

# ANOTHER LINK IN NEW JERSEY'S SOLID CHAIN AGAINST HEALTH HAZARDS

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## SANITARIANS MANUAL

STANDARD  
OPERATING PROCEDURES  
for Institutions and Agencies



STATE OF NEW JERSEY

N.J.  
"

DEPARTMENT OF INSTITUTIONS AND AGENCIES,

*Division of Mental Health and Hospitals. Environmental Sanitation Committee.*

**STANDARD OPERATING PROCEDURES FOR  
INSTITUTIONS AND AGENCIES :**

**MILK SANITATION**

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*NJ/ KA8  
I5/ M6  
1966*

*This Manual was prepared under the guidance and direction of V. Terrell Davis, M.D., Director of the Division of Mental Health and Hospitals.*

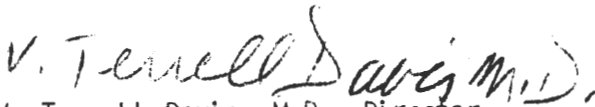
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## FOREWORD

This Manual, prepared by the inter-departmental Environmental Sanitation Committee describes one of the areas in which the Department of Institutions and Agencies sanitarian is concerned. It brings together in one place information on Milk Sanitation that will be of continuing interest to hospitals and other institutions.

The objective is to provide basic information on the procedure the sanitarian is to follow in performing his duties as another link in New Jersey's solid chain against health hazards.

We are grateful to the many individuals in the Departments of Institutions and Agencies, and Health, and other State departments who have contributed to make this Manual possible, and regret that, because the number is so large, we are unable to acknowledge our gratitude to each person by name in this foreword.

  
V. Terrell Davis, M.D., Director  
Division of Mental Health and Hospitals

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**STANDARD OPERATING PROCEDURES  
FOR INSTITUTIONS AND AGENCIES SANITARIANS**

Rev. May 24, 1965

**MILK SANITATION**

Milk contains more of the essential food elements required by man than any other single food. Milk products are unique in that their consumption in adequate quantities is essential to the nutritional well-being of the individual; but, if not properly safeguarded they may be instruments in the transmission of disease infectious to man. Therefore, milk must be carefully protected from contamination during production, transportation, refrigeration, storage, processing, distribution and handling. A breakdown during any phase of the operation can seriously impair the quality of the finished product; this is especially true during operations subsequent to pasteurization.

New Jersey institutions are supplied with milk and milk products in various ways. Some institutions maintain their own herds, others purchase their milk already packaged. In some cases, the milk is purchased in bulk and broken down at the institution for distribution throughout the institution buildings. For the most part the supply is received in 40 quart cans. In some instances smaller cans, for use in dining area milk dispensers, are used.

All milk and milk products are required to meet the standards of the New Jersey State Department of Institutions and Agencies and the State Department of Health, see Page 13, "Laboratory Services". The sanitarian should be familiar with various platform, chemical and bacteriological tests for milk. See Pages 11 through 14 of the same chapter.

Milk and milk products should be protected from contamination, adequately refrigerated and handled from the time of receipt at the food service area until consumed.

As the basis of sanitation evaluation, the following criteria should be considered.

**DAIRY FARMS**

**DAIRY WORKERS**

Any person affected with a communicable disease or who is a carrier of a causative agent of any such disease should not be allowed to engage in milking, handle milk or milk utensils. Dairy workers should be free from apparent lesions and cuts. Smoking should not be permitted in milk processing areas.

**WORKERS' GARMENTS**

Dairy workers should wear clean, washable garments and cap while engaged in the milking operations.

**HERD HEALTH**

Milking cows should not be thin and emaciated or sickly and should not have indurations of the udder or visible infected cuts or lesions.

With regard to the use of antibiotics in udders of cattle, the basic criteria is the presence or absence of antibiotics as an adulterant in the

resulting supply of milk. Therefore, since the use of antibiotics to control udder infections is becoming generalized, it is important that treated animals be separated from the milking herd normally for at least 72 hours or in accord with the directions on the package for the type and dose of the medication used.

