 10 ml. of milk. A composite sample shall include at least 150 ml. of milk.

(c) A composite sample container shall have a capacity of at least 240 ml. The composite sample container shall include an effective permanent closure that is attached to the container. The composite sample container shall be marked to identify the producer and the milk shipments represented in the composite sample.

(d) A composite sample representing a producer's bulk milk shipments shall be compiled from fresh milk samples collected from those shipments under s. ATCP 82.12. On the same day that a producer's bulk milk shipment is received by the dairy plant operator, or by 12:00 noon of the following day, the dairy plant operator shall transfer, to the composite sample, at least 10 ml. of milk from the sample collected from that milk shipment under s. ATCP 82.12.

(e) A composite sample representing a producer's can milk shipments shall be compiled from milk samples collected from those shipments according to sub. (3).

(f) A dairy plant operator shall preserve a composite sample by adding potassium dichromate, or another preservative approved by the department, to the composite

sample. Not less than 100 mg., nor more than 190 mg. of potassium dichromate may be used in each composite sample to obtain a concentration of 20 mg. per 30 ml. of milk in the completed sample.

Note: Potassium dichromate is available in tablets containing 40 mg. of active ingredient per tablet. The use of these tablets at the rate of one tablet per 2 fl. oz. of milk in a completed composite sample is equivalent to the concentration specified under par. (f). Labeling requirements and limitations on the disposal of milk samples preserved with potassium dichromate are contained in s. ATCP 29.05 (1) (b). Milk samples treated with potassium dichromate are also considered hazardous wastes under chs. NR 600 to 685.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.32 Test methods. (1) **GENERAL.** Milk quality tests shall be performed using one of the following methods, subject to additional requirements under subs. (2) to (6):

(a) A method described in the American Public Health Association, Inc., "Standard Methods for the Examination of Dairy Products," 16th edition.

(b) A method described in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition.

(c) A method approved in writing by the department.

Note: To be certified under s. 143.15, Stats., a laboratory must also comply with methods specified by the United States Public Health Service/Food and Drug Administration in "Evaluation of Milk Laboratories," 1985 revision. In some cases these methods are more detailed than the methods specified under pars. (a) and (b). Laboratory evaluation forms incorporating these methods (FDA 2400 series laboratory evaluation forms, 1993 revision) are available from the department or from the Laboratory Certification Officer, Wisconsin Department of Health and Social Services, 1414 E. Washington Avenue, Room 96, Madison, WI 53703.

The American Public Health Association, Inc., "Standard Methods for the Examination of Dairy Products," 16th edition, is on file in the offices of the department, the secretary of state, and the revisor of statutes, and may be obtained from the American Public Health Association, Inc., 1015 Eighteenth Street, N.W., Washington, D.C. 20036.

The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file in the offices of the department, the secretary of state and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists, International, 1970 Chain Bridge Road, Dept. 0742, McLean, VA 22109-0742.

(2) **MILKFAT TEST METHODS.** (a) Milkfat tests shall be performed using the Babcock method, the ether extraction method, or another test method approved by the department. Babcock and ether extraction tests shall be conducted according to the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, except as provided under par. (b).

(b) Each milk sample tested by the Babcock method shall be agitated for at least 3 minutes by the use of a mechanical agitator after pipetting the sample and adding sulfuric acid according to the procedure prescribed under par. (a). A reader, such as a needlepoint divider or other mechanical divider, which accurately determines milkfat level in a test bottle shall be used in reading all Babcock tests. All Babcock test readings shall be made against a light-colored surface with adequate natural or artificial light. The Babcock test shall be read to the nearest 0.05% by weight.

(3) **BACTERIA COUNTS.** Bacteria counts required under s. ATCP 60.18 and bacteria counts that may affect the amount paid to a milk producer shall be obtained by

means of a standard plate count (SPC), plate loop count (PLC) or petri film aerobic count method.

(4) **DRUG RESIDUES.** Drug residue tests required under s. ATCP 60.19 shall be performed according to s. ATCP 60.19.

(5) **SOMATIC CELLS.** Somatic cell counts required under s. ATCP 60.20 and somatic cell counts that may affect the amount paid to a milk producer shall be obtained by means of a direct microscopic somatic cell count (DMSCC) or an optical somatic cell count (OSCC). The Pyronin Y-Methyl green stain test may be used in place of a DMSCC or OSCC for goat or sheep milk, and shall be used to confirm a DMSCC or OSCC on goat or sheep milk that exceeds 1,000,000.

(6) **TESTING DEADLINES.** A milk quality test shall be completed within the time period specified by the test method.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.34 Milk component testing devices. (1) **GENERAL.** If an automated testing device is used to perform a milk component test for any milk component, that device shall be calibrated and regularly checked to ensure that it accurately tests for that milk component.

