



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

**Plan Review Submittal Requirements
for
On-Farm and/or Small Milk Processing Plants**

Revised 10/15

The Code of Maryland Regulations 10.15.05, 10.15.06, 10.15.09 and 10.15.08 require that legible, detailed plans be submitted to, and approved by, the Department of Health and Mental Hygiene, Center for Milk and Dairy Product Safety (CMDPS), before a dairy processing plant is constructed, remodeled or altered, or before an existing building is remodeled for use as a dairy processing plant. These plans must include, but are not limited to, the following information:

1. Documentation of approval from Local Planning and Zoning Office.
2. The method of approved sewage disposal and the source of potable water. County Health Department approval must be obtained before CMDPS can review and approve plans for the dairy processing plant.
3. Basic building layout showing all doors and windows.
4. Basic site layout showing all buildings, houses, wells, septic areas, manure pits, roads, etc...
5. A drawing that identifies the restroom(s), separate work areas and the location of all equipment to be used in the preparation, production, and storage of manufactured grade milk products and ingredients. This must be drawn to scale.
6. Diagram of the milk piping layout in the plant – CIP or manual clean up, flow of milk (raw and pasteurized), valve locations, recorder locations, equipment piping.
7. A description of the building's construction type, such as wood frame, masonry, metal siding on steel, or concrete tilt-up construction.
8. A finish schedule that includes the material of construction of the walls, floors, and ceiling of all areas. Any wood surfaces must be sealed with appropriate paint or sealer
9. A complete list of the proposed equipment to be used in the preparation, production, and storage of milk products and ingredients. The separate equipment items must be identified on the plant layout.
10. The specifications of all the proposed equipment to include documentation of applicable listings such as NSF, UL, and 3A standards.

11. A plumbing layout and/or riser diagram which indicates the proposed location of all fixtures such as hand sinks, toilets, utility sinks, floor drains, floor sinks, hose stations, hub drains, and backflow preventers (floor drains must be provided in all “wet” areas and floor must be sloped to each floor drain).
12. Location of toilet facilities. Toilet room cannot open into a processing area and must have a hand sink provided. ****Restrooms are required.**
13. Diagram showing utility locations - The size, type and location of water heating facilities (recommend placement in utility room), glycol or cooling water tanks, compressors, CIP tanks and recorders.
14. Lighting plan to provide adequate light, shielded in areas with exposed milk or milk products.
15. The methods and facilities for trash storage and disposal (including whey) and insect and rodent control.
16. Ventilation plans
17. A list of all products that will be manufactured.

Items to be submitted after construction begins but before approval given by CMDPS to operate

1. A detailed process narrative that includes:
 - List of all raw ingredients and the ingredient sources
 - SOP describing the type of storage and transportation for all raw ingredients and finished products
 - SOP for Receiving and processing steps (mixing, pasteurization, cooling, packaging, etc.) **for EACH DIFFERENT PRODUCT TO BE MANUFACTURED.**
 - SOP for cleaning and sanitizing each piece of equipment
 - A product flow chart
 - List of container and lid sources
 - Examples of all labels for each product and for each type and flavor of product
 - Traceback/Production sheet SOP
 - Recall SOP
 - Employee Training and Personal Hygiene Practices SOP

Submit this information to:

Center for Milk and Dairy Product
Safety
Kirk Engle, Section Head
1360 Marshall Street
Hagerstown, MD 21740
301.791.4779

You are advised that additional information may be required based on future findings or future plan review. There is no fee for plan review.

Plan Review Process

First Step – Obtain approval from County Planning and Zoning

Second Step - Waste water from the dairy plant and approved water source: In Maryland the County Environmental Health must be contacted to determine the proper method of sewage disposal of the plant and restroom waste. County Health Department approval must be obtained for a sewage disposal system. An approved water source must also be obtained, which is approved by both the County Environmental Health Department and CMDPS.

Third Step – Contact Center for Milk and Dairy Product Safety (CMDPS) for guidance

Fourth Step – Develop a business plan, identify your market, identify the products you want to process and how to process (SOP's), consult with dairy equipment dealers and other on-farm processors, County Environmental Health Department, etc.... **It is important to have a clear mission statement of your goals and a timetable to reach them.**

Fifth Step – Submission of Plans – A copy of all construction plans, SOP's and equipment list must be submitted to CMDPS for review and approval BEFORE construction begins. Refer to the following handout
Applicant will receive a written approval from CMDPS to begin construction.

After Construction Begins:

- Periodic consultation and construction inspections are made by Center for Milk Control. A boroscope may need to be provided for inspection of sanitary welds on piping.
- Water sample taken after all plumbing complete.
- Approx. 2 weeks before processing plant is to begin operation:
 - Application for operating permit(s) is submitted and fee is paid;
 - Grade A lab certification
 - Plant sampler certification
 - Bulk Milk Sampler/Hauler Certification (if applicable)
 - Milk transportation vehicle permitted (if applicable)
 - Label approval – Need description and example of labels
 - SOP approval - A Standard Operating Procedures or Operations Manual that addresses: Manufacturing practices, Employee training, Traceback, and Plant sanitation.
 - Approval of all single service container sources – Need a list of container sources
 - Product sell by date approval
 - Production Sheet approval
 - Applicable Log approval (ph log, bottle washer log, sanitizer log, Appendix N logs, filler log, vitamin log, HVAC system filter log)
 - Discuss monthly reports to be submitted after operation begins (Drug Testing. Volume Control, Vitamin Testing)
- HACCP evaluation may be required for certain facilities.

When plant is ready to operate, a full inspection and equipment tests will be conducted by CMDPS before any permits issued.

