

Raw Milk Sampling and Testing for On-Farm Dairy Processors

All Minnesota dairy producers are required to submit raw milk samples to a certified lab for qualities testing at least four out of every six months. This applies to both Grade A and Grade B producers, including farmstead cheese producers, small dairy plants that use milk from their own herds, and farms associated with on-farm processors ([MINN. STAT. 32D.14](#)). While most dairy farms have raw milk samples collected by a bulk hauler and submitted through the plant that receives the milk, on-farm processors who process all their own milk need to collect and submit their own samples to a lab for testing. The submitted samples must meet state requirements for raw milk qualities, described in the table below.

Legal Limits for Qualities		
Test Type/Component	Grade A	Grade B
Somatic Cell Count (SCC) – cow, sheep milk	≤750,000 SCC/mL	≤750,000 SCC/mL
SCC – goat milk	≤1,500,000 SCC/mL	≤1,500,000 SCC/mL
Standard Plate Count (SPC) – all milk	≤100,000 CFU/mL	≤500,000 CFU/mL
Antibiotics	None found	None found
Temperature (unless within two hours of end of milking)	≤45° F	≤45° F

Getting set up for qualities sampling – What do I need to do?

Designate a sample collector.

If raw milk samples are not currently collected by a bulk hauler picking up milk from your farm, you will need to become a licensed bulk hauler/sampler or designate another person at your plant to do so.

Obtain bulk hauler license.

This involves an online written test and an in-person evaluation of sampling procedures. Information and study materials are available on the Minnesota Department of Agriculture (MDA) website at [Bulk Hauler & Sampler License](#). Let your dairy inspector know when you are ready to take the test. After you pass the test, contact your inspector again to set up the in-person evaluation.

Retain the services of an MDA-certified lab to process official qualities samples.

Your dairy inspector can help you find a certified lab. Each lab has its own sample submission requirements. Make sure you understand how to complete required paperwork. It is your responsibility to make all the arrangements with the lab, including scheduling sample drop-offs, paying for tests, and ensuring test results are reported directly to the MDA.

Begin collecting monthly raw milk samples and submitting them to the lab.

Using proper sampling technique, collect a raw milk sample once a month. Submit each sample to the lab for testing as an official state sample. Samples submitted to the lab must include the following information:

- Name and hauler license number of the person collecting the sample
- Farm name, farm address, and permit number
- Collection date and temperature
- Indication if the sample was collected within 2 hours of completing milking

Find out from the lab where this information should be recorded on the submission form to ensure it is included with your results when they are sent from the lab to the MDA. Samples submitted with incomplete information may be rejected.



Submitting qualities samples to the MDA

If the lab is unable to submit results directly to the MDA on your behalf, you will need to submit results yourself via email to the MDA Dairy Qualities Coordinator at dairy.results@state.mn.us. Before submitting results, please double check that all necessary info is included in the PDF lab result or noted in your email:

Producer Information		
Plant number	Grade (A or B)	Producer name and patron number
Sample Information		
Sample date	Temperature at collection (+ note if sample collected <2 hours after completion of milking)	
Lab Information and Testing Results		
Lab number	SCC and SPC results including date(s) of testing	
Antibiotic test result (found/not found)		
Samples submitted with incomplete information may be rejected.		

What happens if raw milk sampling is not completed or if my farm's samples fail qualities testing?

All dairy farms must meet raw milk quality standards for Somatic Cell Count (SCC), bacteria (SPC), antibiotic residues, and temperature to maintain a dairy permit. If a farm fails to meet standards, the MDA may take enforcement action, described as follows:

- Whenever two of the last four consecutive monthly quality counts exceeds a given standard, the MDA will issue a written "Notice of Intent to Suspend" letter to the producer. Within 21 days of the letter, but not before the fourth day, the licensed hauler/sampler must take a "recheck" sample.
- Whenever a given standard is violated by three of the last five quality counts, the producer permit will be suspended.
- Any positive antibiotic test is counted as a violation and triggers the adulterated milk enforcement process.
- The MDA will also take enforcement action if the farm fails to submit counts in at least four out of every six months.

If your permit is suspended, you will need to follow specific steps to have it reinstated. For more information, contact your dairy inspector and refer to your suspension letter.

What if my herd is drying off?

If you are drying off your herd or not using the milk produced on your farm during a particular month for processing, you must **let the MDA know**. Submit a permit update form to request to have the qualities requirement put on hold until you resume milking. Not informing the MDA that your herd has dried off may result in a suspension of your dairy permit due to failing the ongoing four of six sampling requirement. **Notify the MDA when you start milking again**, as this may require a new permit, depending how long you have been dried off and/or if you had qualities issues at the time of dry-off.

Resources and References

- [*MINN. STAT. 32D.14 Official Producer Samples*](#)
- [*MINN. STAT. 32D.03 Bulk Milk Hauler and Sampler License*](#)
- [*Grade "A" Pasteurized Milk Ordinance \(pdf\) | Food and Drug Administration*](#)
- [*Milk for Manufacturing Purposes and Its Production and Processing \(pdf\) | U.S. Dept. of Agriculture*](#)
- [*Bulk Hauler and Sampler License | MDA*](#)
- [*Starting a Small Dairy Processing Plant \(pdf\) | MDA*](#)

Questions?

For more information, contact the MDA Dairy Qualities Coordinator at dairy.results@state.mn.us or call the Dairy and Meat Inspection Division at 651-201-6300.