Note: As defined under s. ATCP 80.01 (20), "milk component test" means a test which determines the amount of milkfat, protein, total solids, solids-not-fat or other valuable components in milk, and which may affect the price that a dairy plant operator pays a milk producer for milk.

(2) **CALIBRATION.** (a) **Requirement.** If an automated testing device is used to test for milkfat, protein, total solids or solids-not-fat in milk, and if the test results may affect the price paid to a milk producer, the testing device shall be calibrated according to this subsection. The testing device shall be calibrated, for each relevant milk component, by a tester who is licensed under s. 97.17 or 98.145, Stats., to operate that device.

Note: See s. ATCP 80.28 (2).

(b) **Calibration frequency.** A milk component testing device under par. (a) shall be calibrated at all of the following times:

1. Upon installation.
2. At regular 3 month intervals after installation.
3. Immediately after every significant repair or alteration to the testing device.
4. Whenever the mean difference on a daily performance check under sub. (3) exceeds plus or minus 0.044% for milkfat or protein, or 0.084% for total solids or solids-not-fat.

(c) **Calibration procedure.** To calibrate a milk component testing device under par. (a), a tester shall use the device to test a set of calibration samples under par. (d). The milk component testing device shall be adjusted, as necessary, to satisfy all of the following requirements:

1. The performance error on each calibration sample shall be as near as practicable to zero. The performance error is the difference between the known percentage content of each milk component in the calibration sample, as determined by the sample provider, and the percentage content as measured by the testing device.

2. The mean difference for the entire set of calibration samples shall be as near as practicable to zero, and shall not exceed plus or minus 0.044% for milkfat or protein, or 0.084% for total solids or solids-not-fat. The mean difference is the sum of the performance errors for the individual calibration samples, divided by the number of samples in the set.

3. The standard deviation of test results, calculated for the set of calibration samples according to the formula set forth in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, section 969.16, shall not exceed 0.044 percent for milkfat or protein, or 0.084 percent for total solids or solids-not-fat.

Note: The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file with the department, the secretary of state, and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists International, 1970 Chain Bridge Road, Dept. 0742, McLean, VA 22109-0742.

(d) *Calibration samples.* A set of calibration samples shall be obtained from the department or another sample provider approved by the department. A set of calibration samples shall consist of at least 12 individual samples, each of which complies with all of the following requirements:

1. Each sample shall consist of milk from a single herd. The sample provider may modify a sample, as necessary, by adding milk from another herd, except that the sample provider may not modify more than 10 percent of the samples in a set.

2. Each sample in a set shall be obtained from a different herd.

3. Each sample shall be not more than 21 days old.

4. Each sample shall be a fresh milk sample preserved with bronopol (2-bromo-2-nitro-1,3-propanediol) or another approved preservative. Preservative methods, formulations and concentrations shall be approved by the department.

5. Each sample shall have a known percentage content of each relevant milk component, determined by the sample provider under subs. (5) to (8).

(3) *DAILY PERFORMANCE CHECK.* (a) *Requirement.* If an automated testing device is used to test for milkfat, protein, total solids or solids-not-fat in milk, and if the test results may affect the price paid to a milk producer, the device shall be subjected to a daily performance check before each day's testing. The daily performance check shall be conducted, for each relevant milk component, by a tester who is licensed under s. 97.17 or 98.145, Stats., to operate the testing device.

(b) *Procedure.* To conduct a daily performance check under par. (a), a tester shall test a set of daily performance check samples under par. (d). Based on the daily performance check, the tester shall do both of the following:

1. Determine the performance error of the testing device with respect to each daily performance check sample. The performance error is the difference between the known percentage content of each milk component in that sample, as determined by the sample provider, and the percentage content as measured by the testing device.

2. Based on the performance errors for the individual samples under subd. 1, calculate the mean difference for the set of daily performance check samples. The mean difference is the sum of the performance errors for the individual samples, divided by the number of samples in the set.

(c) *Calibration based on daily performance check.* If, on a daily performance check under par. (a), the mean difference calculated under par. (b) 2 exceeds plus or minus 0.044% for milkfat or protein, or 0.084 percent for total solids or solids-not-fat, the testing device shall not be used until it is recalibrated under sub. (2).

(d) *Daily performance check samples.* A set of daily performance check samples shall be obtained from the department or another sample provider approved by the department. A set shall consist of at least 5 individual samples, each of which complies with all of the following requirements:

1. Each sample shall consist of milk from a single herd. The sample provider may modify a sample, as necessary, by adding milk from another herd, except that the sample provider may not modify more than 20% of the samples in a set.

