

CHAPTER 7-03.2-03 REQUIREMENTS FOR SAMPLING AND TESTING

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7-03.2-03-01. General requirements.

A tester analyzes milk for components, quality, microbiological, or drug residues for the purposes of determining the value or grade of the milk. All tests performed by testers must conform with the requirements in the standard methods. The results of such tests must be retained for one year and must be available to the commissioner upon request.

History: Effective October 1, 2009; amended effective July 1, 2024.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-22, 4.1-25-26, 4.1-25-34

7-03.2-03-02. Laboratories.

All laboratories used for sampling and testing milk and milk products must meet all of the requirements for grade A laboratories in the pasteurized milk ordinance. All manufacturing grade laboratories used for sampling and testing milk and milk products must meet all regulations imposed by the United States department of agriculture. On a case-by-case basis and only for good cause, the commissioner may waive the requirements of this section if the commissioner imposes substitute requirements that are substantially equivalent to those required above.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-03. Universal sampling.

A universal sample must be collected every time milk is picked up at the farm. This sample must be aseptically collected and may be used for all tests required by the commissioner. Before a sample is collected, the milk in the tank from which the sample is to be taken must be agitated to ensure that the sample is representative of the tank's contents.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-04. Sample reporting - Records.

1. The results of all raw milk testing done for regulatory purposes by industry laboratories must be reported to the commissioner weekly. When a test shows the presence of adulterants, the commissioner must be informed immediately.

2. Records on sampling, testing, or grading of milk or cream created to comply with article 7-03.2 and North Dakota Century Code chapter 4.1-25 to establish producer pay levels must be retained and available to the commissioner for twelve months. These records must include the following:
 - a. Producer identification number.
 - b. Date of sampling, testing, or grading.
 - c. Type of sampling, testing, or grading procedure used.
 - d. Results of sampling, testing, or grading.
 - e. Name of licensed tester, grader, or sampler conducting the procedure.
3. When the commissioner is investigating a complaint, the plant must give the commissioner access to all quality records that the commissioner requests.

History: Effective October 1, 2009; amended effective July 1, 2019.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26, 4.1-25-34

7-03.2-03-05. Butterfat and protein composite sampling.

A composite sample used to test butterfat and protein must consist of a minimum of twenty milliliters made up of a representative sample from each delivery of milk or cream to the plant. A minimum of ten milliliters of milk from each delivery must be included in the composite sample. The composite sample must be maintained at a temperature of thirty-two to forty degrees Fahrenheit [0 to 4.4 degrees Celsius]. A composite sample may not be retained for more than fifteen days and must be tested within three days after the last addition. A chemical preservative must be added to maintain the integrity of the sample. Approval for the type and concentration of the preservative must be given by the commissioner upon request. If a composite testing program is being used for butterfat or protein determination, a minimum of two deliveries is required. A log is required on all composite samples maintained and available to the commissioner for twelve months. This log must list all of the following:

1. Date of the test.
2. Pickup weight of milk.
3. Producer's identification.
4. Protein or butterfat, or both, result for that composite sample.
5. Name of licensed tester performing the test.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-06. Farm tank calibration disputes.

When a dispute exists between the buyer and seller of raw milk as to the amount of milk being removed from farm bulk milk tanks, the buyer or seller may contact the commissioner who may review the matter and supply a recommended resolution to the buyer and seller.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-07. Sampling equipment.

All sampling equipment must comply with requirements in the standard methods. Certified thermometers must be used to take samples. Certified thermometers must be accurate within two degrees Fahrenheit [1.11 degrees Celsius]. Their accuracy must be checked once during a six-month period. Certification must be obtained by a trained analyst approved by the commissioner. The analyst must maintain a log of the results of each thermometer certified. The log must contain the same information recorded on the thermometer and must show the certification history of all thermometers for which the analyst is responsible for one year. The following must be listed on certified thermometers:

1. Initials of the person calibrating the thermometer.
2. The date of calibration.
3. The date the calibration expires.
4. The thermometer owner's name or the thermometer number.

History: Effective October 1, 2009; amended effective July 1, 2024.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-08. Farm samplers.

Individuals licensed to sample milk at farms shall follow the procedures in the North Dakota milk hauler and sampler manual, issued by the commissioner.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-09. Plant samplers.

1. Plant storage tanks used for storing raw milk without sampling cocks must be sampled using the procedures described in the North Dakota milk hauler and sampler manual, issued by the commissioner.
2. Samples taken from plant storage tanks with sampling cocks must use the following procedures:
 - a. Rinse the area around the sample cock with warm water and clean if needed.
 - b. Wash and dry hands.
 - c. Sanitize sample cock with an approved sanitizer or equivalent, using a minimum contact time of sixty seconds.
 - d. Purge sample cock by discarding enough milk to remove any excess chlorine solution.
 - e. Label two sample containers with the following information:
 - (1) Plant name.
 - (2) Date.
 - (3) Time.
 - (4) Temperature.

