



Province of Alberta

DAIRY INDUSTRY ACT

DAIRY INDUSTRY REGULATION

Alberta Regulation 139/1999

With amendments up to and including Alberta Regulation 4/2017

Office Consolidation

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(Consolidated up to 4/2017)

ALBERTA REGULATION 139/99

Dairy Industry Act

DAIRY INDUSTRY REGULATION

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Interpretation

1(1) In this Regulation,

- (a) “Act” means the *Dairy Industry Act*;
- (a.1) “approved method” means a standard method or a test specified by the Director, if in the opinion of the Director that test provides equivalent or greater food safety than that provided by a standard method;
- (b) “bulk milk tank” means a stationary storage tank used for the cooling and holding of raw milk on a dairy farm and includes the fixtures and equipment used in connection with it;
- (c) “commercially sterile” means the condition obtained in a dairy product that has been processed by the application of heat alone or in combination with other treatments, to render the dairy product free from viable forms of micro-organisms, including spores, that would be capable of growing in the dairy product at normal temperatures at which the milk or dairy product is intended to be held during distribution and storage;
- (d) “communicable disease” means a communicable disease as defined in the *Communicable Diseases Regulation* (AR 238/85);
- (e) “critical control point” means a point or procedure in a dairy plant where, with respect to the receiving of milk or the processing of dairy products, a failure to exercise

- control over the process at that point or a failure to follow a procedure in the process may result in a health hazard;
- (f) “critical limit” means identified tolerances in processing that must be met to ensure that a critical control point effectively controls a health hazard;
 - (g) “gross producer returns” means the value of milk delivered by a producer to a processor before any deductions or adjustments are made under this Regulation;
 - (h) “HTST” means high-temperature, short-time, when used with reference to the pasteurization of a dairy product;
 - (h.1) “inhibitor” means any antibiotic, drug residue or other foreign chemical substance in a dairy product whose presence in the dairy product is confirmed as a positive result using an approved method;
 - (i) “market” means to sell, re-sell, offer for sale or re-sale, keep for sale or re-sale, buy, price, assemble, pack, handle, store, deliver or transport;
 - (j) “milk house” means a building, room or rooms on a dairy farm used for cooling and storing milk or farm-separated cream and for cleaning and sanitizing equipment used in the production and storage of raw milk or farm-separated cream;
 - (k) “sanitize” means the process of reducing the number of bacterial contaminants by means of heat or chemical treatment;
 - (l) “standard method” means the microbiological, chemical, physical and compositional methods of analysis as approved by Health Canada or those methods described in the most recent Standard Methods for the Examination of Dairy Products published by the American Public Health Association or the Official Methods of Analysis published by the Association of Official Analytical Chemists, as amended or replaced from time to time;
 - (m) “thermal processing” means a heat preservation process applied to food with the object of reducing the level of pathogens associated with that food in order to ensure the safety of that food over its intended shelf-life and storage conditions;
 - (n) “3-A Standards” means the 3-A Standards published by the International Association of Milk, Food and

Environmental Sanitarians, as amended or replaced from time to time;

- (o) “UHT” means ultra high temperature processing of dairy products by systems that are capable of rendering the dairy products commercially sterile on exiting the thermal processor.

(2) For the purposes of this Regulation, a reference to

- (a) the *Food and Drugs Act* (Canada) includes the regulations under that Act, and
- (b) the *Marketing of Agricultural Products Act* includes the regulations under that Act.

AR 139/99 s1;147/2002

Part 1 Licences

Dairy Industry Act Licences

Classes of licences

2 The Director may issue the following classes of licences:

- (a) bulk milk grader;
- (b) pasteurizer operator;
- (c) producer of milk produced by a species other than *Bos taurus*;
- (d) processor of milk produced by a species other than *Bos taurus*;
- (e) a producer or processor of milk produced by the species *Bos taurus* if the producer or processor is exempt from the *Alberta Milk Plan Regulation*.

AR 139/99 s2;147/2002

Application for licence

3(1) An application for a licence must be made to the Director.

(2) An application must

- (a) contain the information and any documentation required by the Director,

- (b) be accompanied by evidence satisfactory to the Director that the applicant has taken a course specified by the Director and has satisfactorily passed an examination required by the Director, and
- (c) be accompanied by the applicable fee.

(3) The Director may issue a licence if the Director is satisfied that the application meets the requirements of this section.

Conditions of licence

4(1) The standards and requirements set out in the Act and this Regulation are conditions imposed on each licence issued by the Director under this Regulation.

(2) A licence issued under this Regulation may not apply to more than one dairy farm or dairy plant.

AR 139/99 s4;147/2002

Licence term

5 The term of a licence expires on the 5th December 31 following its issue, unless a different expiry date is specified by the Director on the licence.

AR 139/99 s5;147/2002

Licence not transferable

6 A licence issued under this Regulation is not transferable.

Licence format

7 A licence must be in a form provided by the Minister.

Part 2 Milk Production and Transportation

Dairy Barn, Milk House and Milking Parlour

Dairy barn, milk house

- 8** The land surrounding a dairy barn and milk house must be
- (a) configured and maintained in a manner that prevents contamination of milk and farm-separated cream,
 - (b) kept free of refuse and animal and vegetable wastes, and
 - (c) well drained.

Road

9 In order to permit passage by a milk transport vehicle, a producer's road to a milk house must be maintained by the producer so that access to the milk house is

- (a) safe and easy in all weather conditions, and
- (b) free of animals, locked gates and other obstacles.

Building approval

10 No person shall

- (a) construct a building for use for dairy purposes on a dairy farm, or
- (b) renovate or remodel a building for use or used for dairy purposes on a dairy farm in a way that materially affects the milk handling operation,

unless an inspector has first approved the proposed site and plans.

Dairy Barns**Barn required**

11 Every dairy farm must have a dairy barn located on it.

Dairy barn standards

12(1) A dairy barn must be

- (a) kept clean,
- (b) maintained in good repair,
- (c) provided with a water source, and
- (d) insulated and ventilated so as to prevent the accumulation of odours and water condensation.

(2) In a dairy barn,

- (a) manure must be removed at least daily from animal stalls, floors, alleyways, gutters and holding areas, and
- (b) box stalls and calf pens must be maintained in clean, dry and sanitary conditions, free of strong odours.

(3) A loose housing barn must be provided with bedding distributed on a regular basis sufficient to provide a clean, dry rest area for the animals and must be cleaned out at least once a year.

