



***Raw Milk
Quality
Program
Policies***

**Dairy Farmers of Ontario
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(check www.milk.org for updates to DFO Policies)

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This book has been prepared to provide all Ontario producers with information on the Raw Milk Quality Program Policies of DFO. These policies remain in effect until DFO advises producers otherwise. Policy changes may be announced in *The Milk Producer* magazine. As well, an updated version of the policy book is included on the DFO website at www.milk.org. The document posted on the DFO website contains the most up-to-date policies and will be used for all policy interpretation.

For more information or clarification on any policies, producers may contact DFO's Field Services Representatives (names and contact information on DFO website) or the appropriate head office staff (905-821-8970).

Raw Milk Quality Program Policies

Section A

What Producers Need To Do

1. Authority and Responsibilities

Ontario Regulation 761, under the Ontario Milk Act, outlines all of the regulations pertaining to the production, transportation, and processing of milk. Regulation 761 provides the requirements producers must meet to offer milk for sale to Dairy Farmers of Ontario (DFO). Regulation 761 is available from the Ontario Government website at: www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900761_e.htm

DFO, under an agreement with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), is responsible for administering provincial Regulation 761 pertaining to farm premises, raw milk quality testing, truck-tank inspections, and Bulk Tank Milk Grader (BTMG) certification, recertification and monitoring.

This Raw Milk Quality Program Policies Book generally describes the regulatory requirements and provides an explanation of DFO's administration procedures.

Director of Regulatory Compliance

The Director of Regulatory Compliance is appointed by DFO to oversee the administration of the provincial Raw Milk Quality Program Policies. The Director of Regulatory Compliance has overall responsibility for overseeing sampling, milk quality testing, penalty application and transporter and BTMG activities and performance, as well as the inspection of farms. The Director may call a Hearing if a producer or BTMG does not meet regulatory requirements.

2. Requirements for Raw Milk Production

The specific requirements pertaining to the production and marketing of raw milk are outlined in Regulation 761. Following is a general overview of how the Raw Milk Quality Program Policies are administered, the services available to producers and farm premise and milking and cooling equipment requirements.

a) Requirements for Farm Premises

All farms can expect to be inspected by a DFO Field Services Representative (FSR) at least once in every two-year period. An inspection form giving producers an idea of what will be evaluated follows in Appendix A. Potential farm classifications are Grade A, Conditional Grade A, Non-Grade A, and Unsanitary Non-Grade A. More information regarding these classifications is shown under Farm Inspection in Section C. Penalties can be applied if a licensed dairy facility does not meet Grade A requirements. Penalties are explained in Section D of this book.

To meet Grade A requirements, farm premises and surroundings, and milking equipment must be clean and in a state of good repair. All animals must receive appropriate care and only milk from healthy animals can be offered for sale.

Areas reviewed during a farm inspection include:

- i) Biosecurity – contaminants (manure, other animals, deadstock) which could affect animal health or milk quality must be kept separate from milking animals and equipment;
- ii) Milk Contact Surfaces – all milk contact surfaces must be clean and in good repair;
- iii) Milk Storage and Cooling – bulk tank interior and exterior must be clean and in good

repair. Milk must be cooled to 10°C or lower within one hour after milking and to between 1 - 4°C within two hours of the end of milking. Other than the time period during and immediately after milking, milk must be stored between 1 - 4°C;

- iv) Udder Contact Surfaces – stalls, barnyard, pasture, etc., must be clean;
- v) Physical Structures – animal housing, milking areas and milkhouse must be clean, tidy and maintained in a state of good repair; and
- vi) Time Temperature Recorder must be installed, properly functioning and constantly monitoring milk and milking equipment wash time and temperatures.

b) Requirements For Milk Quality

i) Milk Grading

Milk in the bulk tank must be free of objectionable odours, foreign substances, coagulation and evidence of melted or churned butterfat. Milk that has an objectionable odour or contains foreign matter may be rejected by the BTMG.

ii) Milk Sample Testing

A sample will be taken by the BTMG from each bulk tank of milk shipped. This sample may be tested for:

1. Inhibitors

Milk must be free of substances that inhibit bacterial growth in raw milk. These substances are normally veterinary drug residues. Penalties are applied if inhibitors of any type are in penalty range in the bulk tank milk sample. Losses and cost may also be charged to an offending producer when a tanker-truck is contaminated if the producer's bulk tank milk sample contains inhibitors in penalty range.

2. Abnormal Freezing Point

Milk must have a freezing point that is less than -0.506°C (-0.524°H). A penalty is applied if the official Cryoscope result is greater than the specified level for Abnormal Freezing Point (AFP) of -0.507°C (-0.525°H).

