

DFPEI 2023-04
Dairy Farmers of Prince Edward Island

Order: 2023-04
Effective: 1 August 2023

Under the *Natural Products Marketing Act*, R.S.P.E.I.1988, Cap. N-3, and the Dairy Farmers of Prince Edward Island Regulations thereunder, Dairy Farmers of Prince Edward Island makes the following order:

RAW MILK SAMPLING, INSPECTION, GRADING AND TESTING ORDER

Application

1. This order establishes the procedures for sampling, inspecting, grading and testing raw milk picked up on dairy farms in Prince Edward Island.

Definitions

2. The words herein shall have the meanings as found in the Prince Edward Island Natural Products Marketing Act and the Dairy Farmers of Prince Edward Island Regulations under the Act, unless differentiated herein and as hereinafter defined:

- (1) “bulk milk grader” means a person licensed by to inspect, grade and receive milk, as described in DFPEI orders, and who holds a bulk milk grader’s licence;
- (2) “bulk milk grader’s licence” means a licence issued by DFPEI for the performance of duties as a bulk milk grader described in DFPEI orders;
- (3) “bulk milk tank” means a vessel for cooling and holding milk until it can be transferred to a transport vehicle;
- (4) “CFIA” means the Canadian Food Inspection Agency;
- (5) “compartment” means one of the parts into which a bulk milk truck tank is divided;
- (6) “dairy animal” means a cow of the bovine family kept for the purposes of milking;
- (7) “dairy farm” means a farm where dairy animals are kept for milking and from which milk is marketed or sold for processing in a dairy plant or for human consumption, and includes all buildings, yards and premises occupied or used in connection with the production of milk;
- (8) “dairy plant” means a premise, building or structure, where milk is received and/or dairy products are prepared;
- (9) “DFPEI” means Dairy Farmers of Prince Edward Island;

- (10) “inhibitor” means any substance, other than a bacterial culture, that does not occur naturally in milk and inhibits the growth of bacteria in milk or negatively affects the organoleptic properties of milk or dairy products;
- (11) “inspector” means a person who has been trained as a bulk milk grader and is appointed by the Board to inspect dairy farms, dairy barns, milking parlours, milking areas, milk houses, milk handling equipment and transport vehicles to ensure compliance with this order and other orders of DFPEI regulating the production, handling, storage, transportation and marketing of milk;
- (12) “laboratory” means the Prince Edward Island Analytical Laboratory or an alternate that has been recognized to be in compliance with an international standard (ISO/IEC 17025) that is designated by DFPEI to analyse raw milk samples;
- (13) “milk” means a normal lacteal secretion obtained from the mammary gland of a dairy animal that is free of colostrum, and includes whole milk and such products of milk that are supplied, processed, distributed or sold in any form;
- (14) “milk components” means the three constituent parts of milk that are measureable and used to determine the value of milk, namely butterfat, protein and other solids;
- (15) “official sample” means a milk sample as described in s.7 of this order;
- (16) “processor” means a person performing any processing of milk and may operate one or more dairy plants;
- (17) “producer” means a person or partnership that holds quota and has no other interest in any other quota, who markets or sells milk that has been produced by a herd of dairy animals owned or controlled by the producer;
- (18) “raw milk” means milk that has not been heated beyond 40°C or undergone any treatment that has an equivalent effect;
- (19) “sale” means the act of selling milk and includes trade or barter;
- (20) “sample” means a representative part of the raw milk offered for sale that is presented for inspection, grading or for testing;
- (21) “test week” means a period of seven consecutive days extending from a Saturday to the following Friday; and
- (22) “transport vehicle” means a vehicle used for the transport of milk and includes a bulk milk truck.

Approved testing methods

3. Only approved and validated methods which conform to the handling, procedural, and quality control parameters described in the most recently published "Standard Methods for the Examination of Dairy Products" approved by the American Public Health Association, the "Official Methods of Analysis of the Association of Official Analytical Chemists", any method recognized by the International Dairy Federation/International Standards Organization (ISO), or any other method approved by the Board shall be used for testing milk.

Approved laboratory

4. Raw milk samples obtained for the purposes specified in this order shall only be tested by the Prince Edward Island Analytical Laboratory, or an alternative accredited laboratory, using the approved methods described in s.3.