Dairy barn construction

13(1) A dairy barn must be designed and constructed in a manner that

- (a) permits the operations carried on in it to be performed under sanitary conditions,
- (b) prevents the contamination of milk and farm-separated cream, and
- (c) prevents injury to and damage by dairy animals.

(2) A dairy barn must be constructed of materials that

- (a) are durable,
- (b) permit the effective cleaning of all interior surfaces, and
- (c) are free of any toxic or noxious substances.

(3) Subject to subsection (4), stall platforms, gutters, holding areas and alleyways of a dairy barn must be

- (a) constructed of concrete or other impervious material, and
- (b) constructed in a manner that prevents random cracking.

(4) Subsection (3) does not apply to bedding areas in loose housing barns, or stalls in a free stall barn.

(5) A dairy barn where cows are milked must

- (a) have walls and ceilings that are hard, cleanable, light-coloured and painted as required by an inspector,
- (b) have stall platforms, gutters, floors, mangers and alleyways constructed of concrete or other impervious material, in a manner that prevents cracking,
- (c) have manure gutters of sufficient size to contain manure accumulated between cleanings,
- (d) have gradients in stalls that permit complete drainage,
- (e) be provided with light fixtures that are shielded so as to prevent breaking glass from falling into open milk containers,

- (f) be illuminated in a manner that permits the person carrying out the milking to
 - (i) see the udders of the dairy animals during milking, and
 - (ii) perform the milking in a sanitary manner,and
 - (g) have, in a case where a liquid manure pit is located under or adjacent to a dairy housing barn, ventilation for the liquid manure pit that prevents the pit odours from entering the barn, milk house and milking parlour.
- (6) Dairy barns must be kept free of pests.
- (7) A system that is satisfactory to an inspector must be provided for the storage or disposal of manure and other wastes from the dairy barn.

Milking Parlours

Milking parlour

14(1) A milking parlour must

- (a) be equipped with or have ready access to a pressurized hot and cold running potable water system that is protected from any source of contamination,
- (b) be equipped with pipes, hoses and nozzles that are installed and arranged in a manner that permits cleaning of the parlour and equipment,
- (c) be equipped with a ventilation system to eliminate condensation and odours that may affect the organoleptic characteristics of the milk,
- (d) be equipped with a heating system to prevent freezing,
- (e) be illuminated in a manner that permits the person carrying out the milking to
 - (i) see the udders of the dairy animals during milking, and
 - (ii) perform milking in a sanitary manner,
- (f) have walls and ceilings that are

- (i) covered with hard, smooth, washable, light-coloured, waterproof material, and
 - (ii) free of indentations, flaking, pitting and cracks,
 - (g) have the lower 15 cm of the walls, above floor level, constructed of concrete or other impervious material, and
 - (h) be kept free of animals other than dairy animals that are present for milking.
- (2) The floor, ramps and platforms of a milking parlour must
- (a) be constructed of concrete or other impervious material,
 - (b) be maintained in good repair,
 - (c) be rounded at the intersection with the walls, and
 - (d) have covered drains, equipped with traps, that are sloped so as to flow into a wastewater drainage system.
- (3) If a milking parlour is constructed as a part of a dairy barn it must be located and maintained so that all equipment can be kept clean and free of contamination, including stable odours.

Milk Houses

Milk house purpose

15 A producer must have a milk house and must use it exclusively for

- (a) cooling and storing milk and farm-separated cream, and
- (b) cleaning, sanitizing and storing materials, milking equipment and utensils used in the production and handling of milk and farm-separated cream.

Milk house standards

16(1) A milk house must be

- (a) attached to, adjacent to or part of the dairy barn or milking parlour, and
- (b) of adequate size to accommodate the milking equipment and utensils and provide the necessary working space.

(2) A milk house must be

- (a) fitted with self-closing doors where the milk house leads directly into a dairy barn,
 - (b) located, constructed and maintained so as to prevent any objectionable odours or pests from entering the milk house directly from a milking parlour, barn or any other source, and
 - (c) accessible from an exterior entry point.
- (3)** A milk house must have a floor of concrete or other impervious material that
- (a) is properly reinforced and constructed to prevent cracking,
 - (b) is maintained in good repair,
 - (c) slopes adequately to prevent pooling and drains to a properly trapped, readily accessible covered floor drain that
 - (i) has a minimum diameter of 10 cm, and
 - (ii) is not located under the bulk milk tank or bulk milk tank outlet,
- and
- (d) has a concrete or similarly impervious wall rising at least 15 cm above the floor level.
- (4)** A milk house must
- (a) be equipped with a pressurized hot and cold running potable water system that
 - (i) has taps, pipes, hoses and nozzles installed and arranged in a manner that permits cleaning of the milk house,
 - (ii) is protected from any source of contamination to the water, and
 - (iii) provides sufficient water to meet the operating requirements of the milk house,
 - (b) be equipped with a ventilation system to eliminate condensation and odours that may affect the organoleptic characteristics of the milk,
 - (c) be properly insulated and heated to prevent freezing,

- (d) be illuminated in a manner that permits milk or farm-separated cream handling operations and inspection, cleaning and sanitizing of the premises and equipment to be carried out in a sanitary manner,
 - (e) be equipped with a dispenser containing individual towels,
 - (f) have walls and ceilings that are
 - (i) covered with hard, smooth, washable, light-coloured and waterproof material, and
 - (ii) free of indentations, flaking, pitting and cracks,and
 - (g) be kept free of pests.
- (5) Lights in a milk house that are directly above or near a bulk milk tank must be protected by shatterproof covers or coatings.
- (6) All exterior doors, windows and openings of a milk house must be kept closed or be fitted with screens or other devices to prevent the entry of pests.

Cleansing standards

- 17(1)** A milk house must contain
- (a) one or more sinks with concave bottoms for washing equipment,
 - (b) a separate sink for washing hands,
 - (c) the necessary materials for washing and drying hands, and
 - (d) cupboards, stands or shelves of non-corrosive material located off the floor to hold the materials and equipment used in the production and handling of milk or farm-separated cream.
- (2) All sinks referred to in subsection (1) must be drained by a pipe equipped with a trap connected to a wastewater drainage system.
- (3) If a milk house is provided with a lavatory, the lavatory must
- (a) not open directly into the milk house working area, and
 - (b) be maintained in a clean and sanitary condition.

Storage of hazardous products

18(1) All containers of detergents or sanitizers and all other cleaning materials used in the production and handling of milk or farm-separated cream that are stored in a milk house must be in a location and stored in a manner that prevents contamination of the milk or farm-separated cream.

(2) No pesticides, or other toxic products, other than those that are directly related to the operation of a milk house, must be stored in a milk house.