3. Bacteria

Milk must contain less than 122,000 Individual Bacteria Cells (IBC) per mL. A milk sample that contains greater than 121,000 IBC is in the penalty range.

4. Somatic Cell Count (SCC)

Milk must contain less than 500,000 Individual Cells (IC) per mL. A milk sample with a test result greater than 499,000 IC/mL is in the penalty range.

Note: Effective August 1, 2012, samples greater than 399,000 IC/mL will be in penalty range.

Appendix B: Checklist for Troubleshooting Milk Quality Issues contains information that can assist producers in improving milk quality and addressing problem areas.

c) Requirements for Research

Every producer shall, prior to selling or offering for sale milk from test cows where the tests or experiments involve chemicals, drugs or hormones not authorized for use on a commercial basis in Canada, file with DFO written notice of the producer's intention to sell or offer for sale any such milk. The producer must receive the written approval of a regulatory agency before milk can be marketed.

d) Water Testing

The provincial microbiological standard for drinking water quality is zero E-Coli and zero coliforms (0 cfu/100 mL). A water sample taken at the "point of use" (the sample is taken five to 10 seconds after turning on the milkhouse tap to represent water as it is used to clean milking equipment) should contain zero E-Coli and zero coliforms (0 cfu/100 mL). Water standards are only enforced by DFO in the case of reinstating a producer to the market where water that is used to clean milk equipment must contain zero E. Coli (Section D-3(b)).

Section B

Canadian Quality Milk (CQM) Program

The Canadian Quality Milk (CQM) Program is a national program, initiated by Dairy Farmers of Canada. CQM is an on-farm HACCP-based food safety program designed by dairy farmers for dairy farmers. Meeting CQM requirements is a condition of being licensed to produce and market milk in Ontario. Producers must meet provincial Grade A standards as a prerequisite requirement of meeting CQM requirements. If the producer is not Grade A, a CQM validation does not take place but the validation opportunity is considered a validation for CQM penalty determination.

CQM requirements are available on the DFO website at www.milk.org under Farmers, subsection Canadian Quality Milk Program.

1. Validation periods

- a) Initial validation – Assigned Validation Months (AVM) for producers were assigned in April 2011. For new licences, the AVM is the sixth full month following the month quota is assigned (e.g. started April 1, due October with November being the deadline). The Administrator may move the AVM back by one or more months if required for management reasons.
- b) Initial self-declaration – due in the 12th month following the month the producer first passed a CQM validation (e.g. initial validation pass month of April, self-declaration due the following April).
- c) Second and subsequent validations – every 24 months after the month the producer first passed a CQM validation unless revised plus or minus one month by the Administrator.
- d) Second and subsequent self-declarations - every 24 months after initial self-declaration month.

2. Permitted changes to Assigned Validation Month

- a) The Assigned Validation Month (AVM) of a producer can be changed upon the written request of the producer if the producer has suffered a catastrophe and milk is not being produced at the licensed dairy facility.
- b) The AVM of a producer can be changed if the producer has suffered a catastrophe and the quota is being held in abeyance.
- c) In the case of a catastrophe, the revised AVM will be the sixth full month after production has restarted at a producer's licensed dairy facility.

3. Penalties

Every producer who does not meet CQM Program requirements by the end of the second month following the validation or self-declaration month, shall be assessed for each consecutive month of non-compliance:

- a) a penalty for each hectolitre, or fraction thereof of all milk marketed by the producer during the month; and
- b) the penalty for the first, second or third consecutive month of non-compliance is \$2/hL and in each of the next three months of non-compliance (second quarter-year), a penalty equal to the penalty applied during each month of the first quarter-year plus an additional \$2 for each hectolitre, or fraction thereof of all milk marketed by the producer during the month; and
- c) in each month of all subsequent quarter-year periods of non-compliance, a penalty equal to the penalty applied during each month of the previous quarter-year plus an additional \$2 for each hectolitre, or fraction thereof of all milk marketed by the producer during the month; and
- d) penalties will continue to be applied in such manner until the producer meets the

- requirements of the CQM Program.
- e) No financial penalty under subsection 4 a), b), c) or d) will be assessed by DFO unless the Board has first conducted a Hearing into the matter and ordered a penalty be applied, or the producer affected has waived the requirement of a Hearing.
 - f) No financial penalty assessed by DFO under subsection 4 a), b), c) or d) will exceed 10 per cent of the price payable to the producer for milk marketed by the producer during the immediately preceding 12-month period.
 - g) If a CQM penalty is to be applied, the producer will be advised by letter on or about the 6th of the month that a CQM penalty will be applied following a Hearing before the Board at the end of the same month and that a validation is to be conducted by the end of the current month to avoid further CQM penalties.
 - h) The producer has three options regarding a Hearing that will be held by the end of the month following the self-declaration due month: i) waive the rights to a Hearing, ii) provide a written response for consideration at the Hearing, or iii) attend the Hearing in person.

