Ohio Administrative Code

Rule 901:11-2-22 Equipment and utensils.

Effective: February 21, 2016

(A) All equipment and utensils used for the processing of milk and manufacturing of dairy products shall be constructed in a manner to be readily demountable when necessary for cleaning, sanitizing, and inspection. The product contact surfaces of all utensils and equipment shall be constructed of stainless steal or of other equally corrosion-resistant material. Nonmetallic parts, other than glass, having product contact surfaces shall meet the 3-A sanitary standards for plastic or rubber and rubberlike materials.

(B) All equipment and piping shall be designed and installed to be easily accessible for cleaning and shall be kept in good repair, free from cracks and corroded surfaces. New or rearranged equipment shall be set away from walls or spaced in such a manner to facilitate proper cleaning. All parts or interior surfaces of equipment, pipes (except certain piping cleaned in place) or fittings, including valves and connections, shall be accessible for inspection. Milk and dairy product pumps shall be of sanitary design and easily dismantled for cleaning or shall be of specially approved construction to allow effective cleaning-in-place.

(C) All CIP systems shall comply with the 3-A sanitary practices for permanently installed sanitary product, pipelines, and cleaning systems for those CIP circuits that can not be readily inspected.

(D) Weigh cans and receiving tanks shall meet the 3-A sanitary standards and be protected sufficiently with the necessary covers or baffles to prevent contamination from splash, condensate, and drippage. The cans and tanks shall be easily accessible for cleaning and shall be elevated above the floor to provide easy access for the cleaning of floors and adjacent wall areas.

(E) Can rinsers shall have sufficient capacity and ability to provide thoroughly rinsed, dry cans and covers. Rinsers shall be maintained in a clean and satisfactory operating condition and shall be kept free from accumulation of scale or debris which adversely affects the efficiency of the rinser.

(F) Product storage tanks shall be fully enclosed or tightly covered and be well insulated. The entire

interior surface, agitator and all appurtenances shall be accessible for thorough cleaning and inspection. Any opening or vent at the top of the tank including the entrance of the agitator shaft shall be suitably protected against the entrance of dust, moisture, insects, oil, or grease. Sight glasses, if used, shall be clean, and in good repair. Tanks which have hinged covers shall be so designed that moisture or dust on the surface cannot enter the tank when the covers are raised.

(1) If the storage tanks are equipped with air agitation, the system shall be of an approved type and properly installed in accordance with the 3-A accepted practices for supplying air under pressure.

(2) Storage tanks intended to hold product for longer than eight hours shall be equipped with refrigeration and/or be insulated in order to hold the product at the required product temperature.

(3) All new storage tanks shall meet the appropriate 3-A sanitary standards and shall be equipped with thermometers in good repair.

(G) Surface coolers shall be equipped with hinged or removable covers for the protection of the product. The edges of the fins shall be so designed as to divert condensate on non-product contact surfaces away from product contact surfaces. All gaskets or swivel connections shall be leak proof.

(H) Vacuum chambers shall be constructed in a manner to facilitate cleaning and all product contact surfaces shall be accessible for inspection. A vacuum chamber shall be equipped with a vacuum breaker and a check valve on the product discharge line. Only steam which meets the requirements of culinary steam shall be used. The incoming steam supply shall be regulated by an automatic solenoid valve which will cut off the steam supply in the event the flow diversion device of the high-temperature, short-time (HTST) pasteurizer is not in the forward flow position. When condensers are used they shall be equipped with a water level control and an automatic safety shutoff valve.

(I) Hot wells shall be enclosed or covered and shall be equipped with an indicating thermometer either in the hot well or in the hot milk inlet line to the hotwell. If used for holding high heat products, a hot well shall also have a temperature recorder.

(J) Open-type evaporators and/or vacuum pans shall be equipped with an automatic condenser water

level control, barometric leg, or so constructed so as to prevent water from entering the product, and shall meet the applicable 3-A sanitary standards. When enclosed-type condensers are used, no special controls are necessary to prevent water from entering the product.