(3) All veterinary drugs stored in a milk house must be kept in a cupboard or refrigerator in a manner that prevents contamination of the milk and farm-separated cream.

Hose port

19(1) A milk house must be equipped with a hose port that

- (a) is located at least 40 cm above the milk house floor,
- (b) is not more than 15 cm in diameter, and
- (c) is kept closed when not in use to prevent the entry of pests.

(2) A milk house must have

- (a) outside the milk house and directly below the hose port, a concrete apron
 - (i) that is connected to the main entrance of the milk house by a concrete walkway, and
 - (ii) that is large enough so that the hose of the milk transport vehicle cannot contact ground other than the concrete walkway,
- (b) a grounded exterior electrical outlet adjacent to the hose port and controlled by a bipolar switch located on the interior wall of the milk house in a location accessible to the bulk milk grader, and
- (c) a window in the milk house that permits the bulk milk grader to observe the transfer pump compartment of the milk transport vehicle's tank from inside the milk house.

Equipment

20(1) When located in a milk house, the refrigeration compressor, water heater and water pump must be installed and operated in a manner that does not contaminate the milk.

(2) A milk house must be equipped with a separate and adequately drained and well maintained equipment room for the vacuum pumps.

Bulk Milk Tanks**Bulk milk tank**

21(1) A producer must store all milk produced for sale for human consumption in a bulk milk tank that meets the requirements of this Regulation.

(2) Subject to section 24(2), all bulk milk tanks must be located in the milk house.

(3) Despite subsection (1), a producer who produces only farm-separated cream is not required to have a bulk milk tank in a milk house but must have facilities for storing and cooling farm-separated cream so that the farm-separated cream meets the requirements of Schedule 2.

(4) Despite subsections (1) and (5), if a Director has approved direct shipment to a dairy plant, a producer is not required to have a bulk milk tank in the milk house.

(5) A producer must have at least one bulk milk tank for each species of dairy animal milked on the dairy farm.

(6) A producer may place only milk in a bulk milk tank that is produced on the producer's dairy farm.

Installation

22 No person shall install or permit the installation of a bulk milk tank on a dairy farm unless the tank is first approved by an inspector.

Milk from approved tank

23 A processor may not accept milk from a bulk milk tank that the processor knows or ought to know has not been approved under section 22.

Clearances

24(1) A bulk milk tank in a milk house must be located so that there is

- (a) sufficient clearance for inspection and sampling of the milk and the removal of the dipstick, gauge or other measuring device,
- (b) at least 90 cm clearance on the outlet side, the pouring side and the sink side, and
- (c) at least 60 cm clearance on any remaining side.

(2) Subsection (1)(c) does not apply to a bulk milk tank that is bulkheaded where a portion of the tank extends beyond the milk house wall.

Standards

25(1) A bulk milk tank must

- (a) conform to 3-A Standards,
- (b) be used exclusively for the storage and cooling of milk,
- (c) have a capacity to hold at least 2.5 days of milk production by the dairy animal herd during its peak production period,
- (d) be equipped with a dipstick, gauge or other measuring device authorized by the Director to permit determination of the volume of milk contained in the tank on the basis of the calibration table bearing the same serial number as the dipstick or gauge and the tank,
- (e) have mechanical agitation capable of restoring uniformity of all milk constituents throughout the tank without splashing or churning of the milk,
- (f) not use air agitation,
- (g) be equipped with intermittent controlled agitation that provides a minimum of 5 minutes of agitation every hour,
- (h) be capable of cooling the milk and maintaining it at a temperature of between 1°C and 4°C,
- (i) have legs that are adjustable,
- (j) be equipped with a thermometer in working order bearing gradations from at least 0°C to 50°C and showing the

temperature of the milk contained in the tank to within +/-1°C, and

(k) be equipped with an outlet cap.

(2) A bulk milk tank must be

(a) emptied at least once every 2 days, unless approval for a longer period is granted by the Director, and

(b) cleaned and sanitized each time it is emptied.

(3) The Director may notify the producer using the bulk milk tank and Alberta Milk of an approval under subsection (2)(a).

(4) Despite subsection (1)(c), if there is more than one bulk milk tank on a dairy farm, the combined capacity of the bulk milk tanks must be able to hold at least 2.5 days of milk production by the dairy animal herd during its peak production period.

AR 139/99 s25;147/2002;217/2002

Milk temperature

26(1) The milk contained in a bulk milk tank on a dairy farm must be maintained at a temperature of between 1°C and 4°C until collection.

(2) The temperature prescribed for milk in subsection (1) must be achieved in the following manner:

(a) the first milking placed in the bulk milk tank must be cooled to 10°C or less within one hour after completion of milking and to between 1°C and 4°C within 2 hours after milking and maintained at that temperature;

(b) the blend temperature, when subsequent milkings enter the tank, may not rise to above 10°C and the milk must be cooled to between 1°C and 4°C within one hour after milking and maintained at that temperature.

Cream temperature

27 A producer of farm-separated cream must provide a cooling system capable of maintaining the farm-separated cream at a temperature necessary to achieve the acidity level set out in Schedule 2.

Milk and Cream Handling Equipment

Equipment in contact with milk

28 The surfaces of materials and equipment that come into contact with milk or farm-separated cream must be

- (a) constructed of non-corrosive material,
- (b) smooth and free of cavities, open seams and loose particles,
- (c) non-toxic and resistant to damage by cleansers and sanitizers,
- (d) unaffected by milk or farm-separated cream, and
- (e) manufactured so as not to affect milk and farm-separated cream.

Equipment maintenance

29 All equipment used to handle, store or transport milk or farm-separated cream must be

- (a) kept clean,
- (b) installed and maintained in accordance with the manufacturer's instructions,
- (c) maintained in working order, and
- (d) used only for the purposes of collecting, cooling, holding and transferring milk or farm-separated cream.

Milk handling equipment

30(1) No person shall install or permit the installation of milking or milk handling equipment on a dairy farm unless the equipment conforms to 3-A Standards and is installed in accordance with 3-A Standards.

(2) No producer shall use or permit the use of milking or milk handling equipment that does not comply with subsection (1).

(3) If an inspector discovers milking or milk handling equipment that does not comply with subsection (1), is beyond repair or is otherwise unsuitable for the purpose intended, the inspector may request the producer to cease using the equipment, and the producer must comply.

Milking Operations

Cleanliness, maintenance

31 The premises, materials and equipment of the dairy barn, holding area, milking parlour and milk house must be kept clean and maintained in good repair.