4. Fees

A fee will be applied if a producer requires higher service levels as follows:

- a) A service fee of \$250 applies for the third and subsequent validations or validation opportunities until the producer passes a validation.
- b) A \$50 service fee applies for each reminder notice sent to producers.

Note: A producer who sells total quota on the exchange month in the month following the assigned validation or self-declaration month is not subject to a CQM penalty.

Examples of how the CQM penalty and fee programs will be applied follow.

Example 1

Month	Description	Compliant	Penalty	Pen Rate	Service Fee	Fee Rate
Jan	Assigned month	no	n/a	n/a	n/a	n/a
Feb	Follow-up	yes	n/a	n/a	n/a	n/a
There are no penalties or fees as requirements were met the month following the assigned validation month.						

Example 2

Month	Description	Compliant	Penalty	Pen Rate	Service Fee	Fee Rate
Jan	Assigned month	no	n/a	n/a	n/a	n/a
Feb 1st	Follow-up	no	yes	\$2/hL	n/a	n/a
March	2nd Follow up	yes	no	n/a	yes	\$250
A CQM penalty applies for the month of February as the CQM requirements were not met in February and February is the second opportunity. A service fee is applied for March as this is the third validation. No penalty is applied for March as the CQM requirements were met.						

Section C

How Information Is Reported To Producers

1. Reporting of Inspection and Sample Test Results

Each producer has a responsibility to obtain milk quality information available through DFO mechanisms. Information is available through MILKLINE at 1-800-386-9109, the DFO website at www.milk.org and the monthly milk statement. A producer username and password are needed to obtain test results or inspection reports. MILKLINE also calls producers to warn of elevated and high test results.

a) Farm Inspection

DFO conducts farm inspections approximately every two years and more frequently if the farm was not Grade A on the last inspection. At the time of inspection, farms will be classified as either:

- i) **Grade A** – The majority and all critical items relating to premises, milking equipment and animal care meet industry standards. Farms that are Grade A have the majority of items scored as acceptable and items that needed improvement would not be seen to have the ability to significantly impact milk quality.
- ii) **Conditional Grade A** – The farm has a number of items that are not in compliance with regulations but the items may not directly affect milk quality. The producer is given a grace period to come into compliance.
- iii) **Non-Grade A** – The farm has an item or items that do not meet standards at the time of inspection.
- iv) **Unsanitary Non-Grade A** – If conditions are unsanitary at the time of inspection, the producer is immediately shut off from the milk market until all items are in compliance. Examples of unsanitary conditions may include unsanitary milk contact surfaces; unsanitary udder contact surfaces; milkhouse drain not working; deadstock in a laneway or loading area and concerns about animal health or inadequate animal care. **A farm will also be classified as Unsanitary Non-Grade A for refusal to allow an inspection.**

Farm inspection intervals for routine inspections are based on the previous farm inspection status. Farms that were Conditional Grade A on the last initial inspection can expect to be inspected every year. Farms that were Unsanitary Non-Grade A or Non-Grade A can expect an inspection every three to six months.

The inspection begins with the farm yard and lane and proceeds to the milkhouse, milking and housing areas, and areas surrounding the farm premises. Cow condition is also reviewed. A farm inspection form is used by staff and outlines if the farm premises, surroundings and animal care meet industry standards. The inspection form is designed to cover parlour, tie stall and robotic milking systems. Each inspection point is reviewed and scored as Acceptable, Needs Improvement or Unacceptable. Upon completion of the evaluation, the farm is classified as Grade A, Conditional Grade A, Non-Grade A or Unsanitary Non-Grade A.

A copy of the inspection report is given to the producer or left in the milkhouse following the inspection. An electronic copy is also available on the DFO website. A copy of the Farm Inspection Report is included in this document as Appendix A.

b) Bulk Tank Sample Testing

A representative sample of milk is taken from each bulk tank prior to milk being picked up by the milk transporter. Milk samples will be taken by the BTMG using a sterile sampling pipette. Where the milk in a farm bulk tank cannot be sampled by a sampling pipette, the

producer shall provide a long-handled dipper and a container filled with sanitizing solution for use by the BTMG. If, for some reason, the sample cannot be taken using a pipette or a long handled dipper, the sample will be taken from the outlet valve of the tank. Samples taken from the outlet valve will be used as an official sample for inhibitor testing only.

With the exception of inhibitor testing, a bulk tank milk sample shall only be used for testing by the laboratory if it is maintained within an acceptable temperature range from the time of pickup until being prepared for testing.

