

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

**288.701 Manufacturing milk into dairy product; additional duties of plant owner or operator.**

Sec. 141. A person who owns or operates a plant receiving milk for manufacturing into a dairy product shall do all of the following:

(a) Ensure that the equipment and utensils used for the processing of milk and dairy products are constructed to be readily demountable when the department determines necessary for cleaning and sanitizing.

(b) Ensure that the product contact surfaces of all equipment and utensils, including holding tanks, pasteurizers, coolers, vats, agitators, pumps, sanitary piping and fittings, and any specialized equipment, are constructed of stainless steel or other equally corrosion-resistant material meeting various sanitary standards for fabrication of dairy equipment.

(c) Ensure that nonmetallic parts having product contact surfaces meet sanitary standards.

(d) Ensure that all equipment and piping is designed and installed to be easily accessible for cleaning, kept in good repair, and free from cracks and corroded surfaces.

(e) Ensure that new or rearranged equipment is kept away from any wall or spaced in a manner that facilitates proper cleaning and good housekeeping.

(f) Ensure that all parts or interior surfaces of equipment, pipes not CIP cleaned, or fittings, including valves and connections, are accessible for inspection and meet sanitary standards.

(g) Ensure that all new or replacement milk and dairy products pumps meet sanitary standards.

(h) Ensure that all CIP systems comply with sanitary standards.

(i) Ensure that weigh cans and receiving tanks meet sanitary standards established or approved by the department, are easily accessible for interior or exterior cleaning, and are elevated above the floor and protected sufficiently with the necessary covers to prevent contamination from splash, condensate, and drippage.

(j) Ensure that each can washer has sufficient capacity and ability to discharge a clean, dry can and cover and is kept properly timed in accordance with the instructions of the manufacturer.

(k) Ensure that each water and steam line supplying a can washer maintains a reasonably uniform pressure and if necessary is equipped with pressure-regulating valves.

(l) Ensure that product storage tanks or vats comply with all of the following:

(i) Meet sanitary standards.

(ii) Regarding the entire interior surface, agitator, and all appurtenances of each tank or vat, are accessible for thorough cleaning and inspection.

(iii) Regarding any opening at the top of each tank or vat, including the entrance of the shaft, is suitably protected against the entrance of dust, moisture, insects, oil, or grease.

(iv) Regarding sight glasses, if used, are sound, clear, and in good repair.

(v) Regarding a vat with hinged covers, is designed so that moisture or dust on the surface cannot enter the vat when the covers are raised.

(vi) Regarding storage tanks or vats equipped with air agitation, contain a properly installed air agitation system that meets sanitary standards.

(vii) Regarding storage tanks and vats intended to hold dairy products for longer than 8 hours, are equipped with adequate refrigeration or adequate insulation.

(viii) Are equipped with thermometers in good operating order. All raw milk storage tanks or silos installed after the effective date of this act that are not cleaned daily shall be provided with an approved recording thermometer and shall be cleaned and sanitized at least every 72 hours except as approved by the director in writing, on a case-by-case basis.

(m) Ensure that all product contact surfaces of separators are free from rust and pits and, if practicable, are of stainless steel or other equally noncorrosive metals.

(n) Ensure that each batch pasteurizer has a temperature indicator and recording device and conforms to sanitary standards and complies with the following, as applicable:

(i) Has an air-space indicating thermometer that is accurate within 1.0 degree Fahrenheit (0.5 degree Celsius) for the proper temperature range at least 1 inch above the surface of the products pasteurized in a vat to ensure that foam in the vat or air above the product pasteurized receives the minimum temperature treatment required by the department.

(ii) Has a recording thermometer that is accurate within 1.0 degree Fahrenheit (0.5 degree Celsius) for the proper temperature range.

(iii) Has surface coolers equipped with leak-proof gaskets and connections and with hinged or removable covers for the protection of the product and has edges of the covers that are designed to divert condensate on

non-product-contact surfaces away from product contact surfaces. The use of surface coolers will be allowed only with specific written approval of the director on a case-by-case basis.

(iv) Use recording thermometers accurate within 2.0 degrees Fahrenheit (1.0 degree Celsius) to record holding and cooling time.

(v) Provides long-stem or equally acceptable indicating thermometers that are accurate within 0.5 degree Fahrenheit (0.25 degree Celsius) for the applicable temperature range, for checking the temperature of pasteurization and cooling of products in vats and checking the accuracy of recording thermometers.

(o) Ensure that high-temperature, short-time pasteurization equipment is tested and sealed by the department upon installation and quarterly thereafter and complies with sanitary standards and with the following, as applicable:

(i) In accordance with manufacturer recommendations, has in each high-temperature, short-time pasteurizer a short-stem or equally acceptable indicating thermometer that is accurate within 0.5 degree Fahrenheit (0.25 degree Celsius) for the applicable temperature range, to be used for checking the accuracy of recording thermometers.

(ii) Has in each storage tank for which the department requires a temperature reading an indicating thermometer that is accurate within 2.0 degrees Fahrenheit (1.0 degree Celsius).

(iii) Provides that all new or replacement plate-type heat exchangers meet sanitary standards, all gaskets are tight and kept in good repair, and plates are opened at sufficiently frequent intervals to determine if the equipment is clean and in satisfactory condition.

(p) Ensure compliance with each of the following:

(i) Internal return tubular heat exchangers meet sanitary standards.

(ii) Pumps used for milk and dairy products are of the sanitary type and constructed to meet sanitary standards.

(iii) Unless a pump is specifically designed for effective cleaning in place, pumps are dismantled and cleaned after use.

(iv) Homogenizers and high-pressure pumps of the plunger type comply with sanitary standards.

(v) New equipment and replacements, including all plastic parts and rubber and rubberlike materials for parts and gaskets having product contact surfaces, meet sanitary standards.

(vi) A vacuum chamber, if used, is made of stainless steel or other equally noncorrosive material; is constructed to facilitate cleaning with all product contact surfaces accessible for inspection; is equipped with a vacuum breaker and a check valve at the product discharge line; uses only steam that meets the sanitary standards; regulates incoming steam supply by an automatic valve that cuts off the steam supply if the flow diversion valve of the high-temperature short-time pasteurizer is not in the forward flow position; and uses only condensers equipped with a water level control and an automatic safety shutoff valve.

(vii) Bulk storage and distribution equipment in dairy plants for handling liquid sweetening agents, edible oils, or other ingredients consists of suitable metals, alloys, or other materials that will withstand corrosive action by the ingredients and the equipment and ingredients are protected from contamination. Pipelines containing liquid sweetening agents and liquid chocolate remain flooded with the ingredient to prevent mold growth or may be dismantled and washed.

(q) Ensure that the plant is provided with adequate ventilation, that is acceptable to the director, to minimize possible product contamination with condensation, dust, and odors.

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