2. Each sample in set shall be obtained from a different herd.

3. Each sample shall be not more than 21 days old.

4. Each sample shall be a fresh milk sample preserved with bronopol (2-bromo-2-nitro-1,3-propanediol) or another approved preservative. Preservative methods, formulations and concentrations shall be approved by the department.

5. Each sample shall have a known percentage content of each relevant milk component, determined by the sample provider under subs. (5) to (8).

(4) *REFERENCE CHECKS.* (a) *Requirement.* If an automated testing device is used to test for milkfat, protein, total solids or solids-not-fat in milk, and if the test results may affect the price paid to a milk producer, that device shall be subjected to a daily reference check under par. (b) and hourly reference checks under par. (c).

(b) *Daily reference check.* 1. A daily reference check shall be conducted before each day's testing, at the same time that the dairy plant operator conducts the daily performance check under sub. (3). The daily reference check shall be conducted, for each relevant milk component, by a tester who is licensed under s. 97.17 or 98.145, Stats., to operate the testing device.

2. To perform a daily reference check, a tester shall perform 10 tests on a reference sample. The reference sample may be a homogenized milk sample prepared by the dairy plant operator, or it may be a daily performance check sample obtained from the department or another approved source under sub. (3) (d). The 10 test results shall be averaged, and the average result shall be used as a comparison value for the hourly reference checks under par. (c).

(c) *Hourly reference checks.* 1. An hourly reference check shall be conducted, for each milk component, before each hour's testing for that component. To conduct an

hourly reference check, a tester shall test the same reference sample used for the daily reference check under par. (b).

2. For each relevant milk component, the hourly reference check result shall be compared to the average result obtained on the daily reference check under par. (b). If an hourly reference check result differs from the average result on the daily reference check by more than 0.034% for milkfat or protein, or 0.064% for total solids or solids-not-fat, the testing device shall not be used until the condition causing the difference is found and corrected. Test results obtained before the device is corrected, and subsequent to the last previous conforming reference check, shall not be used in determining the amount paid to milk producers.

(5) CALIBRATION AND DAILY PERFORMANCE CHECK SAMPLES; MILKFAT CONTENTS. (a) The provider of a calibration sample under sub. (2) or a daily performance check sample under sub. (3) shall determine the known percentage content of milkfat in that sample by averaging the results of 3 milkfat tests using a method specified under par. (d). The results from those 3 milkfat tests shall not vary by more than 0.034%.

(b) The known milkfat content of a calibration sample, expressed as a percentage of the sample weight, shall be at least 2.5%. Within a set of calibration samples, the difference in known milkfat content between the lowest milkfat sample and the highest milkfat sample, expressed as a percentage of average sample weight, shall be at least 2.5%.

(c) The known milkfat content of a daily performance check sample, expressed as a percentage of the sample weight, shall be at least 2.8%. Within a set of daily performance check samples, the difference in known milkfat content between the lowest milkfat sample and the highest milkfat sample, expressed as a percentage of average sample weight, shall be at least 1.5%.

(d) To determine the milkfat content of a calibration sample or daily performance check sample, the sample provider shall use either a manual or robotic version of the Modified Majonnier method as described in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, s. 989.05.

Note: The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file with the department, the secretary of state and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists International, 1970 Chain Bridge Road, Dept. 0742, McLean, VA 22109-0742.

(6) CALIBRATION AND DAILY PERFORMANCE CHECK SAMPLES; PROTEIN CONTENTS. (a) The provider of a calibration sample under sub. (2) or a daily performance check sample under sub. (3) shall determine the known percentage content of protein in that sample by averaging the results of 3 protein tests using the method specified under par. (c). The results from those 3 protein tests shall not vary by more than 0.034%.

(b) The known protein content of a calibration or daily performance check sample, expressed as a percentage of sample weight, shall be at least 2.7%. Within a set of calibration samples, the difference in known protein content between the lowest protein sample and the highest protein sample, expressed as a percentage of average sample weight, shall be at least 0.7%. Within a set of daily

performance check samples, the difference in known protein content between the lowest protein sample and the highest protein sample, expressed as a percentage of average sample weight, shall be at least 0.5%.

(c) To determine the protein content of a calibration sample or daily performance check sample, the sample provider shall use the traditional or block digester/steam distillation Kjeldahl method as described in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, s. 991.20.

Note: The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file with the department, the secretary of state and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists International, 1970 Chain Bridge Road, Dept. 0742, McLean, Va 22109-0742.

(7) CALIBRATION AND DAILY PERFORMANCE CHECK SAMPLES; TOTAL SOLIDS. (a) The provider of a calibration sample under sub. (2) or a daily performance check sample under sub. (3) shall determine the known percentage content of total solids in that sample by averaging the results of 3 total solids tests using the method specified under par. (c). The results from those 3 total solids tests shall not vary by more than 0.054%.

