

# **Guidelines for the development of SMALL SCALE COW FARMSTEAD CHEESE OPERATIONS**



**VIRGINIA DEPARTMENT OF AGRICULTURE  
AND CONSUMER SERVICES**

**OFFICE OF DAIRY AND FOODS**

## **PURPOSE**

The purpose of this booklet is to provide general information that will be helpful to those persons considering a small-scale farmstead cheese operation using milk from cows or other large animals. Specific requirements and detailed regulations may be obtained from the local Virginia Department of Agriculture and Consumer Services dairy inspector. The name and telephone number of the inspector for your area is listed on the last page of this booklet.

Any person interested in beginning a farmstead cheese operation should contact the dairy inspector listed for guidance before starting construction or buying any dairy equipment.

## **INTRODUCTION**

Recently, there has been increased interest across the state of Virginia in farmstead cheese operations. These small businesses typically produce a "specialty" cheese that is sold for a premium price. Milk is usually produced on the farm and made into cheese that is sold locally at farmers' markets, restaurants, grocery stores, and directly to customers at small retail stores operated on the farm.

It is important that a business plan be developed before committing to build facilities or buy dairy equipment. The business plan should include estimates of required capital, debt repayment, profit, income and expenses, as well as management structure. An accurate assessment of the market available for the cheese that is produced is essential. Farmstead cheese businesses that are successful produce high quality products and sell them for a price that enables the business to be profitable.

When preparing the business plan, reasonable estimates should be made of expenses and income. It is helpful to talk with and visit other small-scale cheese businesses in the area. Your dairy inspector can give you the names of others already in the cheese business that are willing to assist those just getting started. These contacts will enable you to make accurate estimates of your expenses, amount of time required, and your income from cheese sales.

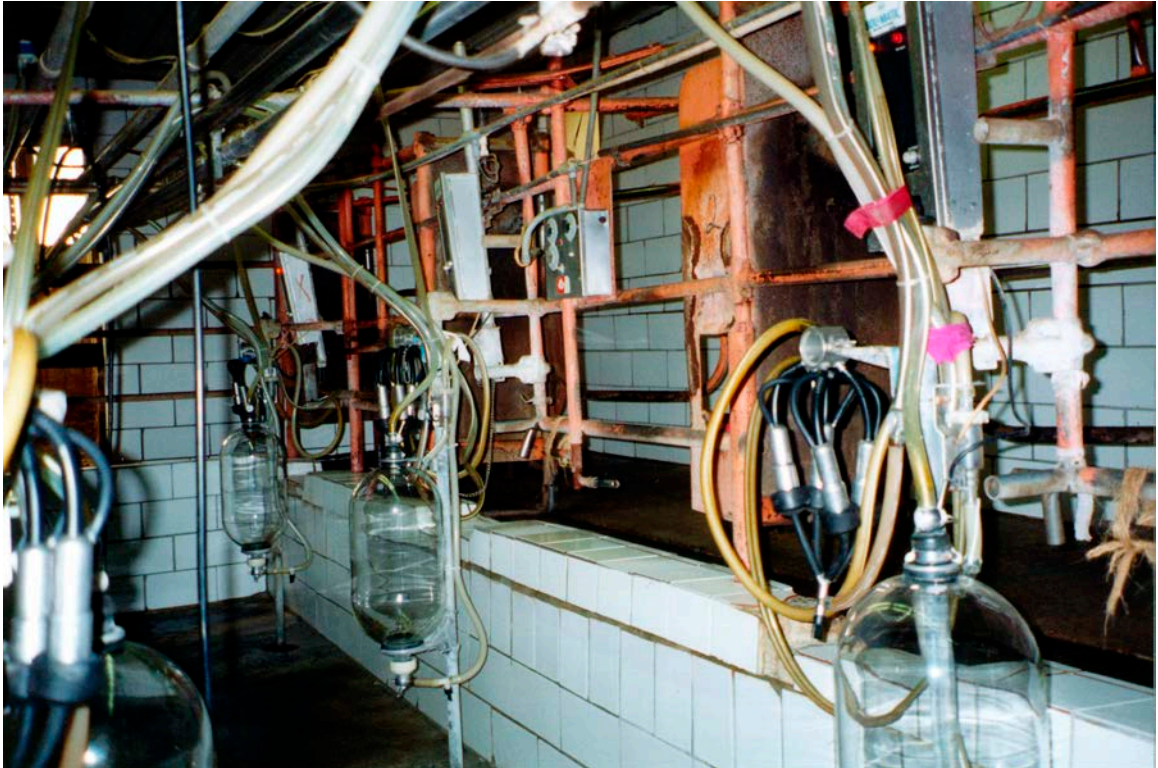
## **PERMITS AND INSPECTION**

Permits are required from the state of Virginia to produce milk for sale and to manufacture cheese for sale. The local dairy inspector can advise the operator of the requirements for these permits and can issue them as soon as conditions are met. After operations are begun, dairy inspectors make regular inspections of facilities and products and collect samples of milk and cheese for regulatory testing. At the present time, there are no charges for the services of the dairy inspector, the issuing of the necessary state permits, the inspecting of the facilities, or the conducting of laboratory tests on the milk and cheese.

Operators are required to provide milk and cheese samples to be tested to the dairy inspector at no charge.

## FACILITY REQUIREMENTS

### Milking Barn / Parlor



*Milking Parlor*

Regulations require that the cows be milked in a milking barn or parlor. This room must have floors that are constructed of concrete or equally impervious material. The walls and ceiling must be painted or finished in an approved manner, and the ceiling must be dust tight. The room must have adequate light for day or nighttime milking. Ventilation must be provided to prevent condensation and odors.