- (5) Sampler name or initials.
 - (6) Tank or silo identification.
 - (7) The sample container to be used for the temperature control must also have "T.C." noted on it.
- f. Aseptically remove the top of the bag or cap cover of the sample container marked "T.C." Fill the sample container three-quarters full, close, and place immediately in a refrigerated sample case with a water-ice mixture capable of keeping the sample at a temperature of thirty-two through forty degrees Fahrenheit [0 through 4.4 degrees Celsius].
 - g. Using the certified thermometer, obtain the temperature of the milk in the sample container marked "T.C." Write this temperature on both sample containers.
 - h. Aseptically remove the top of the bag or cap of the second sample container and obtain a sample. Fill the sample container three-quarters full. Close and place immediately in the refrigerated sample case.
 - i. Rinse off all excess milk from the sample cock and storage tank or silo.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-10. Finished product sampling procedures.

1. All finished product that is to be sampled or tested for regulatory purposes must be collected by the commissioner. Samples must be collected randomly and the older code date must be selected before a more recent code date.
2. Finished product chosen for sampling must be stored in a refrigerated sample container that maintains the samples at thirty-two to forty degrees Fahrenheit [0 to 4.4 degrees Celsius]. A temperature control sample must be selected for each area or cooler where finished milk product is stored. The temperature control must be opened and a temperature obtained using a certified thermometer. The temperature control must be closed and sealed to prevent leakage during transport. Samples must be taken at the plant of origin.

History: Effective October 1, 2009.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-26

7-03.2-03-11. Adulterants.

1. **Drug testing.**
 - a. Raw milk. Prior to processing, the processor must test all bulk milk pickup tankers for the presence of beta lactam drug residues and for other residues as determined necessary by the commissioner. Test methods will be those approved by the association of official analytical chemists or the food and drug administration. A positive test on the commingled sample requires confirmation testing for drug residues of all individual producer samples making up the bulk pickup tanker. Bulk milk tankers testing positive must be reported to the commissioner immediately. This report must include the tests used, volume of milk contaminated, how the milk was disposed of, and which producer caused the positive residue. All milk sample residue results must be recorded and retained for examination by the commissioner for twelve months.

- b. Bulk load rejected. If a bulk load of milk tests positive for a drug residue, the processor shall reject the entire bulk load. The rejected bulk load may not be used for human food.
 - c. Processor's loss - investigation. If a processor sustains a monetary loss because a bulk load of milk is rejected, the processor may file a complaint with the commissioner. The commissioner may investigate the complaint and may issue a report on the amount of monetary loss suffered by the processor and on the responsibility for the rejected load and for the processor's monetary loss.
 - d. Followup testing. If a bulk load of milk tests positive for drug residue, the processor shall immediately notify the commissioner and suspend further pick up of milk from the producer whose milk contaminated the bulk load until followup tests of that producer's milk test negative for drug residues. The dairy processor must perform these followup tests.
 - e. Testing bulk loads. In addition to performing routine beta lactam tests, a processor shall randomly test bulk milk deliveries for other drug residues as required by the commissioner. The drug testing program shall include milk from each producer in at least four separate months during any consecutive six-month period.
 - f. Finished product. All finished milk products must be free of antibiotics. Raw milk contaminated with antibiotics may not be used in processing finished milk products. All manufacturing grade finished milk products must be tested as determined by the commissioner. These products include fluid and cultured products, butter, cheese, and other products so designated by the commissioner.
2. **Drug residue and other substances.** A person may not sell or offer for sale milk that contains drug residues or other chemical substances in amounts above the tolerances set in the food and drug administration's Memorandum of Information No. M-I-28-9, dated February 9, 2018, and in title 21, Code of Federal Regulations, parts 530 and 556. These levels are merely guidelines. Milk with drug residues or other chemical substances below these tolerances is not necessarily unadulterated or otherwise acceptable milk, and selling or offering to sell such milk may be subject to penalty and other regulatory action by the commissioner.
- a. When a producer has shipped milk that tests positive for residue, the producer's farm license must be suspended until a sample of the producer's milk tests negative.
 - b. When a producer has shipped milk that tests positive for residue three times in a twelve-month period, the producer's farm license may be revoked if the commissioner's investigation warrants such action.
 - c. The commissioner will complete a followup inspection when a producer's milk tests positive for residue.
3. **Pesticides.** Milk containing any pesticides or chemical contamination exceeding food and drug administration or environmental protection agency standards for safe food may not be offered for sale.
4. **Added water.** Milk may not contain added water. Any packaged milk that tests under .530 degrees Hortvet using the cryoscope thermistor test may not be offered for sale.

History: Effective October 1, 2009; amended effective July 1, 2019; July 1, 2024.

General Authority: NDCC 4.1-25-50

Law Implemented: NDCC 4.1-25-02, 4.1-25-26, 4.1-25-35, 4.1-25-36, 4.1-25-37