Staff

32(1) A person who is conducting a milking operation must

- (a) wash hands and dry them with single-service towels to ensure that the hands are clean and dry during milking,
- (b) wear clean clothing, and
- (c) in a case where the person has an open lesion, wear a waterproof covering that prevents contamination of the milk or farm-separated cream.

(2) No person infected with or carrying a communicable disease that may be transmitted through the milk or farm-separated cream may work in a capacity that involves the production, handling, storage or transportation of milk or farm-separated cream.

Single species milk

33 No person may mix milk from more than one animal species in the same bulk milk tank.

Milking

34(1) A producer must ensure that the flanks, udders and tails of the producer's dairy animals are kept clean and free of mud and manure.

(2) A teat dip solution used to sanitize teats must be approved for that purpose under the *Food and Drugs Act* (Canada).

(3) A producer must have posted procedures for the milking equipment sanitation program and ensure that they are followed.

Milking equipment sanitation

35 Equipment and utensils that come into contact with the milk during milking must be

- (a) rinsed, washed, rinsed and drained within one hour after use,

- (b) stored, when not in use, in a manner that prevents contamination, and
- (c) sanitized and drained immediately before use.

Cleansers

36(1) Detergents, sanitizers, pesticides and other pest control products used in a dairy barn must be those approved by the Director.

(2) All detergents, sanitizers, pesticides and other pest control products must be kept in their original labelled containers or kept in containers that are labelled to ensure easy identification of the types of products.

Care of Dairy Animals

Housing

37(1) Animals whose milk is intended for human consumption must be kept clean and free of diseases transmittable to humans by milk.

(2) A dairy barn may not be used to house animals other than the species of the dairy animals being kept for the purpose of milking.

(3) If more than one dairy species is maintained on the same dairy farm,

- (a) dairy ewes must be kept in separate buildings from other dairy species,
- (b) dairy species other than dairy ewes may be kept in separate areas of the same building, and
- (c) milking, collection, storage and transfer equipment must be operated so that mixing of the milk among dairy animal species is prevented.

(4) In a dairy barn, young dairy animals must be kept in separate pens or box stalls when housed in the same facility as the milking herd.

(5) In dairy goat operations, all bucks must be housed separately from the rest of the herd in order to prevent odour contamination of the milk.

Drugs

38(1) Only drugs or products approved for administration to dairy animals under the *Food and Drugs Act* (Canada), the *Feeds Act* (Canada), the *Pest Control Products Act* (Canada) and any applicable provincial enactment may be administered to a dairy animal as set out in the product label.

(2) A producer must identify treated animals and maintain a written record for at least one year of all drug and product use.

(3) A processor who receives milk from a producer, an inspector and the Director may examine the records referred to in subsection (2) during the producer's regular working hours.

Milk Handling and Transport**Licence required**

39 No person shall receive milk from a bulk milk tank unless the person is a bulk milk grader.

Milk collection

40(1) A bulk milk grader must

- (a) wear clean clothing while performing any activities, duties or functions under this Regulation,
- (b) not be infected with or carry any communicable disease that is transmitted through milk, and
- (c) wear a waterproof covering over any open lesion so that the milk is not contaminated.

(2) A bulk milk grader shall not collect milk from a bulk milk tank if

- (a) the milk in the tank has been seized or placed under detention by an inspector under section 11 of the Act, has been ordered by an inspector under section 14 of the Act to cease supplying milk or has been ordered by an inspector under section 18 of the Act to not sell or supply a shipment of milk,
- (b) the producer has been prohibited from shipping milk by an inspector under section 11 of the Act, has been ordered by an inspector under section 14 of the Act to cease supplying milk or has been ordered by an inspector under section 18 of the Act to not sell or supply a shipment of milk,

- (c) the producer does not hold a producer licence, in good standing, issued by the Alberta Milk or by the Director, or
 - (d) the milk contained in the bulk milk tank is not acceptable on the basis of its appearance, odour, temperature or other observable abnormalities.
- (3)** A bulk milk grader, when collecting milk at a dairy farm, must
- (a) ensure that hands are clean before handling or touching equipment,
 - (b) measure the volume of milk contained in the producer's bulk milk tank,
 - (c) clearly identify samples as required by the Director,
 - (d) take a representative sample of milk from each bulk milk tank to conduct tests for the purposes of the Act and the *Marketing of Agricultural Products Act*
 - (i) by means of a mechanical sampler on the milk transport vehicle, or
 - (ii) directly from the producer's bulk milk tank using a sanitized dipper rinsed in the milk prior to sampling, pipette or other sanitary sampling device, following agitation of the milk contained in the tank for at least 5 minutes or as otherwise required by the Director to assure homogeneity of the milk,
- and
- (e) record on a collection report all information required by the Director.
- (4)** A bulk milk grader must use the hose port when transferring milk from a bulk milk tank to a milk transportation tank.
- (5)** A bulk milk grader must completely empty the bulk milk tank every time any milk is removed, other than for samples, and the bulk milk grader must ensure that the tank is immediately rinsed.
- (6)** A bulk milk grader must deliver samples of milk taken under this section to a processor who must deliver
- (a) a sample to an approved laboratory at least 4 times a month in accordance with the timetable of the approved laboratory, and

- (b) any additional sample requested by an inspector or analyst.

AR 139/99 s40;147/2002

Milk Transport Vehicles

Milk transport vehicles required

41 Milk transport vehicles may be used only for the transportation of milk, farm-separated cream or potable water unless otherwise authorized by the Director.

Tank standards

42(1) The owner of a milk transport vehicle must ensure that the milk transportation tank and related equipment conform to 3-A Standards and this section.

(2) On a milk transport vehicle, the inner wall of the milk transportation tank and any equipment that comes into contact with milk, and any container used for the transportation of farm-separated cream, must be

- (a) constructed of non-corrosive material, and manufactured in such a manner as not to affect milk or farm-separated cream,
- (b) smooth and free of cavities and loose particles, and
- (c) non-toxic and resistant to damage from cleansers and sanitizers.

(3) The milk transportation tank of a milk transport vehicle must be

- (a) insulated so that the temperature of the milk cannot rise more than 2°C in 24 hours, and
- (b) equipped with a sufficient number of spray balls to allow for proper cleaning.

(4) The milk transportation tank and related equipment of the milk transport vehicle must be cleaned and sanitized at least once a day in a manner that prevents contamination of the milk.

(5) If more than one shipment is collected in one day in a milk transport vehicle, the pump, hoses and fittings of the milk transport vehicle must be washed between shipments.