(b) The known total solids content of a calibration or daily performance check sample, expressed as a percentage of sample weight, shall be at least 11%. Within a set of calibration samples, the difference in known total solids content between the lowest total solids sample and the highest total solids sample, expressed as a percentage of average sample weight, shall be at least 2.00%. Within a set of daily performance check samples, the difference in known total solids content between the lowest total solids sample and the highest total solids sample, expressed as a percentage of average sample weight, shall be at least 1.5%.

(c) To determine the total solids content of a calibration sample or daily performance check sample, the sample provider shall use the direct forced air oven drying method as described in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, 1st supplement, s. 990.20.

Note: The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file with the department, the secretary of state and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists International, 1970 Chain Bridge Road, Dept. 0742, McLean, VA 22109-0742.

(8) CALIBRATION AND DAILY PERFORMANCE CHECK SAMPLES; SOLIDS-NOT-FAT. The provider of a calibration sample under sub. (2) or a daily performance check sample under sub. (3) shall calculate the known percentage content of solids-not-fat in that sample by subtracting the percent fat as determined under sub. (5) from the total solids for that sample as determined under sub. (7). The calculation method shall be that described in the "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, 1st supplement, s. 990.21.

Note: The "Official Methods of Analysis of the Association of Official Analytical Chemists," 15th edition, is on file with the department, the secretary of state and the revisor of statutes, and may be obtained from the Association of Official Analytical Chemists International, 1970 Chain Bridge Road, Dept. 0742, McLean, VA 22109-0742.

(9) TESTING DEVICES; CONSTANT VOLTAGE. A constant voltage regulator shall be connected to, or form a part of,

ATCP 80.34

every milk component testing device that is in line with a single phase 115 or 220 volt power supply.

(10) RECORDS RELATED TO CALIBRATIONS, DAILY PERFORMANCE CHECKS AND REFERENCE CHECKS. (a) A dairy plant operator shall keep a record of every calibration, performance check or reference check conducted on a milk component testing device under this section.

(b) Every record required under par. (a) shall be signed by the licensed tester who made the record. Calibration records shall be kept separate from performance check and reference check records.

(11) ACCURACY OF DEVICES; DEPARTMENT AUDIT. The department may audit the accuracy of milk component testing devices using test samples prepared by the department under subs. (5) to (8).

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.36 Milk quality test records and reports. (1) TEST RECORDS; GENERAL. (a) A person performing a milk quality test shall immediately record the test result and sign the test record. The test record shall specify the date of the test, the identification number of the milk producer, and the milk shipment from which the milk sample was collected.

(b) No test record may be altered except that errors, if any, may be corrected by striking through the original entry and inserting the correct entry immediately adjacent to the original. A corrected entry shall be initialed by the person who made the corrected entry.

(c) The department may authorize a dairy plant to keep test records in electronic form if the department finds that all of the following requirements are met:

1. The records are effectively secured against loss or tampering.
2. The records can be readily retrieved for inspection by the dairy plant operator and the department.
3. The person who performs the test identifies himself or herself on the test record, by an electronic method that is equivalent to a personal signature.
4. If an erroneous test record is corrected, the correction is identified so that the reader can easily compare the corrected record to the original record.

(2) REQUIRED TESTS; REPORTS. A dairy plant operator shall report the results of milk quality tests required under subch. IV of ch. ATCP 60, as required under that subchapter.

(3) RECORDS RETAINED BY DAIRY PLANT OPERATOR. A dairy plant operator shall retain records required under this section for at least one year, and shall make the records available for inspection and copying by the department upon request.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.38 False samples, test results or reports. No person may do any of the following, or conspire with another person to do any of the following:

- (1) Falsely identify milk samples.

Register, November, 1994, No. 467

(2) Submit a false milk sample to the department, a dairy plant operator or a testing laboratory.

(3) Falsify any milk quality test or test result.

(4) Make any false or misleading record or report related to a milk quality test.

(5) Withhold any milk quality test report required under subch. IV of ch. ATCP 60.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter V — Pasteurization

ATCP 80.40 Pasteurization required. (1) Except as provided under sub. (2), every dairy product shall be pasteurized at the dairy plant where that dairy product is manufactured.

(2) Subsection (1) does not apply to any of the following:

(a) Raw milk shipped in bulk to another dairy plant for use in manufacturing dairy products, provided that the raw milk shipment is accompanied by a bill of lading that identifies the milk as unpasteurized raw milk.

(b) A dairy product made entirely from dairy products that have been pasteurized at the same dairy plant.

(c) Ice cream or frozen dessert made from pasteurized ice cream mix or pasteurized frozen dessert mix, provided that no unpasteurized dairy product is added to the pasteurized mix.