Any treatment of dairy cattle should be in accord with the veterinarian's recommendations.

#### STRIP CUP

A strip cup must be used for those engaged in milking and each quarter should be tested for abnormal milk at each milking. The use of a black plate is recommended.

#### CLEANLINESS OF ANIMALS

Udders, teats and flanks of the cows should be closely clipped. The udders, teats and flanks of the cows should be free from loose manure, caked manure, bedding, etc., and such surfaces should be clean at the time of milking.

#### FEEDING

Dusty foodstuffs, shall not be brought into a milking stable or milking parlor until after milking is completed.

#### STABLE VENTILATION

The cow stable should be provided with a minimum of 2 square feet of window area per 500 cubic feet of air space properly distributed so as to provide adequate ventilation in all parts of the stable. For new construction, not less than four square feet of window light shall be provided for each 500 cubic feet of air space. Excessive vapor or condensate should not be apparent. The stable should be reasonably free of odors. Thermostatically controlled ventilating systems can be used to supplement ventilation.

#### STABLE LIGHTING

Windows should be provided as above and be maintained in a clean condition. Artificial light should be used to supplement natural light and to allow for operations conducted before or after daylight hours. Light bulbs should be so placed that the milker has good light for cleaning and examining the udder. Light bulbs should be cleaned at frequent intervals.

#### STABLE OVERCROWDING

The cow beds should be of proper dimension for sanitary stabling. A stanchion should be provided for each cow unless pen stabling is practiced. Dividers between cows will greatly reduce accidental injury. Separate quarters or pens should be provided for calves and maternity purposes. No cows or calves should be tied on the back walk, feed alley or walkways.

### FLOOR REPAIR AND CLEANLINESS

The floor should be constructed of concrete or other equally impervious material, be graded to a drain and be in a good state of repair. Gutters of sufficient size should be provided. "Fade-away" gutters should be discouraged. The floor and gutters should be free from accumulation of manure and manure scale. The cow beds should be free of dirt, dusty bedding and dust. There shall be no sweeping during milking procedures.

### WALL AND CEILING REPAIR AND CLEANLINESS

The walls and ceiling should be smooth and tight and maintained in a state of good repair.

The walls and ceiling should not contain accumulations of dust, dirt, manure splash and cobwebs.

### OTHER ANIMALS

Horses, pigs and fowl should be kept out of the milking house. The use of the stable for housing rabbits, dogs, cats and like animals should be prohibited.

### LIQUID WASTES

Liquid wastes should be removed with the manure by utilizing some type of absorbent to assist with the removal and to reduce manure splash. The use of a drainage system in which liquids are disposed of in a manner that will not create a nuisance is permitted. Where mechanical manure removal units are utilized, special provision should be made to prevent a nuisance and fly breeding area at the discharge end of the conveyor. Cement slabs utilizing underground liquid waste disposal provisions are recommended.

### MILK STOOLS

Milk stools, if used, should be of an impervious material.

Milk stools and surcingles, if used, should be maintained in a clean condition. Special attention should be given to the underside of the stool since this is a significant hand contact area.

### COWYARD

The cowyard should be reasonably dry and contain no low areas where waste liquids accumulate. The surface should be such that cows do not penetrate more than hoof deep. A hard surface apron should be provided at the barn entry so that soil is tramped off prior to entry into the stable.

Manure droppings and other wastes should not be allowed to accumulate over the surface of the cowyard. Storage of manure for more than three days in the summer season could become a fly breeding nuisance. The manure should be removed daily to a point where it will not create a nuisance and shall not be accessible to dairy animals.

## LOOSE HOUSING OR PEN STABLING

The lounging area should be roofed over. The exercise yard and feeding area should be graded and drained. The lounging area should be ventilated so as to approximate atmosphere conditions. The area at the front of the feeding facility should be paved for a distance of nine feet.

The amount of bedding in the lounging area should be sufficient to keep the cows free of accumulations of manure and to discourage fly breeding. Feeding should not be practiced in the lounging area as this practice tends to concentrate manure droppings in one area. Animal wastes should be removed from the exercise yard and feeding area frequently.