- (6) The outer wall of the milk transportation tank of a milk transport vehicle must be constructed of hard, smooth, non-corrosive, washable, waterproof material.
- (7) A milk transport vehicle must be equipped with a compartment to store the hose, pump and any other equipment used in the transfer of milk to protect them from any source of contamination.

Part 3

Samples, Testing, Standards and Grades

Milk and Cream Quality Standards

Milk, cream standards

43 If a producer's milk or farm-separated cream does not meet the requirements of Schedule 2, the milk may be rejected in accordance with this Regulation.

AR 139/99 s43;147/2002

Saleable milk

- 44(1)** No person shall sell milk for human consumption that
- (a) comes from an animal 15 days before and 3 days after parturition, or any longer periods that are necessary to ensure that the milk is free of colostrum,
 - (b) contains blood, coagulation or other foreign particles,
 - (c) has odours that adversely affect its organoleptic characteristics, or
 - (d) is contaminated.
- (2)** Raw milk, farm-separated cream or a product produced from raw milk or farm-separated cream may be sold only to a processor.
- (3)** Subsection (2) does not apply to cheese that has been manufactured in compliance with the *Food and Drugs Act* (Canada).

AR 139/99 s44;147/2002

Samples

45 A processor must provide samples of milk for testing as required by the Act, this Regulation, the Director, an inspector or an analyst at an approved laboratory.

Testing

46(1) A sample of milk taken for testing must be taken in an aseptic manner and be maintained at a temperature between 1°C and 4°C.

(2) An approved method carried out in a manner satisfactory to the Director must be used to test milk and farm-separated cream to determine compliance with this Regulation.

(3) Except as is otherwise provided by this Regulation,

(a) an analyst who tests a dairy product by microbiological, chemical, physical or compositional analysis must

(i) conduct the test at an approved laboratory in accordance with an approved method carried out in a manner satisfactory to the Director, and

(ii) report the results in accordance with the method used to the persons required by this Regulation or the Director,

and

(b) a person who takes, identifies or transports samples for the purpose of an analysis referred to in clause (a) must do so in accordance with an approved method.

AR 139/99 s46;147/2002

Grade tests

47(1) The food safety of a producer's milk that is received by a processor must be determined monthly by testing by an analyst in an approved laboratory.

(2) For the purposes of this section, milk is received when it is transferred from a bulk milk tank to a milk transport vehicle.

AR 139/99 s47;147/2002

48, 49 Repealed AR 147/2002 s13.

Drug residue ramifications

50(1) to (4) Repealed AR 147/2002 s14.

(5) If a sample of a producer's milk does not meet the requirements of Schedule 2 with respect to inhibitors and drug residues,

(a) the producer shall not sell, supply or offer for sale milk to be used or processed for human consumption, and

(b) a processor shall not accept milk from the producer

until the milk meets the requirements of Schedule 2 with respect to inhibitors and drug residues.

(6) If a producer's milk is found by analysis at a dairy plant to not meet the requirements of Schedule 2 with respect to drug residues, the processor at that dairy plant must ensure that the sample is submitted to an approved laboratory for confirmation of the results.

(7) If a shipment of milk is found by analysis at a dairy plant to not meet the requirements of Schedule 2 with respect to drug residues and is rejected for that reason, the processor at that dairy plant must ensure that the shipment sample is submitted to an approved laboratory for confirmation of the results.

(8) The Director may specify the approved method that may be used for confirmation of the results with respect to drug residues to determine compliance with Schedule 2.

AR 139/99 s50;147/2002

Bacteria ramifications

51(1) If a producer's milk tested in accordance with this Regulation is found to contain in excess of 1 000 000 bacteria per millilitre,

(a) the producer shall not sell, supply or offer for sale milk to be used or processed for human consumption, and

(b) a processor shall not accept milk from the producer,

until authorized to do so by an inspector.

(2) A processor may reject milk that arrives at the dairy plant at a temperature higher than 6°C.

Freezing point ramifications

52 If a producer's milk is found to have a freezing point of -0.514° Hortvet or higher, the producer shall not sell, supply or offer for sale, milk to be used or processed for human consumption until a subsequent sample from the producer's bulk milk tank is tested and found to be in compliance with Schedule 2 or the producer is authorized by an inspector to sell, supply or offer for sale, milk.

AR 139/99 s52;147/2002

Cleanliness ramifications

53(1) If an inspector finds that a producer's milking or milk handling equipment is contaminated or that the producer's premises are unclean, the inspector may notify the producer in writing of that finding and, on receiving a notification, the producer may not supply milk to a dairy plant or to any other person for human consumption until the producer eliminates the contaminated or unclean condition to the satisfaction of the inspector.

(2) A processor shall not accept milk from a producer if the processor knows or ought to know that the producer has received a notification under subsection (1).

Method to test dairy products

54 An analyst in an approved laboratory must use an approved method but, if the Director specifies that a particular approved method be used, the analyst must use the specified approved method.

AR 139/99 s54;147/2002

Part 4 Processing

Processor duties

55 A processor must ensure that this Part is complied with and must maintain and operate all parts of a dairy plant, including the equipment, in a safe and sanitary manner and ensure that the dairy plant meets the requirements of the Act and this Regulation.

AR 139/99 s55;147/2002

Construction, Layout and Operation of Dairy Plants**Plant land**

56 The land occupied by a dairy plant must meet the following requirements:

- (a) the access routes and traffic areas must be constructed with a dense material, to eliminate dust and mud;
- (b) the land surrounding the dairy plant must be free of waste and refuse and of any other source that could contaminate dairy products produced at the dairy plant.

Plant standards

57 The dairy plant must meet the following requirements:

- (a) the floors must be

- (i) made of a hard, washable and waterproof material, and be rounded at the intersections with the walls in order to prevent any accumulation of water or dirt,
 - (ii) free of indentations, cracks and crevices,
 - (iii) inclined toward the drains so as to prevent the accumulation of liquids, and
 - (iv) provided with a wastewater drainage system that includes devices for preventing the contamination of the facilities by pests and odours;
- (b) the walls and ceilings must be
- (i) covered with a hard, smooth, washable and waterproof material, and
 - (ii) free of indentations, pitting, cracks and flaking;
- (c) doors, windows and any other openings to the exterior must be kept closed or have screens or other devices to prevent pests from entering the dairy plant.

Dairy plant water system

58(1) The dairy plant must have hot and cold pressurized running water and soap for the washing of hands, with equipment for drying and disinfecting hands.

(2) The dairy plant must have hot and cold running potable water under pressure, with pipes and nozzles installed and arranged in a way that facilitates the cleaning of the facilities and equipment.