Samples to be tested for bacteria are to be tested not later than the second day following procurement. However, for milk pick ups that occur after 6 p.m., samples can be tested for bacteria up to three calendar days later. Sample temperatures must be between 1°C and 4°C plus or minus 1°C for bacteria testing.

Samples tested for composition, SCC, inhibitor and abnormal freezing point must not be more than seven days of age at the time of testing. Sample temperatures must be between 1°C and 4°C plus or minus 1°C variance from this range for not more than four hours. Any sample temperature variance cannot be less than 0°C or more than 20°C.

For producers with two bulk tanks, representative samples will be taken from each tank during milk pickup. The poorest official quality tests from either tank will be used for penalty determination.

For linked dairy facilities, shipments and test results are distinct for each dairy facility.

The following test results will be provided to producers:

i) Inhibitors

Each load of milk delivered to a processor is subject to being screened for inhibitors. If a load sample screens suspect-positive, the load sample and all bulk tank samples will be further tested to confirm the presence of inhibitors. A bulk tank sample may also be randomly tested for inhibitors.

ii) Abnormal Freezing Point

Each bulk tank sample will be scheduled to have a freezing point estimate (FPE) calculated. Samples with a FPE greater than -0.507°C (-0.525°H) will be tested on the Cryoscope to determine if the official freezing point is greater than or equal to -0.506°C. A minimum of 18 days is required between Cryoscope tests used for penalty calculations.

iii) Bacteria

One bulk tank sample each week will be scheduled for bacteria testing. Producers on everyday pickup service may receive two test results each week. A minimum of three days is required between bacteria tests used for penalty calculations.

Any sample taken within three days of the previously reported bacteria test will be deleted from the official record of the producer.

iv) Somatic Cell Count

Each bulk tank sample will be scheduled for somatic cell count (SCC) testing. The results from each sample will be used to calculate the monthly weighted average SCC. This average will be used for penalty determination and quality awards.

v) Water

If a producer is shut-off from the milk market, a sample of the water used to wash or rinse milking equipment will be taken by the Field Services Representative. For the

producer to be reinstated to the milk market, the sample must contain zero E-Coli (0 cfu/100mL).

c) Sample Test Results

DFO provides various methods for producers to obtain milk quality and composition test results. A username (licence #) and password are needed to access the information.

MILKLINE is DFO's automated phone information system. Producers will be notified of penalty range test results for inhibitors, abnormal freezing point, bacteria and somatic cell count by an automated call from MILKLINE.

Producers can also call MILKLINE (1-800-386-9109) to acquire test result information.

DFO's website is www.milk.org. Test results are available to producers within the "Farmers" section of the website.

A user guide for MILKLINE and the DFO website are included in this document as Appendix C.

d) Notification of Penalties

Producers who have reached a penalty level for inhibitors, abnormal freezing point, bacteria or somatic cell count will receive a notification letter by mail outlining the reason for the penalty and its application. Notification for Non-Grade A farm premises will be the farm inspection report that is left at the farm. The producer's milk statement will show the specific financial application of any and all penalties incurred by the producer.

e) Producer Challenge of Test Results

Any challenge to test results must be received by the Director within 90 days of the test result being reported to the producer (i.e. MILKLINE or website). If a producer feels a sample and associated test result is not representative of the milk offered for sale, the producer can ask that the test result be deleted or varied by the Director of Regulatory Compliance.

Any requests to the Director must be made in writing to the Director of Regulatory Compliance, 6780 Campobello Road, Mississauga, Ontario L5N 2L8 and must outline the reason for the request and provide any supporting documentation. E-mail and fax are acceptable, but it is the sender's responsibility to confirm the information has been received by the Director. The request, along with reports from Field Services Representatives, the Bulk Tank Milk Grader, the lab and sample transportation will be reviewed. The Director will decide whether to grant or deny the request.

f) Milk Quality Recognition Program

DFO, in conjunction with local Dairy Producer Committees, operates a Milk Quality Recognition Program for Ontario producers. Producers who meet the criteria are eligible for quality certificates. Criteria for this program are outlined in Appendix D: Raw Milk Quality Recognition Program.

Section D

Consequences If Quality Standards Are Not Met

Ontario Regulation 761

1. Penalties for Non-Compliance

Ontario Regulation 761 states that producers who do not meet minimum farm premises or quality test standards shall be assessed a financial penalty. Penalties are administered as follows.