(d) A dairy product whose standard of identity provides that the dairy product and its ingredients need not be pasteurized.

(e) A dairy product that is sterilized and packaged in a hermetically sealed package.

(f) Heat-treated cream, skim milk or lowfat milk shipped in bulk to another dairy plant for use in manufacturing dairy products, provided that the bulk shipment is accompanied by a bill of lading that identifies the contents of the bulk shipment as being unpasteurized and heat-treated. The heat-treated cream, skim milk or lowfat milk may be heated not more than once for separation purposes, to a temperature that is not less than 125° F. (52° C.) nor more than 161° F. (72° C.). Heat-treated cream may be heated further, up to a temperature of 166° F. (75° C.) in a continuing heating process, if further heating is necessary to deactivate enzymes for functional reasons. Heat-treated cream, skim milk and lowfat milk, after being heated, shall immediately be cooled to a temperature of 45° F. (7° C.) or less.

(3) A dairy product pasteurized after January 1, 1997 shall be pasteurized by, or under the direct supervision of, a pasteurizer operator who has successfully completed at least one of the following:

(a) A pasteurization training course of at least 8 hours duration provided by the university of Wisconsin, or an equivalent course approved by the department.

(b) A competency examination approved by the department.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.42 Labeling pasteurized and unpasteurized products. (1) If a dairy product is pasteurized or made exclusively from pasteurized ingredients, the label on every shipping container of that dairy product shall clearly and conspicuously state that the product is pasteurized. If a grade A dairy product is pasteurized or made exclusively from pasteurized ingredients, the label on every shipping container and consumer package of that grade A dairy product shall clearly and conspicuously state that the grade A dairy product is "pasteurized" or "ultrapasteurized." Every label under this subsection shall also include the name and address, or the unique identification number, of the dairy plant where the dairy product was pasteurized.

(2) Except as provided under sub. (3) or (4), if a dairy product is not pasteurized or made exclusively from pasteurized ingredients, the label on every shipping container and consumer package of that dairy product shall state that the product is unpasteurized.

(3) Subsection (2) does not apply to cheese that meets all of the following requirements:

(a) The standard of identity for the cheese provides that the cheese may be made from unpasteurized dairy products.

(b) The cheese is held for at least 61 days before being distributed for retail sale, or for further processing without pasteurization.

(c) The label on every shipping container and consumer package of cheese states that the cheese is "aged over 60 days."

(4) Subsection (2) does not apply to a dairy product that is sterilized and sealed in a hermetically sealed container.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.44 Pasteurization time and temperature. (1) If a dairy product is required to be pasteurized under s. ATCP 80.40, the dairy product shall be pasteurized according to this section unless the department authorizes a different but equally effective pasteurization method in writing. Every particle of the dairy product to the required temperature and continuously hold the product at or above the required temperature for the required period of time. Pasteurization equipment shall be equipped with accurate measuring, recording and control devices to ensure that the time and temperature requirements under this section are met.

(2) Dairy products identified in table 2, unless ultrapasteurized under sub. (3), shall be pasteurized in a batch pasteurizer or HTST pasteurizer at or above the temperature specified in the table for at least the length of time specified in the table.

TABLE 2.
PASTEURIZATION REQUIREMENTS FOR
SELECTED DAIRY PRODUCTS

Product Group	Batch Pasteurization	HTST Pasteurization
(a) Milk, skim milk, or buttermilk	145° F. for 30 minutes	161° F. for 15 seconds
(b) Cream and fluid dairy products having more than 9% milkfat	150° F. for 30 minutes	166° F. for 15 seconds
(c) Cream for butter	166° F. for 30 minutes	185° F. for 15 seconds
(d) Condensed dairy products including condensed products in group (a) and blends of those products	155° F. for 30 minutes	166° F. for 15 seconds
(e) High total solids products (>16%)	155° F. for 30 minutes	166° F. for 15 seconds
(f) Frozen dessert mixes	155° F. for 30 minutes	175° F. for 25 seconds or 180° F. for 15 seconds
(g) Egg nog	155° F. for 30 minutes	175° F. for 25 seconds or 180° F. for 15 seconds
(h) Process cheese	150° F. for 30 seconds	---

(3) An ultrapasteurized dairy product shall be thermally processed at or above a temperature of 280° F. (138° C.) for at least 2 seconds in order to destroy microbes in the dairy product.

(4) Whey, whey protein concentrate, reduced mineral whey, reduced lactose whey, sweet cream and whey cream buttermilk, when condensed or dried, shall be pasteurized prior to final condensing or drying, except that partially crystallized condensed whey products containing 40% or more total solids, if pasteurized before being condensed, need not be repasteurized prior to final drying.