## Milk House or Room



*Milk Room*

A milk house or room of sufficient size shall be provided in which the cooling, handling, storage of milk, and the washing, sanitizing, and storing of milk containers and utensils can be conducted. This area needs smooth floors constructed of concrete or equally impervious material that are graded to drain. The walls and ceiling must be constructed of a smooth material, painted or finished in an approved manner. Adequate lighting and ventilation must be provided. A two compartment wash vat and hand washing facilities are required in this room.

## Cheese Processing Room



*Cheese Processing Room*

A separate room for making cheese is required. Requirements for this room are similar to those for the milk room. Depending on the size and type operation, additional rooms may be necessary for pasteurization, processing, or storing cheese.

### **OTHER RECOMMENDED FACILITIES**

A utility or equipment room is desirable to house electrical panels, water heaters, vacuum pumps, water pumps, and other equipment. Offices may be used for keeping farm records, production and pasteurization records, sales records, and other business records.

When on-the-farm sales are conducted, small sales rooms may be helpful. In order to maintain safe and sanitary products and prevent the spread of disease, customers and visitors should not have access to the cheese processing and storage areas. Visitors should not have access to the milk room and parlor areas unless proper bio-security measures are taken.



*Packaging and shipping area*

*Cheese storage room*





*Retail Sales Display Case*

## **DAIRY EQUIPMENT REQUIREMENTS**

All dairy equipment such as milking units, utensils, pails, storage tanks, pasteurizers, vats, etc should meet 3-A Sanitary Standards. Equipment that meets these standards will be constructed of non-toxic materials and properly designed for easy cleaning. The dairy inspector will be able to give detailed specifications for particular pieces of equipment.

## **PASTEURIZATION**



Some varieties of cheese may be made from raw (unpasteurized) milk and sold after being aged for a period of sixty days or more at a temperature of not less than thirty-five degrees Fahrenheit. The dairy inspector will be able to tell the operator what varieties fall in this category. For all other cheeses, pasteurization of the raw milk is required before it is made into cheese. Vat or batch pasteurization is usually the most practical method for small-scale cheese operations to use. Proper pasteurization is achieved when the milk is heated in properly designed and operated equipment for at least thirty minutes at a temperature of 145 degrees Fahrenheit. Regulations on pasteurization contain very specific requirements that deal with the fabrication, design, and operation of these units. The prospective cheese maker should beware of individuals or companies selling small "home pasteurizers" for a cheap price. Most of these units do

not meet the requirements of a pasteurizer. The prospective cheese maker should always have the dairy inspector approve any pasteurization unit before it is purchased.

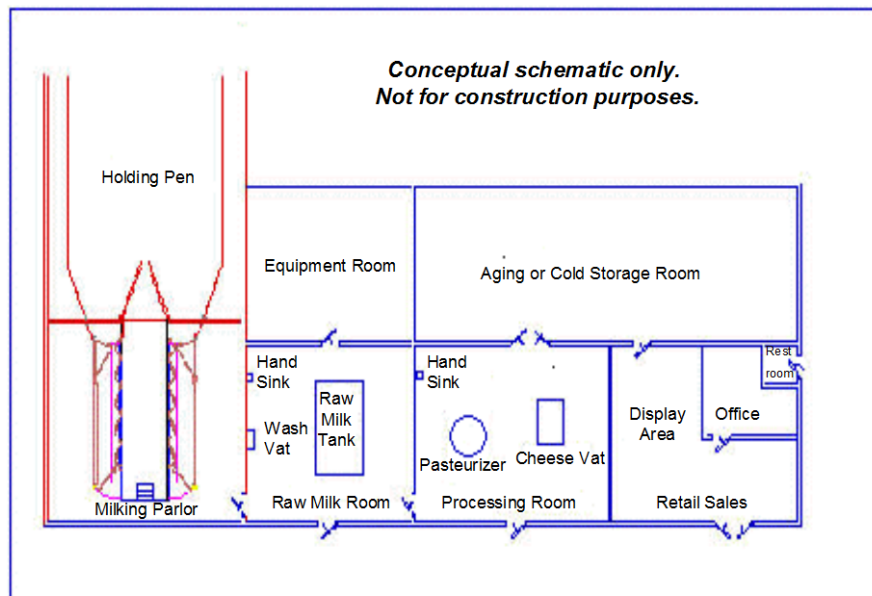
## WATER SUPPLY

Water for the farm and cheese plant must be from a supply that is properly located, protected, and operated. The water supply must also be adequate in volume and be of a safe and sanitary quality. The well or other source of water must be located and constructed in such a manner that neither underground nor surface contamination from any sewerage system, pit privy, or other source of pollution can reach the water supply. The water supply will be sampled and tested on a regular basis by the Virginia Department of Agriculture and Consumer Services.

## TOILET FACILITIES

Toilet facilities that comply with local Health Department regulations must be provided. The toilet room must be kept clean, free of flies and odors, and plumbing maintained in good repair. Doors to the toilet room must be tight and self-closing. The toilet may not open directly into any room where milk, dairy products, or ingredients are handled, processed, packaged or stored.

**A Typical Cow Farmstead Cheese Operation**



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*ILLUSTRATIONS FOOTNOTE: Pictures within this booklet were all taken at typical Virginia farmstead cheese operations.*

*ACKNOWLEDGEMENT: This general information booklet has been prepared by the Dairy Inspectors of the Virginia Department Of Agriculture and Consumer services.*

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**For more information and personal assistance your contact from the Virginia Department of Agriculture and Consumer Services is:**

**DAIRY INSPECTOR:** \_\_\_\_\_

**TELEPHONE:** \_\_\_\_\_

**NOTES:** \_\_\_\_\_  
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