- a) If a load was not marketed because of contamination with inhibitors or foreign matter, the costs of all load losses are assessed to the offending producer(s). There is also no payment for the shipment of milk that caused the contamination.
- b) Penalties are applied on the total milk shipped during the month in which standards were not met.
- c) Penalties increase with each successive violation in a rolling 12-month period.
- d) Shut-offs are administered in a rolling 24-month period.
- e) More than one penalty can apply in the same month.
- f) For linked facilities, quality penalties, if applicable, are applied on the volume of milk shipped by the dairy facility incurring the penalty level test result.
- g) Penalty rates are subject to review and revision on an ongoing basis.

Appendix E: Ontario's Raw Milk Quality Program Penalties provides details on when and how penalties are applied for each infraction as well as the financial implication of each penalty.

Additional Information Regarding Non-Grade A Penalties

Non-Grade A penalties are applied if a dairy facility is Non-Grade A at the time of inspection or if the farm was classified as Conditional Grade A on the initial inspection but all of the required items were not completed upon re-inspection. A follow-up inspection for both Conditional Grade A farms and Non-Grade A farms will occur no sooner than 15 days after the initial inspection and before the end of the next month. All DFO farm inspections following the first follow up inspection are subject to a \$250 fee.

A penalty is applied for each month that a farm is Non-Grade A. Penalties stop in the month the dairy facility is classified Grade A. For farms that were Conditional Grade A upon initial inspection and the farm is Grade A upon re-inspection, no penalties are applied. However, if any items identified on the Conditional Grade A report are not completed upon re-inspection, Non-Grade A penalties may be applied on the shipments made in the initial inspection month and will be applied on shipments made in the next month in which the re-inspection took place.

If a dairy facility has been Non-Grade A for two consecutive months, a re-inspection will only occur in the third month at the request of the producer. If the producer does not request a farm inspection, a third-level Non-Grade A penalty will automatically be applied. A penalty will not be applied in the third month if the producer requests an inspection and the farm is Grade A.

DFO Field Services Representatives will automatically inspect a dairy facility the fourth consecutive month the dairy facility is Non-Grade A. If the dairy facility is Non-Grade A upon re-inspection, the producer will incur a fourth-level Non-Grade A penalty and will be shut off from the market until the dairy facility is Grade A in all respects and meets all reinstatement requirements.

2. Shut-off for Non-Compliance

Producers will be shut off from shipping milk to the market (milk will not be picked up by the milk transporter) if they are unable to meet health, safety and quality standards outlined in Ontario Regulation 761 for farm premises and milk quality.

a) Reasons for Shut-off

A shut-off will occur if:

- i) The farm incurs a fourth-level Non-Grade A penalty.
- ii) The farm is Unsanitary Non-Grade A at time of inspection.
- iii) A second or higher level inhibitor penalty is applied, meaning the producer has had two or more official inhibitor test results that contained inhibitors in the amount of 0.01 IU/ml or greater as determined by an official test in a 12-month period. (Note: For any inhibitor violation, the producer's tank is placed under detention and milk cannot be marketed until a sample from the bulk tank tests negative.)
- iv) A fourth-level abnormal freezing point penalty is applied, which means the producer has had four Cryoscope test results greater than -0.507°C (-0.525°H) in a 12-month period.
- v) A fourth-level bacteria penalty is applied if the producer has four occurrences where they have a test result greater than 121,000 IBC/mL in the third month in any three-month period and at least five more test results greater than 121,000 IBC/mL in the same three-month period.
- vi) A fourth-level SCC penalty is applied, which means the producer has had at least six monthly weighted average counts above 499,000 IC/mL in a 12-month period (this will change to 399,000 IC/ml in a 12-month period effective August 1, 2013).

b) Procedure for Shut-off

A shut-off occurs when:

- i) a shut-off level test result is reported at the lab;
- ii) at inspection, if a producer incurs a fourth-level Non-Grade A penalty or a farm is Unsanitary Non-Grade A;
- iii) a fourth-level weighted average SCC penalty is calculated by DFO for the previous month's production.

For all shut-offs DFO will immediately notify the milk transporter that the producer's milk is not to be picked up until notified otherwise by the Director of Regulatory Compliance. For Non-Grade A shut-offs, the producer will be notified of the shut-off at the time of the inspection. For milk quality shut-offs, the producer would be notified by phone, and will receive written notification from the Director of Regulatory Compliance. Milk produced during the shut-off period cannot be offered for sale.

c) Inhibitor Shut-off

When a sample is found to be positive, by the official inhibitor testing method, a DFO Field Services Representative (FSR) will attempt to notify the producer as soon as possible, by telephone, that inhibitors have been detected in a sample of the producer's milk. If it is the first violation in a rolling 12-month period, the farm is under detention and the producer will be advised that milk cannot be shipped until a test from a bulk tank sample is negative. If a second or subsequent penalty occurs in a rolling 12-month period, the producer would be shut off from the milk market. Reinstatement conditions must be met before the producer would be allowed to ship milk.