(3) The dairy plant must have a drainage system for wastewater that separates the floor wastewater from the sewage wastewater until the wastewater leaves the dairy plant, and includes an inspection hole, flush mechanisms, drainage siphons, protection grids and a solid matter interceptor.

(4) The drainage system for a dairy plant's washing water must be separate from the sanitary drains for the toilets, urinals and sinks.

(5) The washroom facilities of a dairy plant must

- (a) have hot and cold running potable water under pressure, and equipment for cleaning and drying hands, and
- (b) not lead directly into the dairy product handling areas.

Dairy plant lighting

59(1) The dairy plant must have a lighting system that facilitates the performance of dairy product handling operations and cleaning and sanitizing operations.

(2) The lighting system in a dairy plant must be equipped with mechanisms to avoid the contamination of dairy products in the event of breakage of any elements of the lighting system.

Ventilation

60 The dairy plant must be equipped with a ventilation system that will vent condensation, vapours and odours to the exterior of the dairy plant.

Refrigeration

61 Refrigerated rooms for the storage of dairy products in a dairy plant must

- (a) be kept in a clean and sanitary condition,
- (b) be operated at a temperature required by this Regulation for the dairy products stored in them, and
- (c) not be used for the storage of materials that may have a deleterious effect on the quality of the dairy products stored in them.

Contamination prevention

62(1) Supplies used in the processing, packing, storing, transporting or marketing of dairy products must be protected at all times from contamination of any kind, and must be stored in a clean, dry room.

(2) Chemicals used or stored in a dairy plant must be clearly marked and stored separately from dairy products and supplies to be used in processing dairy products.

Thermal Processing**Pasteurization**

63(1) Subject to subsection (3), a processor shall not sell dairy products unless they have been pasteurized in accordance with Schedule 1.

(2) A dairy product that has been treated by UHT and aseptically packaged and a dairy product that has been sterilized in the container must be commercially sterile.

(3) Subsection (1) does not apply to cheese that has been manufactured in compliance with the *Food and Drugs Act* (Canada).

Pasteurization equipment

64(1) A processor must ensure that

- (a) all pasteurization equipment, including UHT processors, is designed, constructed and operated to ensure the pasteurization of dairy products;
- (b) all batch pasteurizers, HTST pasteurizers and UHT pasteurizers meet the requirements set out in this section;
- (c) temperature recording charts are retained at the dairy plant for not less than 12 months and contain the following information:
 - (i) the name of the dairy plant;
 - (ii) the date that the pasteurization took place;
 - (iii) the pasteurizer or recorder number;
 - (iv) the temperature of pasteurization as shown by the indicating thermometer at a reference point during the holding period;
 - (v) the name and signature of the pasteurizer operator;
 - (vi) the dairy products processed;
 - (vii) whether the flow diversion valve position was in forward flow or divert;
 - (viii) the cut-in and cut-out temperature recorded daily by the operator at the beginning of the run;
- (d) HTST pasteurizers used in the dairy plant are designed so that when in operation
 - (i) the flow diversion valve does not operate in forward flow unless the temperature of the dairy product being pasteurized equals or exceeds that required for its proper pasteurization, and
 - (ii) the dairy product pressure in the pasteurized side of the regenerator is at least 7 kPa greater than the product pressure in the side of the regenerator containing the non-pasteurized dairy product.

- (2) A processor must ensure that the HTST pasteurizer
- (a) is timed and sealed at least once every 12 months by a method approved by the Director,
 - (b) has the accuracy, described in subsection (4), of the indicating and recording thermometers determined when the unit is timed,
 - (c) is retimed forthwith after any repairs are made to it or the capacity of it is altered, and
 - (d) is sealed in a manner satisfactory to the Director.
- (3) A processor must ensure that the recording thermometer on a pasteurizer is checked daily with the indicating thermometer at the pasteurization temperature and adjusted if necessary, so that the reading of the recording thermometer is at no time higher than that shown by the indicating thermometer.
- (4) A processor must ensure that the thermometers are accurate throughout the specified pasteurization temperature range, as set out in Schedule 1,
- (a) within 0.5°C plus or minus for indicating thermometers, and
 - (b) within 1.0°C plus or minus for recording thermometers.
- (5) A processor must ensure that the recording thermometer shows no loss or gain of recorded elapsed time as indicated by chart rotation over a period of 30 minutes at pasteurization temperatures.
- (6) A processor must ensure that
- (a) all batch pasteurizers are equipped with
 - (i) indicating and recording thermometers,
 - (ii) valves of close coupled and leak protector type with stops or equivalent valves when connected to other processing equipment,
 - (iii) mechanical agitation that is continuously maintained throughout the heating and holding operations, and
 - (iv) covers to prevent contamination;
 - (b) during the holding operation, the airspace temperature in the batch pasteurizers is at least 3°C above the minimum product pasteurization temperature as set out in Schedule 1;

- (c) all HTST pasteurizers are equipped with
 - (i) a recording thermometer,
 - (ii) a constant level tank,
 - (iii) a regeneration section,
 - (iv) a flow control device,
 - (v) a heating section,
 - (vi) a holding device,
 - (vii) a sensing chamber,
 - (viii) a safety thermal limit recorder,
 - (ix) an indicating thermometer,
 - (x) a flow diversion device,
 - (xi) a pressure differential controller or pressure switch if a booster pump is used,
 - (xii) a cooling section, where applicable,
 - (xiii) a vacuum breaker, and
 - (xiv) components that ensure that the pasteurized dairy product in the regeneration section will, at all times, be at a pressure greater than the pressure of the unpasteurized dairy product in the same regeneration section;
- (d) all UHT pasteurizers are equipped with
 - (i) a constant level tank,
 - (ii) a regeneration section, where applicable,
 - (iii) a flow control device,
 - (iv) a heating section,
 - (v) a holding section,
 - (vi) an indicating thermometer,
 - (vii) a temperature recording device,
 - (viii) a divert flow controller,

- (ix) a divert flow indicator,
 - (x) a cooling section, where applicable, and
 - (xi) a flow diversion device;
- (e) any auxiliary equipment is not installed or operated in conjunction with an HTST pasteurizer so as to
- (i) reduce the holding time below the minimum temperature required by this Regulation,
 - (ii) influence the required pressure relationships within the generator, or
 - (iii) function as a flow promoting device, unless it is interwired with the flow control device.

Required temperatures

65(1) Milk and farm-separated cream must be cooled to 4°C immediately after pasteurization.