The bedding in the lounging area should not be considered as manure unless faulty bedding practices result in heavy manure concentrations in the bedding.

Manure should not be accessible to cows.

## MILKHOUSE

A milkhouse should be provided separate and apart from other buildings. If connected to the barn a vestibule should be provided between the milkhouse and barn. The vestibule should be lighted and ventilated and large enough to move through without both doors being open at the same time.

The milkhouse should be provided with adequate natural light and be supplemented with artificial light for conducting operations prior to daylight and after dark. The light should be well distributed.

In proposing new construction, the window area should be not less than 10% of the floor area. Provision should be made for at least 10 foot candles of light (from natural and/or artificial sources) on all working surfaces.

Odors and condensate should not be apparent in the milkhouse as milk has a tendency to pick up odors.

The doors of the milkhouse should be self-closing, tight-fitting and should open outward. All other openings of the milkhouse should be effectively screened.

The milkhouse and the vestibule should be free from waste materials, trash and other materials not necessary to the normal operations of milk production and handling. Unauthorized persons shall not be permitted in the milkhouse.

## MILKHOUSE CONSTRUCTION AND CLEANLINESS

The milkhouse should be of sufficient size for the operation conducted therein. Spacing should be provided between pieces of equipment and between equipment and the walls. Allowances should be made for the storage of all equipment necessary to the milking and cleaning operations.

Sufficient space should be provided for washing and storing milk utensils and for straining, cooling and storing milk.

The floor should be of an impervious material and be graded to drain to a waste pipe or outlet.

The walls and ceiling should be constructed of a smooth, impervious or a well-painted material.

The floor, walls and ceiling should be maintained in a good state of repair and should be kept clean.

#### UTENSIL REPAIR

The utensils should be constructed of a smooth, nonabsorbent and nontoxic material, with flush seams and joints.

Utensils, including rubber parts, should be in a good state of repair and should be free of corrosion. All surfaces should be readily accessible for cleaning and inspection.

#### UTENSIL CLEANLINESS

All milk utensils, containers and equipment used in milking, cooling, handling, storing and transporting milk should be thoroughly cleaned after each use.

The vacuum tubes, inflation shells, vacuum lines and stanchion lines should be maintained in a reasonably clean condition as they could be an indirect source of milk contamination.

Properly conducted cleaned-in-place operations are permitted providing that the facility is constructed for such operation and the method is consistent with prescribed practices.

#### UTENSILS - BACTERICIDAL TREATMENT

Milk utensils, containers and equipment should, after cleaning be subjected to a bactericidal treatment equal to the following.

1. Immersed in hot water at 180<sup>0</sup>F. for at least  $\frac{1}{2}$  a minute; or exposed to a flow of live steam for  $\frac{1}{2}$  a minute; or immersed in a chemical solution (chlorine or iodoform) for 1 minute. Follow manufacturers direction on label for chemical treatment.
2. By such other method as may result in the same degree of efficiency.

The construction of milking machines, containers and equipment have a direct bearing on the ability to clean such equipment. Large openings, pits, porous rubber, seams, etc., retain milk solids which in turn affect the bacteria count of the milk. An improperly cleaned utensil cannot be properly sanitized with the methods usually employed on a dairy farm.

## PROPER MATERIALS

Detergents, brushes, rods, bactericidal compounds and treating equipment should be available in the milkhouse and they should show signs of being used.

## PROPER RACKS AND UTENSIL PROTECTION

Nonabsorbent, nonrusting racks or suitable cabinets should be provided in the milkhouse for the storage of cans and utensils. All milk equipment stored on racks should be sufficiently elevated off the floor to avoid splash. Equipment should be inverted where this is practicable. All milk containers and equipment should be stored in the milkhouse and protected from contamination during storage. They should be covered when in transit. Clean cans may be stored with the lids on or off.

Milking machines should be disassembled for cleaning, protected during storage and should be assembled just prior to the milking operation. Many companies supply racks for the various parts of milking machines that afford excellent protection during the storage period.

## MILKHOUSE FACILITIES

Running cold water under pressure and hot water should be provided in the milkhouse for the washing of utensils and equipment.