3. Reinstatement Following Shut-off

Requirements change as the number of shut offs increase as follows:

- For the first shut-off in a 24-month period, the FSR will review, with the producer, the reinstatement requirements outlined in this Policies Book.
- For the second shut-off in a rolling 24-month period, the producer must appear at a Hearing before the Director of Regulatory Compliance.
- For the third shut-off in a rolling 24-month period, the producer will not be reinstated to the milk market.

The following outlines the procedures and requirements a producer must follow for reinstatement.

a) Procedures

- i) The producer must contact their FSR to arrange for a farm inspection when they have complied with all Grade A requirements and reinstatement conditions.
- ii) The FSR will visit the farm to verify that the farm is Grade A by conducting an inspection. The bulk tank must be empty at the time of the inspection. A milk sampling schedule will be established if the farm is Grade A.
- iii) If a test result does not meet regulatory criteria, arrangements will be made to take an additional sample or samples on a fee-for-service basis.
- iv) If test results do meet the criteria, FSRs will notify the Director that the producer has met the conditions for reinstatement and, if satisfied, the Director will reinstate the producer to the milk market.
- v) Only milk produced following reinstatement can be stored and offered for sale. Milk stored during the shut-off period must be disposed of and the bulk tank must be emptied and cleaned upon notification of reinstatement by the FSR.

b) Requirements for Reinstatement

i) Grade A Premises

- the farm must be Grade A in all respects;
- a sample of water that is used to clean milk equipment must contain zero E-Coli;
- one bulk tank milk test result representing a normal milk pickup must meet the regulatory requirements for bacteria, SCC, abnormal freezing point and inhibitors; and
- the Director may, after reviewing the producer's record and reports completed by appointed field persons, impose further requirements.

ii) Inhibitors

- farm must be Grade A in all respects;
- standard operating procedures for veterinary drug management are to be reviewed or developed by the producer, approved by an FSR, and posted by the producer;
- all animals must have ear tags that comply with the program standards of the National Livestock Identification (NLID);
- there is to be means of physically identifying treated animals (leg bands, markers, duct tape, etc.);
- there is to be a temporary record of treatment board or display located in a visible location;
- there is to be a system to keep permanent records of treatment (a binder with individual cow treatment records, DHI log book or calendar, etc.);
- the producer must own or have access to a veterinary drug residue test kit or test that can detect the drugs used on the farm;
- a sample of milk from the bulk tank must test negative for inhibitors by the official method and meet the regulatory requirements for SCC, bacteria and abnormal freezing point;
- a sample of water that is used to clean milk equipment must contain zero E-Coli;
- the producer may be required to test a sample of milk from all bulk tanks and obtain a negative result before offering the milk from the bulk tank for sale; and
- the Director may, after reviewing the producer's record and reports completed by appointed field persons, impose further requirements.

iii) Abnormal Freezing Point

- the farm must be Grade A in all respects;
- there must be sufficient volume to satisfactorily agitate, cool and measure the milk. Where milk volumes are low, the FSR will establish the minimum agitation and shipment level for the bulk tank;

- written verification from a milking equipment or refrigeration dealer that the milk does not freeze during the cooling process and that the mechanical function of the milking equipment, including the pipeline safety switch, is working properly;
- written verification from a milking equipment dealer that the pipeline is properly sloped towards the receiver jar;
- written verification from a nutritionist that a balanced ration is being fed;
- written acknowledgement from the producer that the residual milk in the pipeline at the end of milking is not chased with water into the bulk tank;
- a sample of water that is used to clean milk equipment must contain zero E-Coli;
- one bulk tank milk test result representing a normal milk pickup must meet the regulatory requirements for bacteria, SCC, abnormal freezing point and inhibitors; and
- the Director may, after reviewing the producer's record and reports completed by appointed field persons, impose further requirements.

iv) Bacteria

- the farm must be Grade A in all respects;
- current wash procedures charts for the milking system and bulk tank are to be posted;
- written verification from a milking equipment dealer or qualified specialist that the wash systems have proper mechanical function and that the water quantity, water temperatures and chemical concentrations are properly set is to be provided;
- a sample of water that is used to clean milk equipment must contain zero E-Coli;
- written verification from the producer that all wash cycles are run, including the sanitize cycle;
- one bulk tank milk test result representing a normal milk pickup must meet the regulatory requirements for bacteria, SCC, abnormal freezing point and inhibitors; and
- the Director may also impose further requirements such as regular inspections and annual or semi-annual milking equipment evaluation by an equipment dealer or qualified specialist.