(5) If a dairy product standard of identity requires that any ingredient of that product be pasteurized, the ingredient shall be pasteurized in compliance with this section.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.46 Batch pasteurization. Batch pasteurization equipment shall be of the non-coil type. Batch pasteurization equipment shall be constructed and operated so that pasteurization complies with s. ATCP 80.44. Batch pasteurization equipment shall be equipped with leak detector valves, recording thermometers, mercury column product thermometers, and a thermometer to record the tem-

perature of the air space above the product in the pasteurizer.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.48 High-temperature short-time (HTST) pasteurization. Pasteurization by means of high-temperature short-time pasteurization shall comply with the standards set forth in "3-A Accepted Practices for the Sanitary Construction, Installation, Testing and Operation of High-Temperature Short-Time and Higher Heat Shorter Time Pasteurizer Systems," standard 603-06 (December, 1992), published jointly by the International Association of Milk, Food and Environmental Sanitarians, Inc. and the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services.

Note: Copies of the "3-A Accepted Practices for the Sanitary Construction, Installation, Testing, and Operation of High-Temperature Short-Time and Higher Heat Shorter Time Pasteurizer Systems," standard 603-06 (December, 1992) may be obtained from the International Association of Milk, Food and Environmental Sanitarians, Inc., 6200 Aurora Ave., Suite 200 W., Des Moines, IA 50010. Copies are on file with the department, the secretary of state and the revisor of statutes.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.50 Pasteurization records. A dairy plant operator shall keep pasteurization records for all dairy products processed by a dairy plant. Records shall include, for each day of pasteurization operations, all of the following:

- (1) The types and amounts of dairy products pasteurized.
- (2) The duration and temperature of each pasteurization run.
- (3) Lot codes or other information identifying the dairy products pasteurized in each run.
- (4) The name of the individual responsible for the pasteurization operation.
- (5) An entry verifying that the temperature recording chart is accurate to within $\frac{1}{2}^{\circ}$ F. when compared to the indicating thermometer.

(6) Entries indicating product temperature whenever product went into forward flow or diverted flow in an HTST pasteurization system.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.52 Pasteurizer testing. (1) **GENERAL.** The department shall test and seal pasteurization systems according to this section. Except as provided under sub. (6), no person may use any pasteurization system to pasteurize grade A or grade B dairy products unless that system bears the unbroken seals applied by the department under sub. (5).

(2) **TEST PROCEDURE.** The department shall test grade A and grade B pasteurization systems according to the procedure specified in Appendix I of the "Grade A Pasteurized Milk Ordinance — 1993 Recommendations of the United States Public Health Service/Food and Drug Administration."

Note: Appendix I of the "Grade A Pasteurized Milk Ordinance — 1993 Recommendations of the United States Public Health Service/Food and Drug Administration" is on file with the department, the secretary of state and the revisor of statutes. Copies may be obtained from the department at cost.

Register, November, 1994, No. 467

(3) **TEST FREQUENCY; GRADE A PASTEURIZERS.** The department shall test each grade A pasteurization system at the following times:

- (a) Before the pasteurization system is first put into operation.
- (b) At least once every 3 months, except that a holding time test may be conducted at least once every 6 months.
- (c) Whenever a seal under sub. (5) is broken.

(4) **TEST FREQUENCY; GRADE B PASTEURIZERS.** The department shall test a grade B pasteurization system at the following times:

- (a) Before the pasteurization system is first put into operation.
- (b) At least once every 12 months.
- (c) Whenever a seal under sub. (5) is broken.

(5) **DEPARTMENT SEALS.** When the department's test confirms that a pasteurization system is operating correctly, the department shall apply seals that prevent any alteration of the system that would allow any unpasteurized milk or dairy product to flow through the system.

(6) **BROKEN SEAL.** (a) A dairy plant operator shall immediately notify the department by telephone whenever the dairy plant operator breaks a seal applied by the department under sub. (5).

(b) A dairy plant operator may not operate a pasteurizer after breaking a seal applied by the department under sub. (5) unless all of the following conditions are met:

1. The dairy plant operator notifies the department under par. (a).
2. The dairy plant operator determines and documents that pasteurization time and temperature requirements under s. ATCP 80.44 are met. Time and temperature records required by s. ATCP 80.50 shall be retained for at least 6 months.
3. The dairy plant operator confirms, at least once during every 8 hours of operation, that pasteurized milk and dairy products contain less than one microgram of phosphatase per ml. as determined by the Sharer rapid method, or less than 500 milliunits of phosphatase per liter as determined by the fluorometric procedure.

4. A pasteurizer operator qualified under s. ATCP 80.40 (3) is present to operate the pasteurizer, or to supervise its operation.