A sink, preferably a sink with two compartments large enough to immerse the largest utensil, should be provided in the milkhouse.

Soap and clean towels should be provided for handwashing in, or convenient to, the milkhouse. Separate sinks, basins or free taps should be provided for handwashing. Equipment sinks should not be used for this purpose.

## SINGLE SERVICE STRAINER CLOTHS

If milk is strained, single service strainer cloths should be used.

Strainer cloths should be kept in the original package and stored in a suitable box or cabinet. Strainer cloths should not be stored in the same box where medicine or poisons are stored. Several strainer cloth manufacturers supply storage containers for their type of strainer cloths.

Parchment papers should be afforded the same degree of protection as strainer cloths.

## COOLING FACILITIES

Cooling equipment adequate for cooling to below 45 degrees F. and storing of all milk produced below 45 degrees F. should be provided unless the milk is processed within two hours of production.

Milk refrigeration equipment should be capable of cooling the milk to the required temperature within two hours. The 45 degree F. requirement is a maximum allowance; good cooling facilities should be maintained for cooling to somewhat below 40 degrees F.

The water in can immersion type coolers should be of sufficient depth to reach the neck of the cans stored therein.

Spray type coolers are permitted but special attention should be given to the holes in the distributor tubes and the jets of pressure units since dirt and bedding tends to by-pass screens and clog the outlets. This is especially true of gravity type spray coolers. The storage space in a spray cooler can be utilized and will result in a pre-cooled can.

The use of bulk tank coolers is also permitted. The use of this system greatly speeds the cooling process. Installations should be made in conformance with standards specified by the New Jersey State Department of Health, *"Rules and Regulations Governing the Production and Handling of Farm Bulk Milk"*.

#### SURROUNDING OF MILKHOUSE

There should be no accumulations of decomposable material within 50 feet of the milkhouse. Milkhouse wastes should not drain on the surface of the ground. Strainer pads and other foreign material should not be allowed to accumulate in the vicinity of the milkhouse.

#### WATER SUPPLY

A supply of clean, potable water should be available in the milkhouse and cow stable in adequate quantity to promote cleanliness. The water should be from an approved public supply or from a private supply protected from contamination at its source and which complies with "Standard Operating Procedures for Institutions and Agencies" - Water.

#### TOILET FACILITIES

Every dairy farm should be provided with a flush toilet or a sanitary privy so constructed and maintained that flies cannot gain access to the waste material. Excremental material should not appear on the surface of the ground. Privies, cesspools, tile fields and other disposal units should be located and maintained so as not to pollute water supplies and streams.

Toilets and privies should be maintained in a clean condition at all times. Toilet tissue shall be maintained on a fixture at all times.

If a privy exists it should be flush to the toilet pit, the riser should be tight, the seat lids and the toilet door should be self-closing and all vents and louvers should be screened. The pit of the privy should be dark. Special provisions should be made to exclude rodents and to prevent dripping from the roof eroding the soil around the pit.

## MILK PLANTS

### MILK PLANT

The milk plant (house) is an enclosure of one or more rooms where the milk handling operations are conducted. It shall be separate and apart from any area where cows or other animals are stabled or held and shall not be used as a dwelling or kitchen. Smoking shall not be permitted in the milk plant. Unauthorized persons shall not be permitted in the milk plant.

### MEDICAL EXAMINATIONS OF PERSONNEL

Persons having diseases that may be transmitted through milk or milk products or having infected cuts or lesions on any part of their body should not be allowed to handle milk, milk products, containers or equipment.

Institutions and Agencies Administrative Orders 1:27, July 3, 1956 and 2:15, May 18, 1957, outline in detail the requirements of the Department relative to periodic examinations of all employees and food handlers.

### PHYSICAL EXAMINATION AND RECORDS FOR HERDS

Each milk plant or farm office shall keep on file records showing that its herd has successfully passed an annual physical examination, by a licensed veterinarian, and an authorized official tuberculin test either through the individual accredited plan or the modified accredited area plan.