v) Somatic Cell Count

- the farm must be Grade A in all respects;
- a copy of the herd culture and written veterinarian's recommendations on milking management, culling and treatment is to be provided and implementation verified;
- verification of enrollment on an individual-cow SCC testing program that provides at least 10 supervised SCC herd tests per year;
- provide a copy of a report completed by a milking equipment dealer confirming that the milking system is operating properly with respect to milking and any concerns have been corrected;
- a sample of water that is used to clean milk equipment must contain zero E-Coli;
- a sample from each of two consecutive bulk tank tests, representing two normal pickups, must be below 500,000 somatic cells per mL (this will change to 400,000 somatic cells per mL effective August 1, 2012) and must also meet the regulatory requirements for abnormal freezing point and inhibitors and one of the two consecutive samples must be tested for bacteria and contain less than 122,000 IBC per mL; and
- the Director could impose further requirements such as enrollment in a herd health program or annual herd cultures.

c) Hearings with the Director of Regulatory Compliance

Hearings are held at the DFO head office in Mississauga, Ontario, on a date that is mutually convenient for the producer and the Director of Regulatory Compliance.

Following the Hearing, the Director will establish the conditions for reinstatement.

The Director may also hold a Hearing for producers who repeatedly or chronically do not meet regulatory standards and/or may ask the Board to hold a Hearing. The Board has the authority to decide if, or under what conditions, the producer could continue to be licensed to produce milk and/or hold quota.

4. Producer Appeals of Decisions

Decisions of the Director of Regulatory Compliance are appealable in writing to the Agriculture, Food and Rural Affairs Appeal Tribunal (AFRAAT) located at One Stone Road West, Fifth Floor, Guelph, Ontario N1G 4Y2.

Appendix A: DFO Farm Inspection Report



DAIRY FARMERS OF ONTARIO

Farm Inspection Report

Name on Licence _____		Licence # _____								
N/A = Not Applicable A = Acceptable NI = Needs Improvement U = Unacceptable										
A	EXTERNAL	N/A	A	NI	U		N/A	A	NI	U
1	General appearance					58	Pipeline slope			
2	Farm yard & lane					59	Pipeline attachment			
3	Building maintenance					60	Inlet position			
4	Loading area					61	Plate heat exchanger			
5	Hose port					62	Vacuum regulator screens			
6	Truck receptacle & switch					63	Dumping station lines			
B	MILKHOUSE					64	Bucket milkers			
7	Size					65	Strainer			
8	Contained-(doors, windows)					66	Milk pails			
9	Clean & tidy					F	MILKING PARLOUR			
10	Floor drainage					67	Walls & ceiling			
11	Impervious floor					68	Floors & cow platform			
12	Walls and ceiling					69	Drainage			
13	Fly control					70	Lighting			
14	Chemical storage and labeling					71	Fly control			
15	Approved chemicals					G	HOLDING AREA			
16	Viewing area					72	Floor surfaces			
17	Adequate and protected lighting					73	Fly control			
18	Adequate clearance					74	Ventilation			
19	Sink or wash vat					75	Ramps			
20	Equipment racks					76	Gates			
21	Hose and nozzle					H	COW HOUSING			
22	Hot water temperature °C					77	Number of stalls			
23	Potable water					78	Stall size/partitioning			
C	MILKHOUSE WASTE					79	Stalls clean and dry			
24	Washwater disposal					80	Alleyways			
25	Trapped drain					81	Walls and ceiling			
D	COOLING EQUIPMENT					82	Ventilation/air quality			
26	Dust cap					83	Lighting			
27	Bulk tank port lighting					84	Box stalls			
28	Exterior surfaces					85	Calf pens			
29	Interior surfaces					86	Absence of other species			
30	Current wash procedures chart					87	Fly control			
31	Interval timer					88	Rodent control			
32	Cooling indicator light					89	Drinking water			
33	Sampling procedure					90	Feed bunks/mangers			
34	Tank thermometer/recording thermometer					I	BARN YARD			
35	Cooling & storage temper °C					91	Surface			
36	Tank size					92	Drainage			
37	Tank rad					93	Cow exercise yard scraped and clean			
38	TTR Installed					J	MANURE STORAGE			
E	MILKING EQUIPMENT					94	Run-off control			
39	Current wash procedures chart					95	Storage capacity			
40	Cleaned immediately after use					96	Restricted cow access			
41	Sanitized before use					K	COWS			
42	Safety switch					97	Clean			
43	Inflations					98	Body score condition			
44	Jetter cups					99	Feet and legs			
45	Claw					100	Udders clean and dry			
46	Vacuum hoses					101	Udder preparation/post dip			
47	Milk hoses					L	INHIBITORS			
48	Receiver jar					102	Posted procedures			
49	Diverter plugs/valves					103	Storage			
50	Sanitary trap					104	Temporary records			
51	Gaskets					105	Permanent records			
52	Milk filtration					106	Treated animal identification			
53	Air injector screens					107	Access to an inhibitor tester			
54	Milk meters					M	PASTURE AREA			
55	Milk flow sensors					108	Surface area			
56	Pipeline surfaces - interior					109	Drinking water			
57	Pipeline surfaces - exterior									

