

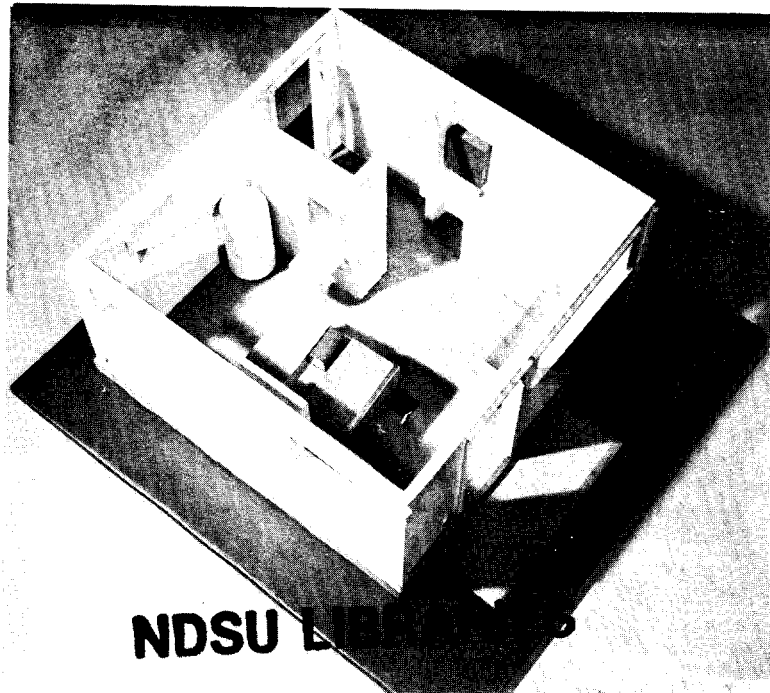


Selling Milk for Manufacturing Purposes

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EXTENSION SERVICE
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OF AGRICULTURE AND APPLIED SCIENCE

Milk House
Floor Plan



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Farmers planning to sell whole milk for manufacturing purposes, must have a milk house that meets certain specifications and permits sanitary practices that assure the consumer of wholesome milk products.

The State Dairy Commissioner of North Dakota prepares the regulations pertaining to the production and sale of fluid milk for manufacturing purposes.

These regulations are in the interest of the dairy farmer and the dairy industry of North Dakota. They help to insure high quality dairy products manufactured in North Dakota which will successfully compete on the market with dairy products from other states.

MINIMUM REGULATIONS FOR SELLING MANUFACTURING MILK

1. Milk House

- a. Milk house shall be provided with a concrete floor, sloped to a trapped drain in the floor for waste disposal. Exhibit A illustrates an approved deep water seal drain.
- b. Walls and ceiling shall be tight and painted to maintain sanitary conditions.
- c. Doors and windows tightly fitted and screened during fly season.
- d. Adequate lighting and ventilation shall be provided.
- e. Milk house shall be large enough to contain milk cooler, milk cans, milking equipment and wash vat. If bulk tank is installed, milk house must be large enough to have minimum of 18 inches between rear walls and bulk tank (24 inches preferred) to provide room for washing all surfaces of tank.

- f. Size of milk house is not stipulated in state regulations, this is left to farmer's own discretion. However, a minimum size of 12 feet by 14 feet is recommended. In planning milk house size, include any plans for future-herd expansion or bulk milk tank cooling.

2. Cooling facilities and washing equipment

- a. If cans are used, cooling facilities shall be installed to cool milk to 50 degrees Fahrenheit or lower within one hour. Running cold water or mechanical cooling may be used. Mechanical cooler is preferred for rapid cooling of milk.
- b. Two compartment wash vat shall be provided for washing and sterilizing milk equipment.

3. Water supply and sanitizing equipment

- a. An adequate supply of hot water shall be provided to thoroughly wash bulk tank or cans and milk equipment after each use.
- b. Bulk tank, cans and milking equipment shall be sterilized with a chemical sterilizer before use.

PLANNING THE MILK HOUSE

A milk house should include facilities for cooling and storing milk, washing and sanitizing equipment, storage racks for cans, pails, milkers and other milking equipment. A storage cabinet for washing powder and sanitizing agents and a place to wash hands should be provided. A place should be provided for everything and everything should be kept in its place.

A counter for assembling the milkers and a vacuum outlet for drawing sanitizing solution into the milkers, although not required in state regulations, would add to the usefulness of the milk house.

In making plans for milk house consider electric needs, ventilation, lighting, water and sewer needs, a means of heating milk house and proper insulation of walls and ceiling. A well insulated frame construction with vapor barrier paper on inside studs is recommended over concrete blocks. It is much easier to keep warm and dry.

MILK HOUSE WASTE DISPOSAL SYSTEM

A disposal system with sufficient capacity to dispose of all wastes from milk room and (milking parlor in loose housing set up) shall be installed.