Herds should be vaccinated against brucellosis. After reaching milking age they are to be tested yearly. File records are to be kept showing the results of the brucella tests. All milking herds shall be free of brucellosis.

### PLANT CONSTRUCTION

The floors of milk plants shall be constructed of impervious and easily cleaned material. They shall be smooth, properly drained and kept clean.

Walls and ceilings are to be finished with smooth, light colored and washable surfaces. They are to be kept clean.

### PLANT WASTE

Liquid wastes shall be carried to a point outside the milk plant through properly trapped floor drains constructed so as to minimize clogging and odors. Liquid wastes are to be disposed of in a sewer or by another acceptable manner so as not to create a nuisance or pollute a stream.

Solid wastes shall be placed in covered containers and removed from the premises daily.

### CONTAINER STORING AND WASHING

Separate rooms, in which milk or milk products are not handled, shall be provided for the unloading, storing and washing of unclean cans.

All rooms shall be provided with sufficient light, either natural or artificial, of at least 10 foot candles so that all operations are adequately lighted. These rooms shall also be adequately ventilated in order that odors and condensate are not apparent. All openings of these rooms shall be protected or so managed as to prevent the entrance of flies, dust and other contaminating materials.

### EQUIPMENT CONSTRUCTION AND MAINTENANCE

All equipment and containers with which milk comes in contact shall be covered and otherwise protected to prevent access of condensate, flies, dust or other contaminating materials.

Tanks and vats shall have tight fitting covers. Any openings in the covers shall be protected by raised edges and covers or drip deflectors.

Milk equipment and containers shall be constructed of such material and in such a manner as to be easily cleaned and shall be in good repair. Surfaces that contact milk shall be smooth, impervious and not readily corroding. Seams, joints and valves shall be smooth, tight and free of corrosion.

All equipment and multi-use containers must be thoroughly cleaned after each use and be sanitized before re-use.

### CLEANING FACILITIES

Adequate facilities and materials shall be provided and used for cleaning and sanitizing milk equipment and containers. Such facilities and materials shall include wash tanks and/or racks for washing and storing demountable equipment, brushes, detergents and bactericidal compounds. There must also be an adequate supply of cold running water, hot water and/or steam.

### RECORDING THERMOMETERS

Pasteurizing apparatus should be equipped with accurate indicating and recording thermometers during each filling, heating, holding and emptying period. The indicating thermometer shall be accurate to within  $\frac{1}{2}$  degree F. plus or minus.

The recording thermometer should be checked daily by the operator against the temperature of the indicating thermometer. To obtain this check it is necessary that both bulbs of the thermometers are submerged sufficiently during pasteurization. The recording thermometer is to be kept adjusted so as at no time to read higher than the indicating thermometer. The recording thermometer chart shall be clear and legible, shall contain the following information and shall be kept on file for a period of at least 90 days:

1. Date.
2. Number and location of recorder(s).
3. Reading of indicating thermometer at time indicated by the chart during the holding period.
4. Record of any unusual occurrences.
5. Milk temperatures, determined daily, at which cut-in and cut-out function. Also record of time during which the flow diversion valve is in the forward flow position.
6. Signature or initials of the operator.

#### PASTEURIZATION

All milk or milk products produced by New Jersey Institutions shall be pasteurized correctly by one of the following systems of pasteurization:

1. In vat pasteurization, every particle of milk or milk products shall have been heated to a temperature of not less than 145 degrees F., agitated and held at that temperature for at least 30 consecutive minutes in approved pasteurizing apparatus or equipment;
2. In high-temperature short-time pasteurization, every particle of milk or milk products shall have been heated to a temperature of at least 161 degrees F., and held at that temperature for at least 15 seconds in approved pasteurizing apparatus or equipment.

#### COOLING AND STORING

Raw holdover milk awaiting pasteurization should be cooled immediately to a temperature not over 45 degrees F., and should be maintained below that degree until pasteurized.

Immediately after pasteurization, all milk and milk products are to be cooled to 45 degrees F., or below and maintained at that temperature until delivery.

Transportation of milk or milk products from one institution to another or to its own Commissary should be accomplished in a manner so that the temperature of the milk does not exceed 45 degrees F. while in transit.

