

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

288.710 Manufacturing dry milk products; duties of plant owner or operator.

Sec. 150. A person who owns or operates a plant manufacturing, processing, or packaging instant nonfat dry milk, nonfat dry milk, dry whole milk, dry buttermilk, dry whey, or other dry milk products shall do all of the following:

- (a) Ensure that each storage room for the dry storage of a product is all of the following:
 - (i) Adequate in size.
 - (ii) Maintained in good repair and kept clean, orderly, free from rodents, insects, and mold.
 - (iii) Adequately lighted and ventilated.
 - (iv) Free from structural defects and inaccessible areas which may harbor insects.
- (b) Provide a separate room or area constructed in compliance with this section and comply with all of the following for filling bulk bins, drums, bags, or other bulk containers:
 - (i) Keep the number of control panels and switchboxes in the room or area to a minimum and mount each control panel a sufficient distance from walls mounted in a wall with tight fitting removable doors to facilitate cleaning.
 - (ii) Provide an exhaust system adequate to minimize the accumulation of product dust within the room or area.
 - (iii) If needed, provide and maintain a dust collector to keep roofs and outside areas free of dry product.
 - (iv) Keep only packaging materials that are used within a day's operation in the packaging area.
 - (v) Keep packaging materials on metal racks or tables at least 6 inches above the floor and prohibit the presence of unnecessary fixtures, equipment, or areas of inaccessible space which may collect dust and harbor insects in the packaging room.
- (c) Provide either of the following:
 - (i) A separate room for the transfer of bulk dry milk products from bags, bins, or drums to hoppers and conveyors leading to fillers that meets the requirements for construction and facilities of a bulk packaging plant.
 - (ii) An area or facility for the transfer of dry milk products from portable bulk bins if gasketed surfaces or direct connections are present and substantially eliminate the escape of product into the area.
- (d) If applicable, provide a separate room for the filling of small packages that meets the same requirements for construction and facilities of a bulk packaging plant.
- (e) Ensure that each preheater is of stainless steel or other equally corrosion resistant material and is cleanable, accessible for inspection, and equipped with suitable automatic temperature controls.
- (f) Ensure that each hotwell is enclosed or covered and equipped with indicating thermometers either within the hotwell or in the hot milk inlet line to the hotwell, and ensure that a hotwell used for holding high heat products has a recorder.
- (g) Equip each open-type evaporator or vacuum pan with an automatic condenser water level control, barometric leg, or ensure that the evaporator or pan is constructed to prevent water from entering the product and meets sanitary standards.
- (h) If surge tanks are used for hot milk and temperatures of product including foam being held in the surge tank during processing is not maintained at a minimum of 145°F (63°C), install 2 or more surge tanks with connections to permit flushing and cleaning during operation and flush and clean each tank at least once every 4 hours during operation to prevent the buildup of bacterial levels or toxins.
- (i) Provide surge tank covers easily removable for cleaning and use a surge tank cover at all times a surge tank is in use.
- (j) Provide high pressure lines approved by the department that may be cleaned in place and are of such construction that dead-ends, valves, and high pressure pumps can be dismantled for hand cleaning.
- (k) Provide spray dryers of continuous discharge type that have all of the following:
 - (i) Product contact surfaces of stainless steel or other equally corrosion resistant material.
 - (ii) Joints and seams on the product contact surfaces that are welded and ground smooth.
 - (iii) A design that facilitates ease in cleaning and inspection.
 - (iv) Sight glasses or ports of sufficient size located at strategic positions.
 - (v) Air intake filters and air intake and exhaust recording thermometers.
 - (vi) A filter system consisting of filtering media or devices that will effectively, and in accordance with good manufacturing practices, prevent the entrance of foreign substances into the drying chamber.
- (l) Clean the filtering system and replace component parts of a dryer as often as necessary to maintain a clean and adequate air supply and take precautions to assure complete combustion in gas fired dryers.