Inhibitor testing products

5. Screening and confirmatory tests for inhibitors shall be performed using an approved inhibitor testing product:

- (1) the choice of testing product shall be approved by the laboratory, processors and DFPEI;
- (2) all inhibitor screening tests shall be performed using the same inhibitor testing product as the laboratory; and
- (3) any test performed using other testing products that cannot be verified using the approved testing product shall not be accepted by DFPEI and any resulting costs or liability shall be for the account of the processor using the unapproved test.

Requirement to sample

6. Raw milk samples shall be drawn from the milk present in the bulk tank on each farm every time milk is offered for sale. Samples shall be used by the bulk milk grader to inspect and grade the milk, prior to loading it on the transport vehicle, to determine if it is acceptable for sale. Samples from each farm shall also be used as required by the laboratory for testing the milk to determine:

- (1) if the milk contains inhibitors;
- (2) if the milk complies with quality standards established in the current DFPEI Raw Milk Standards Order; and
- (3) the milk component content, which is used for calculating the value of the milk.

Official samples

7. Only samples drawn by a bulk milk grader or dairy inspector and held in the continuous custody of a bulk milk grader or dairy inspector until inspected, graded or shipped to the laboratory shall be considered valid official samples. After a

sample is drawn, no person shall be granted access to the sample who is not part of the inspection, grading, shipping or testing process. Only official samples may be used for testing as specified in this order.

Volume of samples

8. Samples are normally drawn in volumes less than one hundred (100) millilitres; but shall be drawn in sufficient volume to meet inspection, grading and testing requirements as specified in this order at the time the milk is offered for sale.

Number of samples required

9. A bulk milk grader shall draw:

- (1) at least one sample to inspect and grade the milk on each farm before it is removed from the producer's bulk milk tank - these samples may be disposed on site if appropriate;
- (2) one or more samples to be retained as official samples in custody as specified in s.7 of this order; and
- (3) one or more samples for extraordinary testing, such as CFIA testing or research testing, as directed by DFPEI.

No compensation for samples

10. The volume of milk drawn for samples is considered insignificant compared to the volume of milk offered for sale by dairy farms and is required in the normal course of marketing milk. Therefore, no compensation shall be paid for any volume of milk drawn as samples prior to measurement of the volume of milk available for sale.

Drawing samples

11. Each official sample shall be drawn:

- (1) following agitation of the milk contained in the tank for at least 5 minutes or as otherwise directed by DFPEI to assure uniformity of the milk;
- (2) in an aseptic manner; and
- (3) by means of:
 - (a) a mechanical sampler on the bulk milk truck;
 - (b) a direct extraction from the producer's bulk milk tank using a sanitized pipette;

(c) a direct extraction from the producer's bulk milk tank using a sanitized dipper that has been rinsed in the milk prior to sampling; or

(d) any other sanitary sampling method approved by DFPEI.

Inspection and
grading

12. A bulk milk grader shall inspect and grade the milk offered for sale and shall accept the milk for purchase or reject the milk contained in the bulk milk tank on the basis of its flavour, appearance, odour, temperature or other abnormalities, as specified in the DFPEI *Raw Milk Standards Order*.

Milk testing
frequency

13. The laboratory shall select samples from the official samples collected at the time of raw milk pick up from each producer for testing. The frequency of testing for each requirement or standard shall be as follows:

- (1) at least one sample each test week for freezing point;
- (2) at least one sample each test week for bacteria;
- (3) all samples for milk component content;
- (4) all samples for somatic cell count;
- (5) as provided for in s.14 and s.15 of this order for inhibitors; and
- (6) as may be otherwise directed by DFPEI.

Inhibitor screening
test procedures

14.(1) Every dairy plant receiving milk shall ensure that a screening test is performed to detect the presence of inhibitors in any milk offered for sale. All bulk loads of milk shall be tested for inhibitors by:

- (a) the receiving dairy plant before the milk is unloaded; or
 - (b) an external milk tester, contracted by the processor purchasing the milk and approved by the Board, after the milk has been unloaded at the receiving plant.
- (2) In the case where a transport vehicle has multiple compartments, all compartments shall be tested.
 - (3) Any additional costs or losses created by accepting the milk before it has been tested by an external milk tester as described in S.14.(1)(b) of this order shall be the responsibility of the processor purchasing the milk.

