

from can washers and any other source shall not be used for the manufacture of dairy products. Bulk milk in storage tanks within the dairy plant shall be handled in such a manner as to minimize bacterial increase and shall be maintained at 45 °F. or lower until processing begins. This does not preclude holding milk at higher temperatures for a period of time, where applicable to particular manufacturing or processing practices.

(b) The bacteriological quality of commingled milk in storage tanks shall not exceed 3,000,000/ml.

§ 58.144 Pasteurization or ultra-pasteurization.

When pasteurization or ultra-pasteurization is intended or required, or when a product is designated "pasteurized" or "ultra-pasteurized" every particle of the product shall be subjected to such temperatures and holding periods in approved systems as will assure proper pasteurization or ultra-pasteurization of the product. The heat treatment by either process shall be sufficient to insure public health safety and to assure adequate keeping quality, yet retaining the most desirable flavor and body characteristics of the finished product.

§ 58.145 Composition and wholesomeness.

All necessary precautions shall be taken to prevent contamination or adulteration of the milk or dairy products during manufacturing. All substances and ingredients used in the processing or manufacturing of any dairy product shall be subject to inspection and shall be wholesome and practically free from impurities. The finished products shall comply with the requirements of the Federal Food, Drug, and Cosmetic Act as to their composition and wholesomeness.

§ 58.146 Cleaning and sanitizing treatment.

(a) *Equipment and utensils.* The equipment, sanitary piping and utensils used in receiving and processing of the milk, and manufacturing and handling of the product shall be maintained in a sanitary condition. Sanitary seal assemblies shall be removable on all agi-

tators, pumps, and vats and shall be inspected at regular intervals and kept clean. Unless other provisions are recommended in the following supplement sections, all equipment not designed for C.I.P. cleaning or mechanical cleaning shall be disassembled after each day's use for thorough cleaning. Dairy cleaners, detergents, wetting agents or sanitizing agents, or other similar materials which will not contaminate or adversely affect the products may be used. Steel wool or metal sponges shall not be used in the cleaning of any dairy equipment or utensils.

(1) Product contact surfaces shall be subjected to an effective sanitizing treatment prior to use, except where dry cleaning is permitted. Utensils and portable equipment used in processing and manufacturing operations shall be stored above the floor in clean, dry locations and in a self draining position on racks constructed of impervious corrosion-resistant material.

(2) C.I.P. cleaning or mechanical cleaning systems shall be used only on equipment and pipeline systems which have been designed, engineered and installed for that purpose. When such cleaning is used, careful attention shall be given to the proper procedures to assure satisfactory cleaning. All C.I.P. installations and cleaning procedures shall be in accordance with 3-A Suggested Method for the Installation and Cleaning of Cleaned-In-Place Sanitary Milk Pipelines for Milk and Milk Products Plants. Because of the possibilities of corrosion, the recommendations of the cleaning compound manufacturer should be followed with respect to time, temperature and concentration of specific acid or alkaline solutions and bactericides. Such cleaning operation should be preceded by a thorough rinse at approximately 110-115 °F. continuously discarding the water. Following the circulation of the cleaning solution the equipment and lines shall be thoroughly rinsed with lukewarm water and checks should be made for effectiveness of cleaning. All caps, plugs, special fittings, valve seats, cross ends, pumps, and tee ends shall be opened or removed and brushed clean. All non-pasteurized product contact surfaces should be sanitized. Immediately prior to starting the product