- (m) Ensure that air is drawn into the dryer from sources free from odors and smoke, dust, or dirt.
- (n) Ensure that the drums of a roller dryer are smooth, readily cleanable, and free of pits and rust.
- (o) Maintain dryer knives in a manner that prevents scoring of the dryer drums.
- (p) Ensure that a dryer has each of the following:
 - (i) End boards that are readily cleanable, have an impervious surface, and a means of adjustment to prevent leakage and accumulation of milk solids.
 - (ii) A stack, hood, the drip pan inside of the hood, and related shields constructed of stainless steel and readily cleanable.
 - (iii) A lower edge of the hood constructed to prevent condensate from entering the product zone.
 - (iv) A hood located in compliance with department guidelines.
 - (v) A stack that remains closed when the dryer is not in operation and that removes all vapors when the dryer is in operation.
 - (vi) Augers of stainless steel or of material approved by the department and that are readily cleanable.
 - (vii) Auger troughs and related shields of stainless steel or of other equally acceptable materials approved by the department that are readily cleanable.
- (q) Provide a filtering system approved by the department to prevent dust, dirt, and all air entering the dryer from entering the drying room.
- (r) Clean the filtering system and replace component parts as often as necessary to maintain a clean and adequate air supply.
- (s) Make all dryer adjustments and ensure that the dryer is operating normally before collecting food grade powder from the dryer.
- (t) Ensure that collectors are made of stainless steel or equally noncorrosive material and constructed to facilitate cleaning and inspection.
- (u) Ensure that filter sack collectors, if used, are in good condition and that the system is constructed to render all parts accessible for cleaning and inspection.
- (v) Ensure that conveyors are of stainless steel or equally corrosion resistant material and constructed to facilitate thorough cleaning and inspection.
- (w) Provide cooling equipment with sufficient capacity to cool the product to 110°F (43.3°C) or lower immediately after the product's removal from dryer and prior to packaging.
- (x) If bulk bins are used, cool the product to at least 90°F (32.2°C) and no more than 110°F (43.3°C).
- (y) Provide a suitable dry air supply with effective filtering when air cooling and conveying is used.
- (z) Ensure that all special equipment, including instantizing systems, flakers, pulverizers, and hammer mills used to process dry milk products are of sanitary construction and that all parts are accessible for cleaning and inspection.
- (aa) Ensure that all newly installed sifters used for dry milk and dry milk products meet standards established or approved by the department and that all other sifters are constructed of stainless steel or other equally noncorrosive material and are of sanitary construction and accessible for cleaning and inspection.
- (bb) Ensure that the mesh sizes of sifter screens used for various dry milk products are those recommended in sanitary standards.
- (cc) Ensure that bulk bins are constructed of stainless steel, aluminum, or other equally corrosion resistant materials, free from cracks and seams, and have an interior surface and all product contact surfaces that are smooth and easily cleanable.
- (dd) If automatic sampling devices are used, ensure that they are constructed in a manner that prevents contamination of the product with all parts readily accessible for cleaning.
- (ee) Ensure that the product contact surfaces of dump hoppers, screens, mixers, and conveyors used for transferring dry products from bulk containers to fillers for small packages or containers are of stainless steel or equally corrosion resistant material designed to prevent contamination and have all parts accessible for cleaning.
- (ff) Ensure that a dump hopper is at a height above floor level to prevent foreign material or spilled product from entering the hopper.
- (gg) Ensure that all filling and packaging equipment is of sanitary construction and all parts, including valves and filler heads, are accessible for cleaning.
- (hh) Ensure that each plant handling dry milk products is equipped with a heavy duty industrial vacuum cleaner and establish a vacuuming schedule approved by the department.
- (ii) Provide persons with clean clothing and shoe covers exclusively for the purpose of cleaning the interior of the dryer when it is necessary to enter the dryer to perform the cleaning operation.
- (jj) Pasteurize all milk, buttermilk, and whey used in the manufacture of dry milk products at the plant where dried, except that condensed whey and acidified buttermilk containing 40% or more solids may be

transported to another plant for drying without repasteurization if it is transported in a milk tank truck dedicated to hauling pasteurized product.

(kk) Pasteurize milk, dairy product blends, or skim milk to be used in the manufacture of dry milk or dry milk blends prior to condensing using the temperature and time standards in section 137. Dry milk blends shall be pasteurized at temperature and time standards approved for equivalent solids and fat content dairy products.

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