(2) In the case of batch pasteurization, the cooling referred to in subsection (1) must be accomplished within one hour.

(3) All dairy products requiring refrigeration, including cheeses with a moisture content of 36% or higher, must be kept at a temperature that is not less than 1°C nor higher than 4°C.

(4) Frozen dairy products while in a dairy plant must be stored at a temperature not exceeding -18°C.

(5) A processor must ensure that this section is complied with and that all temperature-indicating devices used in the pasteurization, refrigeration or freezing facilities, or the storage of dairy products, are accurate and maintained in working order.

Records

66 A processor must maintain a complete and accurate record of the temperature used in pasteurization for each lot of pasteurized dairy product for the greater of

- (a) one year, and
- (b) the expiry date marked on the dairy product label.

Washing, sanitizing

67 A processor must ensure that

- (a) facilities for washing and sanitizing the pumps, hoses and fittings of milk transportation tanks, including a concrete pad of adequate size, are provided in the milk receiving area of the dairy plant, and
- (b) facilities or other arrangements satisfactory to an inspector for washing and sanitizing the milk transportation tanks are provided.

Employees and Visitors

Employees

68 A processor must ensure that all workers who work at the dairy plant are trained and competent to carry out their assigned duties or functions and hold appropriate licences, if any, from the Director authorizing them to carry out those functions in a dairy plant.

Hygiene standards

69(1) Entry to the processing, manufacturing, reprocessing, packing and repacking areas of a dairy plant must be restricted to personnel authorized by the processor.

(2) A processor must follow sanitary practices and require all workers in the dairy plant and visitors to the dairy plant to comply with those practices in order to ensure the sanitary processing of dairy products.

(3) The dairy plant and its material and equipment must be kept clean.

(4) The workers at a dairy plant must

- (a) wear work apparel that shows dirt easily, and that has no pockets or buttons above the waist,
- (b) wear a head covering or a hairnet and beard-cover in order to completely cover the hair while working in the dairy plant,
- (c) change clothing before moving from a high potential cross-contamination area to a lower potential area,
- (d) ensure that watches and jewellery are not worn within the dairy product handling areas, and
- (e) be properly trained for the duties being performed.

- (5)** Tobacco may not be used and food and drink may not be consumed within
- (a) the dairy product handling areas,
 - (b) the dairy product equipment cleaning facilities area, or
 - (c) the areas for the storage of dairy products and supplies to be used in processing dairy products
- of a dairy plant.
- (6)** Dairy products may be handled in a dairy plant only by
- (a) a person who does not have a communicable disease at an infectious stage, or who does not have an infected sore or wound,
 - (b) a person who is not a carrier of pathogens that could contaminate dairy products, and
 - (c) a person who, if that person has an open sore, is wearing a waterproof protection on the wound that prevents contamination of the dairy products and of ingredients or surfaces with which the dairy products come into contact.
- (7)** A processor must ensure that there is an effective pest control program that prevents the entry of pests into and eliminates pests from the dairy plant.
- (8)** Waste, garbage and refuse of any kind in a dairy plant must be deposited in impermeable containers that
- (a) are made of a material that is washable and unaffected by disinfectants,
 - (b) have tight-fitting covers that will not detach when opened, and
 - (c) are properly identified and kept clean.
- (9)** Waste containers must be taken to the main waste area or compartment at the end of the daily operations or if they become full during the course of daily operations.
- (10)** Waste must be managed so that the dairy products handling facilities and equipment are not contaminated, and there is no risk of contamination of the potable water supply.

Diseased people

70 A processor shall not permit any person who has a disease that is transmittable through dairy products to enter areas where dairy products are processed in the dairy plant.

Dairy Plant Operations**Allowable milk**

71(1) All raw milk delivered to a dairy plant must

- (a) meet the drug residue requirements of Schedule 2,
- (b) have been produced on a dairy farm by a licensed producer, and
- (c) have been transported in a milk transport vehicle that meets the requirements of this Regulation.

(2) A processor must ensure that samples are taken from each milk transport vehicle when milk is delivered to a dairy plant, and the processor must test the samples for drug residue in accordance with this Regulation.

(3) The processor of the milk tested for drug residues under subsection (2) is responsible for the cost of the tests.

Storage

72 A processor must ensure that all dairy products at the dairy plant are stored so that they are protected from being contaminated or rendered unfit for human consumption.

Non-milk ingredients

73(1) A processor must ensure that all non-milk ingredients and supplies used in the processing of dairy products

- (a) conform to the requirements of the *Food and Drugs Act* (Canada), and
- (b) are protected from contamination.

(2) All raw materials and ingredients for use in processing dairy products must be intended for human consumption and, before they are used, they must be stored so as not to be contaminated.

(3) Containers of raw materials and ingredients must be labelled to identify the raw materials and ingredients they contain.

Equipment requirements

74 A processor must ensure that all equipment used in a dairy plant is

- (a) designed, constructed, installed and operated in accordance with the requirements of this Regulation, and
- (b) cleaned after use and sanitized before being reused.

Operation requirements

75(1) A processor must ensure that all equipment used in the processing of dairy products is designed, constructed, installed and operated to ensure that there is no contamination of pasteurized dairy products by any other product.

(2) The surfaces of the materials and equipment that come into contact with dairy products must be

- (a) made of non-corrosive material,
- (b) smooth and have no crevices or loose parts,
- (c) non-toxic and of a type suitable for cleaning and disinfecting operations,
- (d) unaffected by the dairy products, and be constructed so that they do not alter the characteristics of the dairy products, and
- (e) free of components or residue that may contaminate dairy products.

(3) Steam introduced directly into dairy products or that comes into direct contact with the surfaces of dairy product processing equipment must be from potable water and be free of harmful substances.

(4) The materials and equipment that come into contact with dairy products must be cleaned at the end of the dairy plant's daily operations, and must be sanitized immediately before use and every time they are contaminated.

(5) Despite subsection (4), if a dairy plant operates 24 hours a day, the materials and equipment that come into contact with dairy products must be cleaned and sanitized in a manner satisfactory to the Canadian Food Inspection Agency.

(6) Non-metallic materials must be used when hand cleaning equipment and utensils.

(7) The equipment and utensils constructed by assembly other than by welding must be removable, and each of the components of the equipment and utensils must be accessible so as to allow cleaning, sanitizing and inspection.

Hazardous agents

76(1) All cleaning agents, disinfectants, insecticides, pesticides and other methods of fighting pests must conform to the requirements of the Canadian Food Inspection Agency and applicable provincial enactments.