Accurate thermometers should be provided to indicate the above while milk is being held, stored or in transit.

All cans of milk should be covered while in transit to prevent the entrance of dust under the can covers.

All cans of milk shall be immediately refrigerated at point of delivery.

#### PLANT PERSONNEL HYGIENE

All personnel handling milk or milk products should wear clean outer garments.

Hand-washing facilities should be provided with hot and cold running water, soap and single service towels conveniently situated and accessible to all concerned with the milk plant operation.

All phases of personal hygiene should be stressed.

#### WATER SUPPLY

An adequate number of water outlets shall be situated so as to insure proper cleaning of the plant and equipment. The source of water supply should be adequately protected from contamination and should comply with the Chapter on WATER - Standard Operating Procedures for Institutions and Agencies.

#### TOILET FACILITIES

Sanitary toilet facilities should be provided, constructed and situated so that toilet wastes are not accessible to flies, do not pollute surface soil, do not contaminate water supplies or cause odors adjacent to the milk handling rooms.

Toilet rooms should not open directly into any room where milk, milk products, equipment or containers are handled or stored.

Toilets should be maintained in a clean condition.

#### PLANT SURROUNDINGS

The immediate area surrounding the milk plant should be free of trash and articles not necessary to the normal operations conducted therein. Garbage should be stored in covered metal containers. All decomposable waste should be removed daily. Liquids should not be allowed to accumulate.

## STANDARDS, Chapter 62, P. L. 1964 (May 25, 1964)

Milk shall not contain more bacteria or coliform organisms per milliliter as herein indicated.

Raw Milk - sampled from either blended or individual cans of milk from a dairy farm 100,000/ml.

Pasteurized Milk - 20,000 bacteria/ml and 10 coliform organisms/ml.

Phosphatase Standards - Pasteurized milk shall not contain more residual phosphatase than 4 phenol units/ml as determined by Method II, Official, AOAC of "Standard Methods for the Examination of Dairy Products" since the standards of approval are based on that test.

Butterfat - to contain not less than 3% milkfat.

References

Manual of Interpretation of Sanitary Requirements for Dairy Farms - N.J. State Department of Health.

Manual of Interpretation of Sanitary Requirements for Milk Plants and Creameries - N.J. State Department of Health.

The State Sanitary Code - N.J. State Department of Health.

Recommended Milk Ordinance and Code - Public Health Service Publication No. 229.

Chapter on Water - Standard Operating Procedures for Institutions and Agencies.

Chapter 62, P. L. 1964 and Supplementary Regulations of the Department of Health of the State of New Jersey (May 25, 1964).

APPENDIX I

DATE .....

SANITARIAN'S DAIRY INSPECTION FORM

Insert X for Discrepancy and S for Satisfactory. Explain Discrepancy (where necessary) Under Remarks.

**COWS**

- 1. COWS, HEALTH
  - APPEAR HEALTHY & FREE FROM DISEASE \_\_\_\_\_
  - DISEASED ANIMALS REMOVED FROM HERD \_\_\_\_\_
  - HERD RECORDS \_\_\_\_\_

**MILKING BARN**

- 2. LIGHTING - ADEQUATE AND/OR ARTIFICIAL LIGHT PROPERLY DISTRIBUTED \_\_\_\_\_
- 3. WELL VENTILATED
  - NO OVERCROWDING \_\_\_\_\_
- 4. FLOORS IN GOOD REPAIR \_\_\_\_\_ CLEAN \_\_\_\_\_
- WALLS IN GOOD REPAIR \_\_\_\_\_ CLEAN \_\_\_\_\_
- CEILINGS IN GOOD REPAIR \_\_\_\_\_ CLEAN \_\_\_\_\_
- WINDOWS IN GOOD REPAIR \_\_\_\_\_ CLEAN \_\_\_\_\_
- 5. COWYARD, GRADING & DRAINING, CLEANLINESS
  - GRADED TO DRAIN \_\_\_\_\_
  - NO POOLED WASTES \_\_\_\_\_
  - CLEANLINESS MAINTAINED \_\_\_\_\_
- 6. MANURE DISPOSAL
  - STORED INACCESSIBLE TO COWS, REMOVED 50 FEET FROM BARNS \_\_\_\_\_
  - INSECT AND RODENT CONTROL \_\_\_\_\_