(c) A dairy plant operator may not operate a pasteurizer for more than 5 days after breaking a seal applied by the department under sub. (5) unless one of the following occurs:

1. The department tests the pasteurizer and replaces the broken seal.
2. A dairy plant operator or employee certified under sub. (7) tests the pasteurizer and replaces the broken seal on an interim basis, pending retesting and resealing by the department.

(7) **EMERGENCY TESTING AND SEALING.** (a) The department may certify a dairy plant operator or employe to test and seal a pasteurization system in that dairy plant on an emergency basis under par. (b). To be certified under this paragraph, a dairy plant operator or employe shall successfully complete a training course approved by the department. The department may suspend or revoke certification for cause.

(b) A dairy plant operator or employe certified under par. (a) may test and seal a pasteurization system in that dairy plant on an emergency basis, pending retesting and resealing by the department under par. (c), if emergency testing and sealing is necessary to continue pasteurizing operations after the department's seal is broken in an emergency. Testing under this paragraph shall comply with the procedure specified under sub. (2).

(c) The department shall promptly retest and reseal a pasteurization system after the department receives notice under sub. (6) (a) that its seal applied to that system has been broken. The department shall retest and reseal a pasteurization system under this paragraph, regardless of whether the pasteurization system has been tested and sealed under par. (b). The department need not retest or reseal a pasteurization system that is withdrawn from service.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter VI — Dairy Plant Records and Reports

ATCP 80.54 Dairy plant records. (1) A dairy plant operator shall keep all of the following records, and shall retain those records for the period of time specified under this subsection:

(a) Records related to milk receipts and producer payrolls, as required by s. ATCP 100.76. Records under this paragraph shall include milk collection records received from milk haulers under s. ATCP 82.10 (10). Records under this paragraph shall be retained for at least 3 years.

(b) Records of all dairy product ingredients received at the dairy plant, including the sources from whom the ingredients were received. Records under this paragraph shall be retained for at least one year.

(c) Daily records of all finished products produced at the dairy plant. Records under this paragraph shall be retained for at least one year.

(d) Records of all milk quality tests and sediment tests conducted on milk shipments received by the dairy plant operator, including but not limited to tests required under subch. IV of ch. ATCP 60. Records under this paragraph shall be retained for at least 2 years.

(e) Records of all in-plant tests, performed by a dairy plant operator on milk and dairy products held or processed by the dairy plant operator, to determine bacterial counts or identify possible adulteration of that milk or those dairy products. Records under this paragraph shall be retained for at least one year.

(f) Records of private water supply tests, if any, conducted under s. ATCP 80.08 (8). Records under this paragraph shall be retained for at least one year.

(g) Cleaning and sanitizing records for all C-I-P systems, as required under s. ATCP 80.14 (2) (b). Records under this paragraph shall be retained for at least 90 days.

(h) A record of every calibration, daily performance check, daily reference check and hourly reference check performed on a milkfat or protein testing device, as required by s. ATCP 80.34 (10). Records under this paragraph shall be retained for at least one year.

(i) Pasteurization records required under s. ATCP 80.50. Records under this paragraph shall be retained for at least 6 months.

(j) Cleaning and sanitizing records for bulk milk tankers, as required under s. ATCP 82.08 (5). Records under this paragraph shall be retained for at least 90 days.

(k) Temperature records made by the dairy plant operator, including records of dairy product temperatures, storage temperatures and processing temperatures. Except where a longer retention period is required for specific temperature records under this chapter, records under this paragraph shall be retained for at least 30 days.

(2) Records under sub. (1) shall be kept at the dairy plant, and shall be made available to the department for inspection and copying upon request.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.56 Dairy plant reports to department. A dairy plant operator shall submit all of the following reports to the department:

(1) Reports required for the issuance or renewal of a dairy plant license or grade A permit under s. ATCP 80.02.

(2) Financial statements and reports required under ch. ATCP 100, if any.

(3) Milk quality test reports required under subch. IV of ch. ATCP 60, and dairy farm inspection reports required under s. ATCP 60.24.

(4) Results of any microbiological test conducted on a pasteurized or ready-to-eat dairy product that confirm the presence of pathogenic organisms in that product.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.58 Confidential information. (1) The following information, received by the department from a dairy plant operator, is closed to public inspection under s. 19.35, Stats.:

(a) Financial information protected from disclosure under s. 100.06 (1g) (c), Stats.

(b) Information qualifying as a trade secret as defined in s. 134.90 (1) (c), Stats.

(2) The following information, received by the department from a dairy plant operator, is closed to public inspection under s. 19.35, Stats., unless the department determines that inspection is necessary to protect the public health, safety or welfare:

(a) Information that identifies individual milk producers who deliver milk to the dairy plant operator if the

information is in the form of a composite list identifying those producers with that dairy plant operator, except as provided under s. 100.06 (4), Stats.