(2) Subject to subsection (3), all cleaning agents, disinfectants, insecticides, pesticides and other products used to fight pests must be stored in an enclosed area or compartment outside the dairy products handling areas and the containers for these products must be labelled to identify what they contain.

(3) If, as part of the dairy product processing, it is necessary to make constant use of a cleaning agent, disinfectant, insecticide or pesticide, then the containers for them must be identified as being for daily use and may be stored in an enclosed compartment located inside the dairy products handling areas.

Product identification

77 A processor must establish and implement written procedures so that any lot of a dairy product can be identified and traced from the dairy plant where the milk was processed to where the dairy product is sold at the retail level.

Sampling, Testing and Standards of Dairy Products

Bacterial standards

78 Dairy products may not contain pathogens or microbial toxins except as provided for in Schedule 3.

Pasteurized milk standard

79 Pasteurized fluid milk products

- (a) must meet the freezing point and drug residue requirements of Schedule 2, and
- (b) must have a negative milk phosphatase level as determined by a method described in the standard methods.

Part 5 Written Notice

Giving notice

80 If a written notice is required to be given under the Act, the notice is sufficiently given if

- (a) it is left with a person apparently over the age of 18 years at the dwelling or milk house or dairy plant of the person who is intended to be served,
- (b) it is posted in a conspicuous place in the milk house or on the bulk milk tank of the person who is intended to be served,
- (c) it is sent by telecopier to the fax number, last known to the Director, of the person intended to be served
 - (i) if the person gave that fax number to the Director for the purpose of receiving written notices under the Act, and
 - (ii) if the person sending the notice receives notification that the notice was sent to the fax number, or
- (d) it is sent by e-mail to the e-mail address, last known to the Director, of the person intended to be served
 - (i) if the person gave that e-mail address to the Director for the purpose of receiving written notices under the Act, and
 - (ii) if the person sending the notice gets confirmation that the notice was sent to the e-mail address.

Part 6 Repeals, Expiry and Coming into Force

Repeals

81 The *Dairy Industry Regulation* (AR 131/88) and the *Licence and Service Fee Regulation* (AR 221/91) are repealed.

Expiry

82 For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on January 31, 2018.

AR 139/99 s82;147/2002;9/2007;320/2009;214/2014;
4/2017

Coming into force

83 This Regulation comes into force on August 1, 1999.

Schedule 1**Minimum Thermal Processing Parameters
for Batch and HTST Pasteurizers**

Product	Pasteurization Type	Time	Temperature
Milk Based Products - below 10% MF	Batch/Vat	30 min.	63° C
Milk Based Products - below 10% MF	HTST	16 sec.	72° C
Milk Based Products - 10% MF or higher, or added sugar (fluid cream, chocolate milk, flavoured milk)	Batch/Vat	30 min.	66° C
Milk Based Products - 10% MF or higher, or added sugar (fluid cream, chocolate milk, flavoured milk)	HTST	16 sec.	75° C
Frozen Dairy Product Mixes, Egg Nog	Batch/Vat	30 min.	69° C
Frozen Dairy Product Mixes, Egg Nog	HTST	25 sec. 16 sec.	80° C 83° C

Schedule 2**Standards for
Raw Milk and Farm-separated Cream**

Product	Parameter	Standard
Raw milk	Temperature	1° C to 4° C for milk contained in the bulk milk tank (in accordance with section 26)
	Total living mesophyllic aerobic	Maximum 50 000 total living mesophyllic aerobic bacteria per ml

	bacteria count or individual bacteria count	or maximum 121 000 total individual bacteria per ml
	Somatic cells	Cow's milk: maximum 400 000 somatic cells per ml Goat's milk: maximum 1 500 000 somatic cells per ml
	Inhibitors and drug residues	Inhibitor and drug residues as determined by approved methods must meet the requirements of the Maximum Residue Levels prescribed by the Food and Drugs Act (Canada)
	Freezing point	Maximum: -0.525° H for cow's milk
Farm-separated cream	Acidity	Unacceptable if greater than 0.6% lactic acid.
	Inhibitors and drug residues	Inhibitor and drug residues as determined by approved methods must meet the requirements of the Maximum Residue Levels prescribed by the Food and Drugs Act (Canada)
	Frequency of testing	Every pickup

AR 139/99 Sched.2;147/2002;107/2008;51/2012

Schedule 3

Bacteria Standards for Dairy Products *

Product	Bacteria	n	c	m	M
Cheese (pasteurized milk)	<u>Staphylococcus aureus</u>	5	2	100	10 000 (/g)
	<u>Escherichia coli</u>	5	2	100	1000 (/g)
Cheese (unpasteurized milk)	<u>Staphylococcus aureus</u>	5	2	100	10 000 (/g)
	<u>Escherichia coli</u>	5	2	100	1000 (/g)
Cheese (pasteurized) without ripening, including fresh cheeses, lactic curd with a minimum of 50% moisture	Coliform	5	2	10	100 (/g)
Fermented dairy products (eg. Buttermilk, yogurt,	Coliform	5	2	10	100 (/g or ml)

sour cream)					
Pasteurized milk, cream and other non-fermented dairy products	Mesophyllic aerobic bacteria (32° C)	5	2	10 000	25 000 (/ml)
	Coliform	5	2	1	10 (/g)
Frozen dairy products	Mesophyllic aerobic bacteria (32° C)	5	2	10 000	50 000 (/ml)
	Coliform **	5	2	10	100 (/ml)
Butter	Mesophyllic aerobic bacteria (32° C)	5	2	10 000	50 000 (/g)
	Coliform	5	2	10	100 (/g)
Milk powders and other dairy product powders	Mesophyllic aerobic bacteria (32° C)	5	2	10 000	50 000 (/g)
	Coliform	5	2	10	100 (/g)
Evaporated, sweetened and condensed milk	<u>Staphylococcus aureus</u> <u>Escherichia coli</u>			must be commercially sterile	must be commercially sterile

n = number of sample units (subsamples) to be examined per lot

c = maximum number of sample units (subsamples) per lot that may have a bacterial concentration higher than the value for “m” without contravening this Regulation

m = maximum number of bacteria per g or ml of product that is of no concern (acceptable level of contamination)

M = maximum number of bacteria per g or ml of product, that if exceeded by any one sample unit (subsample) renders the lot in violation of this Regulation

* The bacterial standards are to be met at the dairy plant.

** Does not apply to frozen yogurt or other frozen fermented dairy products.

*** This sampling plan is an obligation of the regulators.

Processors may have their own sampling plan.

AR 139/99 Sched.3;107/2008



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