Dairy plant
confirmation tests

15. When a screening test detects the possible presence of one or more inhibitors in a compartment, the following actions shall be undertaken to verify the screening test results:

- (1) the dairy plant shall conduct two additional inhibitor tests on milk samples from the suspected contaminated compartment and simultaneously test two control samples, one that is known to be inhibitor free and one that is known to contain the inhibitor;
- (2) if the control sample results verify the tests are functioning correctly and neither of the additional tests indicate the presence of an inhibitor, the original screening result shall be considered an error and the milk shall be accepted for processing; and
- (3) If the control sample results verify the tests are functioning correctly and at least one of the additional tests indicate the presence of one or more inhibitors, the dairy plant shall:
 - (a) reject all the milk contained in the contaminated compartment;
 - (b) notify a DFPEI inspector of the contamination; and
 - (c) forward the remainder of the sample from the contaminated compartment and the samples collected from each farm bulk tank that was loaded into the contaminated compartment to the laboratory for further testing.

Laboratory inhibitor
tests

16. If dairy plant confirmation tests indicate that one or more inhibitors are present in a bulk tank sample, the laboratory shall:

- (1) conduct two inhibitor tests on the milk from the load sample, and also simultaneously test two control samples, one that is known to be inhibitor free and one that is known to contain the inhibitor;
- (2) test all the producer samples from the contaminated compartment;
- (3) determine which producers were responsible for contamination of the compartment; and
- (4) communicate the findings to a DFPEI inspector and the dairy plant.

DFPEI inhibitor
response

17. Upon receipt of confirmation of the presence of inhibitors from the laboratory, DFPEI shall:

- (1) confirm the dairy plant's decision to discard all milk from the contaminated compartment; and
- (2) notify the producer responsible for the contamination and perform actions indicated in the DFPEI Violations and Penalties Order.

Test for added
water

18.(1) The test to determine the presence of added water is analysis of the freezing point of the milk samples.

- (2) All samples shall be screened using an electronic milk analysis device and once per week the results of the freezing point screening for each producer shall be selected to be an official sample for freezing point testing.
- (3) Any official sample that is identified as possibly exceeding the freezing point standard shall be retested by cryoscopy to accurately determine its freezing point.
- (4) The freezing point of the milk shall be reported and recorded in degrees Hortvet or degrees Celsius.

Test for bacteria

19.(1) Each week one official sample of milk from each producer shall be selected for bacteria testing.

- (3) Bacteria testing shall be performed using an electronic milk bacteria analysis device.
- (4) The test shall determine an individual bacteria count of the number of bacteria present in a ml of milk.
- (5) Bacteria test results shall be reported and recorded as individual bacteria counts (IBC).

Test for somatic
cells

20.(1) All official samples of milk from each producer shall be selected for somatic cell testing.

- (2) Somatic cell testing shall be performed using an electronic milk analysis device
- (3) The test shall determine the number of somatic cells present in a ml of milk.

Test for milk components

- (4) Somatic Cell Test Results shall be reported and recorded as somatic cell counts (SCC).
21. (1) All official samples of milk from each producer shall be tested to determine the component content in that producer's milk.
- (2) Milk component testing shall be performed using an electronic milk analysis device.
- (3) The milk analysis device expresses the content of each component in a mass over mass (grams of component per Kg of milk) data format.
- (4) DFPEI shall receive the mass over mass data, then convert that data to the industry recognized mass over volume (Kg/hL) format using a standard calculation and factors provided by the Canadian Laboratory Service or another recognized authority competent to provide the information.
- (5) The component content shall be reported to producers and industry partners in the mass over volume format, which shall be used to determine the value of the milk for invoicing processors and for paying producers.

Reporting test results

22. All test results shall be reported to DFPEI by the laboratory. DFPEI shall distribute test results to producers using electronic and other means and shall use the test results to determine compliance with milk quality standards and to establish the milk component content for the purpose of invoicing processor and paying producers.

Revocation

23. DFPEI order 2017-08 is hereby revoked.

Commencement

This order shall come into force on the 1st day of August 2023.

Dated at Charlottetown, PEI this 28th day of July 2023.



Gordon MacBeath, Chair



Connie Gorrill, Secretary