Note: See s. 97.20 (3m), Stats.

(b) Information pertaining to individual milk producer production and milk quality records if that information identifies the producer.

Note: See s. 97.22 (10), Stats.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

Subchapter VII — Inspection and Enforcement

ATCP 80.60 License suspension or revocation. (1) The department may suspend or revoke a dairy plant license or grade A permit for cause, as provided under s. 93.06 (7), Stats. Cause may include, but is not limited to:

(a) A violation of this chapter, ch. ATCP 60 or ATCP 100.

(b) Interference with lawful inspection or sampling by the department or certifying agency, or refusal to permit lawful inspection or sampling by the department or certifying agency.

(c) Refusal to permit the lawful inspection or copying of documents under s. ATCP 80.54 (2).

(d) Failure to pay fees required under s. ATCP 80.04.

Note: The procedure for suspending or revoking a dairy plant license or grade A permit is specified in ch. ATCP 1.

(2) The suspension or revocation of a dairy plant license automatically suspends or revokes any grade A permit which the dairy plant operator holds for that dairy plant.

Note: Violations of this chapter may also result in court prosecution under s. 97.72 or 97.73, Stats.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.

ATCP 80.62 Grade A dairy plants; compliance monitoring. (1) **AUDIT SURVEYS BY CERTIFYING AGENCY.** (a) *Requirement.* The certifying agency shall perform audit surveys of grade A dairy plants, and the dairy farms shipping milk to those dairy plants, to establish a grade A sanitation compliance rating under this chapter. The certifying agency shall survey a grade A dairy plant, and the farms shipping milk to that dairy plant, at all of the following times:

1. Within 20 business days after the department first issues a grade A dairy plant permit to the dairy plant under s. ATCP 80.06.

2. At least once every 2 years after the initial survey under subd. 1.

3. Within 20 business days after the department asks the certifying agency to perform a survey.

(b) *Survey method.* A survey under par. (a) shall include an inspection of the grade A dairy plant, an inspection of a randomly selected statistical sample of dairy

farms shipping grade A milk to that dairy plant, and an evaluation of enforcement methods. A survey shall be conducted in compliance with "Methods of Making Sanitation Ratings of Milk Supplies," 1987 revision, published by the Food and Drug Administration, Public Health Service, United States Department of Health and Human Services.

(c) *Survey rating.* Based on a survey under par. (a), the certifying agency shall assign an overall grade A sanitation compliance rating to the dairy plant and the dairy farms that ship milk to that dairy plant.

Note: The "Methods of Making Sanitation Ratings of Milk Supplies" is on file with the department, the secretary of state and the revisor of statutes. Copies may be purchased from the Milk Safety Branch, HFF-346, Food and Drug Administration, Public Health Service, United States Department of Health and Human Services, 200 'C' Street S.W., Washington, D.C. 20204.

(d) *Unsatisfactory survey rating; grade A permit suspension.* The department may suspend or revoke a dairy plant's grade A permit if the sanitation compliance rating for that dairy plant under par. (c) falls below 90%. This subsection does not prohibit the department from suspending or revoking a grade A dairy plant permit for any other reason.

Note: Procedures related to the suspension or revocation of a grade A dairy plant permit are set forth in ch. ATCP 1. If a compliance rating falls below 90%, the United States food and drug administration may also decertify the dairy plant as an interstate milk shipper. The effect may be to prevent the dairy plant operator from shipping grade A dairy products in interstate commerce.

(2) **INSPECTION FREQUENCY.** The department shall inspect every grade A processing plant at least once every 3 months, every grade A receiving station at least once every 3 months, and every grade A transfer station at least once every 6 months.

(3) **DAIRY PRODUCT SAMPLING; FREQUENCY.** (a) *Pasteurized milk and dairy products; sample testing.* During any consecutive 6 month period, the department shall collect from each grade A dairy plant at least 4 samples of each pasteurized grade A dairy product produced by that dairy plant. Each sample shall be collected in a separate month. The department shall measure and record the temperature of each pasteurized grade A dairy product from which the samples are collected, and shall test the samples for bacteria counts, coliform counts and beta lactam drug residues. The department may collect additional samples and perform additional tests which the department considers necessary.

(b) *Raw milk held at dairy plant; sample testing.* During any consecutive 6-month period, the department shall collect, from each grade A dairy plant, at least 4 samples of raw commingled milk held at the dairy plant. The department shall measure and record the temperature of the raw commingled milk from which the samples are collected, and shall test the samples for bacterial counts and beta lactam drug residues. The department may collect additional samples and perform additional tests which the department considers necessary.

History: Cr. Register, November, 1994, No. 467, eff. 12-1-94.