(K) If product, including foam, held in the surge tank is not maintained at a minimum of one hundred fifty degrees Fahrenheit, then two or more surge tanks shall be installed to permit flushing and cleaning during processing. Such tanks shall be completely emptied and washed after each four hours of operation or less. Covers easily removable for cleaning shall be provided and used at all times.

(L) High pressure lines may be cleaned-in-place and shall be of such construction that dead ends, valves, and high pressure pumps can be disassembled for manual cleaning. New high pressure pumps shall meet the 3-A sanitary standards regarding homogenizers and high pressure pumps of the plunger type.

(M) Spray dryers shall be of continuous discharge type construction. All joints and seams in the product contact surfaces shall be welded and ground to a smooth finish. All dryers shall be constructed to facilitate ease in cleaning and inspection. Sight glasses of sufficient size shall be located at strategic positions. Dryers shall be equipped with air intake and exhaust recording thermometers. In gas-fired dryers, precautions shall be taken to assure complete combustion.

(N) Air filter system intake media shall consist of fiberglass with a downstream backing dense enough to prevent fiberglass break off from passing through, or cotton flannel, wool flannel, spun metal, activated carbon, activated alumina, non-woven fabric, absorbent cotton fiber, electrostatic or other materials which under conditions of intended use are non-toxic, non-shedding and which do not release to the atmosphere, toxic volatiles, or volatiles which may impart any flavor or odor to the product. Filtering media or devices shall prevent the entrance of foreign substances into the drying chamber. The filtering system shall be cleaned or the component parts shall be replaced as often as necessary to maintain a clean air supply. Air shall be drawn into the dryer from sources free from objectionable odors, smoke, dust, or dirt.

(O) The drums of a roller dryer shall be smooth, readily cleanable, and free of pits and corrosion. The knives shall be maintained in a condition not to cause scoring of the drums. The end boards

shall have an impervious surface and be readily cleanable. They shall be provided with a means of adjustment to prevent leakage and accumulation of milk solids. The stack, the hood, the drip pan inside of the hood, and related shields shall be constructed of stainless steel and shall be readily cleanable. The lower edge of the hood shall be constructed to prevent condensate from entering the product zone. The hood shall be properly located and the stack shall be of adequate capacity to remove the vapors. The stack shall be closed when the dryer is not in operation. The augers shall be of stainless steel construction or be properly plated, and shall be readily cleanable. The auger troughs and related shields shall be constructed of stainless steel and be readily cleanable. All air entering the dryer room shall be filtered to eliminate dust and dirt. The filter system shall consist of filtering media or a device that will effectively, and in accordance with good manufacturing practices, prevent the entrance of foreign substances into the drying room. The filtering system shall be cleaned and component parts replaced as often as necessary to maintain a clean and adequate air supply. All dryer adjustments shall be made and the dryer shall be operating normally before food grade powder can be collected from the dryer.

(P) Collectors and conveyors shall be constructed of stainless steel or equally noncorrosive material and be constructed to facilitate cleaning and inspection. Filter sack collectors, if used, shall be in good condition and the system shall be of such construction that all parts are accessible for cleaning and inspection.

(Q) Dry dairy product cooling equipment shall be provided with sufficient capacity to cool the product to one hundred twenty degrees Fahrenheit or lower immediately after removal from dryer and prior to packaging. If bulk bins are used, the product should be cooled to approximately ninety degrees Fahrenheit but shall not be more than one hundred twenty degrees Fahrenheit. A dry air supply, that meets the requirements of paragraph (N) of this rule, shall be provided where air cooling and conveying is used.

(R) Each plant handling dry milk products shall be equipped with a heavy duty industrial vacuum cleaner. A regular schedule shall be established for its use in vacuuming applicable areas.

(S) Brine tanks used for the treating of parchment liners shall be constructed of noncorrosive material, have a safe means of heating the salt solution for the treatment of the liners, and shall be provided with a satisfactory drainage outlet.

(T) Churn salt brine vats shall be constructed of stainless steel or equally corrosion-resistant metal and shall be constructed according to applicable 3-A sanitary standards. The vats shall be in good repair and equipped with tight-fitting lids.