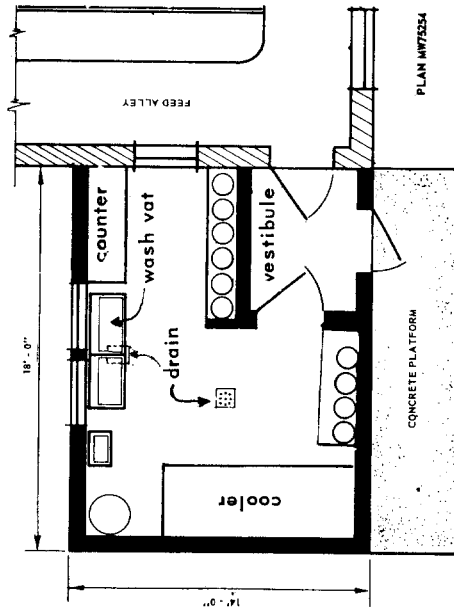
It is recommended that the sewage system include a settling chamber for milk house waste disposal, with removable top for periodical cleaning, be installed adjacent to milk house, where straw and other fibrous material will settle out, before going into disposal field, seepage pit or to hillside drain.

Install disposal system at least 3 feet below grade and cover with straw in winter to protect against possible freezing. A separate disposal system is required for toilet waste. Details of milk house, disposal system may be obtained from County Extension Agent or Milk Inspector. See Special Circular April 1960 North Dakota Extension Service.

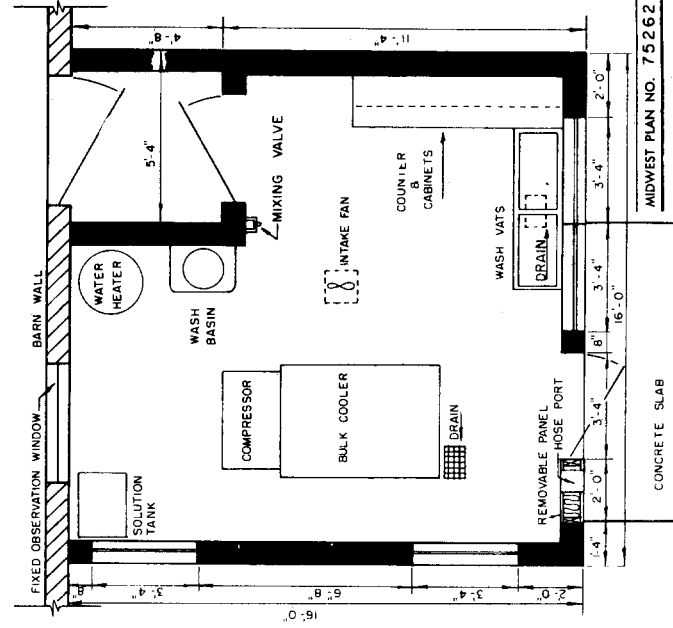
PLAN FOR THE FUTURE

This leaflet sets forth the regulations for selling manufacturing milk.

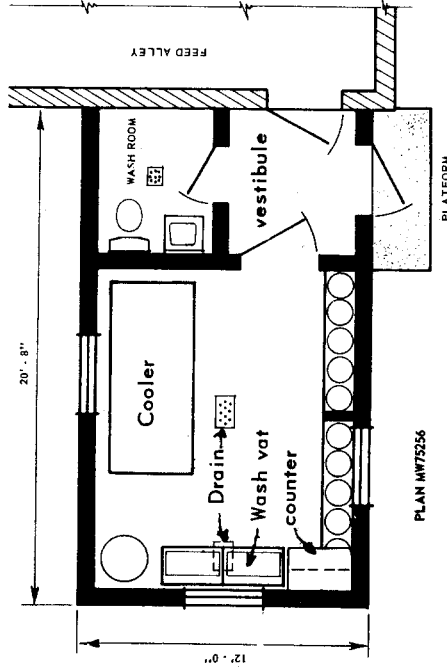
If your future plans include selling Grade A milk — consult Special Circular for PLANNING AND BUILDING FARM INSTALLATIONS FOR PRODUCTION OF GRADE A MILK, April 1960. This circular can be obtained from your Milk Inspector or County Extension Agent.



RECOMMENDED FLOOR PLANS FOR MILK CAN TYPE MILKROOMS ATTACHED TO STANCHION BARN.



RECOMMENDED FLOOR PLANS FOR MILK HOUSES FOR BULK COOLING TANK



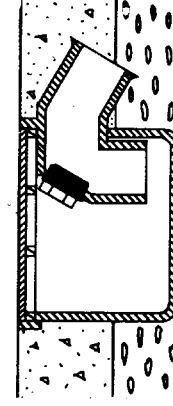
Adjust all sizes and dimensions to specific farm needs and for your convenience. A floor plan that will permit conversion to bulk tank or grade A milk production is desirable.

An entrance vestibule with two doors, as shown in these milk house plans is not required for production of manufacturing milk. A vestibule is required for grade A milk, when milk room is attached to stanchion barn.

Complete construction plans for these milk houses are available through your Milk Inspector, County Extension Agent, or from the NDSU Extension Service Agricultural Engineer, Fargo.

Check list for your milk house ☒

- 1. Cooling tank
- 2. Wash vat
- 3. Counter
- 4. Ventilation
- 5. Water heater
- 6. Floor drain
- 7. Can rack
- 8. Can cover rack
- 9. Wash bowl
- 10. Supply cabinet
- 11. Vacuum outlet



DEEP WATER SEAL DRAIN RECOMMENDED 8"X12" FLOOR DRAIN

EXHIBIT A