**MILK HOUSE**

- 7a. FLOORS
  - SMOOTH, CONCRETE, OR OTHER IMPERVIOUS MATERIAL \_\_\_\_\_
  - GRADED TO DRAIN \_\_\_\_\_
- b. WALLS AND CEILINGS
  - IN GOOD REPAIR \_\_\_\_\_ CLEAN \_\_\_\_\_
- c. LIGHTING & VENTILATION
  - ADEQUATE NATURAL AND/OR ARTIFICIAL LIGHT PROPERLY DISTRIBUTED \_\_\_\_\_
  - ADEQUATE VENTILATION \_\_\_\_\_
  - DOORS AND WINDOWS CLOSED DURING DUSTY WEATHER \_\_\_\_\_
- d. SCREENING
  - ALL OPENINGS ADEQUATELY SCREENED \_\_\_\_\_

**MISCELLANEOUS REQUIREMENTS**

- 7e. MILK HOUSE USED ONLY FOR MILK HANDLING PURPOSES \_\_\_\_\_
- NO DIRECT OPENING INTO BARNS \_\_\_\_\_
- ADEQUATE WATER HEATING FACILITIES \_\_\_\_\_
- TWO-COMPARTMENT STATIONARY WASH AND RINSE TANK OF ADEQUATE SIZE \_\_\_\_\_
- THREE-COMPARTMENT TANK IF CHEMICAL RINSE IS USED \_\_\_\_\_
- WASTES PROPERLY DISPOSED \_\_\_\_\_
- 8. CLEANLINESS AND FLIES
  - FLOORS, WALLS, WINDOWS, SHELVES, TABLES & EQUIPMENT PROPERLY CLEANED \_\_\_\_\_
  - NECESSARY FLY CONTROL MEASURES \_\_\_\_\_

**TOILET AND LOCKER ROOM**

- 9. TOILETS
  - PROVIDED, CONVENIENTLY LOCATED \_\_\_\_\_
  - NO DIRECT OPENING INTO MILK ROOM \_\_\_\_\_
  - CLEAN \_\_\_\_\_
  - TOILET TISSUE ON DISPENSER \_\_\_\_\_
  - INSECT CONTROL \_\_\_\_\_
- 10. WATER SUPPLY
  - SAFE, SANITARY \_\_\_\_\_
  - HAND-WASHING FACILITIES \_\_\_\_\_

**UTENSILS AND EQUIPMENT**

- 11. CONSTRUCTION
  - SHOULD BE SMOOTH, NON-ABSORBENT AND NON-TOXIC MATERIAL WITH FLUSH SEAMS AND JOINTS, EASILY CLEANABLE \_\_\_\_\_
  - GOOD REPAIR \_\_\_\_\_
  - STRAINING PADS, SINGLE SERVICE \_\_\_\_\_
- 12. CLEANING
  - CLEANED AFTER EACH USE \_\_\_\_\_
  - MUST LOOK AND FEEL CLEAN \_\_\_\_\_
- 13. BACTERICIDAL TREATMENT
  - ALL MILK CONTAINERS AND EQUIPMENT PROPERLY TREATED WITH STEAM, HOT WATER OR OTHER ACCEPTABLE TREATMENT \_\_\_\_\_
- 14. STORAGE
  - PROPER RACKS PROVIDED FOR STORING CANS AND UTENSILS, INVERTED \_\_\_\_\_
  - PROTECTED FROM CONTAMINATION \_\_\_\_\_
  - SINGLE SERVICE ARTICLES PROPERLY STORED \_\_\_\_\_
  - EQUIPMENT AND UTENSILS NOT EXPOSED TO TOXIC SUBSTANCES \_\_\_\_\_
- 15. HANDLING
  - NO HANDLING OF MILK CONTACT SURFACES AFTER BACTERICIDAL TREATMENT \_\_\_\_\_

**MILKING**

- 16. UDDER, TEATS, ABNORMAL MILK
  - MILKING DONE IN BARN OR MILKING PARLOR \_\_\_\_\_
  - UDDER AND TEATS CLEAN \_\_\_\_\_
  - RINSED WITH BACTERICIDAL SOLUTION JUST PRIOR TO MILKING \_\_\_\_\_
  - ABNORMAL MILK EXCLUDED, PROPERLY DISPOSED OF \_\_\_\_\_
  - SINGLE SERVICE TOWELS FOR BAG CLEANING \_\_\_\_\_
- 17. FLANKS
  - FLANKS, BELLIES AND TAILS CLEAN AT TIME OF MILKING \_\_\_\_\_
  - BRUSHING COMPLETED BEFORE MILKING BEGUN \_\_\_\_\_
  - CLIPPED WHEN REQUIRED \_\_\_\_\_

## 18. DAIRY PERSONNEL

FREE OF COMMUNICABLE DISEASE \_\_\_\_\_  
 NO INFECTIONS ON HANDS AND ARMS \_\_\_\_\_  
 HANDS WASHED THEN RINSED WITH  
 BACTERICIDAL SOLUTION BEFORE \_\_\_\_\_  
 MILKING AND UPON RECONTAMINATION \_\_\_\_\_  
 HAND-WASHING FACILITIES INCLUD-  
 ING SOAP, WATER AND SINGLE SERVICE \_\_\_\_\_  
 TOWELS \_\_\_\_\_

## 19. DAIRY GARMENTS

WORKERS PROVIDED WITH CLEAN OUTER \_\_\_\_\_  
 GARMENTS, AND HAT \_\_\_\_\_

## 20. MILK STOOLS, SURCINGLES, STRIP CUPS

STOOLS OF EASILY CLEANABLE \_\_\_\_\_  
 CONSTRUCTION, NO PADDING \_\_\_\_\_  
 SURCINGLES STORED ABOVE FLOOR, \_\_\_\_\_  
 CLEAN AND IN A CLEAN PLACE \_\_\_\_\_  
 STRIP CUPS IN USE \_\_\_\_\_

## 21. REMOVAL OF MILK

IMMEDIATE REMOVAL TO MILK HOUSE \_\_\_\_\_  
 OR STRAINING ROOM, NOT IN BARN \_\_\_\_\_

## 22. COOLING

MILK COOLED TO 45 F. OR LESS \_\_\_\_\_

## PASTEURIZATION

## 23. PASTEURIZING AREA

a. FLOORS - SMOOTH, IMPERVIOUS, \_\_\_\_\_  
 NO POOLS, GOOD REPAIR \_\_\_\_\_  
 JOINTS BETWEEN FLOORS AND WALLS \_\_\_\_\_  
 IMPERVIOUS \_\_\_\_\_  
 TRAPPED DRAINS, NO SEWAGE BACKFLOW \_\_\_\_\_

b. WALLS & CEILINGS \_\_\_\_\_  
 SMOOTH, WASHABLE, LIGHT COLORED, \_\_\_\_\_  
 CLEAN, GOOD REPAIR \_\_\_\_\_

c. DOORS & WINDOWS \_\_\_\_\_  
 ALL OPENINGS EFFECTIVELY SCREENED \_\_\_\_\_  
 BROKEN PANES \_\_\_\_\_

d. ADEQUATE LIGHTING \_\_\_\_\_

e. SANITARY PIPING \_\_\_\_\_  
 SMOOTH, NON-TOXIC, NON-CORRODIBLE \_\_\_\_\_  
 MATERIALS, FLUSH JOINTS, EASILY \_\_\_\_\_  
 CLEANED \_\_\_\_\_

f. AUTOMATIC TIME AND TEMPERATURE \_\_\_\_\_  
 DEVICES CHECKED, OPERATING \_\_\_\_\_

g. TEMPERATURE CHARTS CHECKED, SIGNED \_\_\_\_\_  
 AND DATED WITH BATCH NUMBERS \_\_\_\_\_

Remarks