Farm status on (mm/dd/yy): ____/____/____/ Grade A Conditional Grade A Non-Grade A Unsanitary Non Grade A

See attached form for Grade A requirements

Field Services Representative _____

Appendix B: Checklist for Troubleshooting Milk Quality Issues

a) Grade A Farm Premises

A farm classified as Grade A will have clean interior and exterior surfaces on all milking equipment, facilities that are clean and in good repair (milkhouse, milking area, and animal housing), proper biosecurity, and clean, healthy dairy animals.

Some items to check:

- Review previous farm inspection reports and ensure all noted items have been corrected and maintained;
- Visually check the interior of the bulk tank (agitator paddle, dipstick, etc.), pipeline, receiver group and milking claws for the presence of a build-up using a 2,000,000 candle light flashlight;
- Ensure that routine maintenance is performed on all milking and cooling equipment;
- Ensure that the loading area, milkhouse, parlour, stable and all animal housing areas including cow yard and out-buildings are clean and in good repair;
- Ensure that all dairy animals are clean, healthy, and properly cared for.

b) Bacteria

Elevated bacteria levels may lead to inferior product quality and food safety issues. Aim for bacteria results of less than 36,000 bacteria per mL. High bacteria levels can be caused by:

- Slow cooling or high storage temperature;
- Unclean milk contact surfaces due to inadequate washing;
- Inadequate sanitizing rinses;
- Poor udder preparation;
- Unit drops offs, and/or mastitis;
- Unclean vacuum hoses and lines;
- Unclean sample dippers.

To prevent bacterial growth:

- Ensure all milk contact surfaces are cleaned thoroughly;
- Consult with dairy equipment supplier regarding an evaluation of the farm's milk equipment and wash protocol.

c) Abnormal Freezing Point

An Abnormal Freezing Point (AFP) is an indication of abnormal milk. Several issues may affect the freezing point of milk, such as:

- An insufficient volume of milk to agitate or cool;
- An unbalanced feed ration;
- Freezing of milk during cooling;
- Inadequate pipeline slope;
- Excess water present in the milk due to either the first rinse going into the tank or water added to the bulk tank.

d) Inhibitors

Inhibitors result in the inhibition of bacterial growth caused by an added substance or residue, most of which are veterinary drug residues. Proper treatment protocols which can minimize accidental introduction of inhibitors into milk that will be offered for sale include:

- Good communication systems among those doing the milking;
- Milker training;
- Identification of treated animals;
- Accurate record keeping to prevent milk from treated cows entering the bulk tank;
- Adherence to withdrawal times;
- On-label administration;
- Careful use of medicated feeds and topical treatments;
- Inhibitor testing of purchased animals.

e) Somatic Cell Count

Somatic cells are white blood cells and epithelial cells commonly found at low levels in milk. When bacteria are present in the udder, cows produce somatic cells to combat the intramammary bacterial infection (mastitis). High levels of somatic cells in milk indicate abnormal, reduced quality milk.

High SCC levels decrease a cow's milk production and the quality and safety of cheese and other dairy products. Milk from healthy cows will have SCC results of less than 150,000 IC/mL.

To achieve this objective the following practices are recommended.

- Ensure milkers hands are clean or that they are wearing clean milking gloves.
- Follow National Mastitis Council (NMC) recommended teat preparation routines (dip/wash, strip, dry, apply and post-dip).
- Use an approved teat dip/wash and use single service paper towels or re-useable cloth towels for udder preparation. (Cloths laundered after every use.)
- Follow a dry cow treatment protocol.
- Enroll in an individual cow SCC testing program (e.g. CanWestDHI).
- Keep the milk from cows greater than 500,000 IC/mL out of the bulk tank. (Effective August 1, 2012, the standard will change to 400,000 IC/ml.)
- Milk high count cows last.
- Discuss treatment options and protocols with your veterinarian.
- Follow your veterinarian's advice on treatment and culling.
- Have your milking equipment dealer perform an annual milking equipment performance and maintenance check or more regularly if required.
- Change the inflations and milklines at intervals recommended by the manufacturers.
- Have a qualified specialist evaluate your cow environment, milking practices and milking equipment using National Mastitis Council testing protocols.
- Culture high count SCC cows.
- Perform routine cultures on cows greater than 300,000 IC/mL.
- Get complete herd cultures done once per year.

Appendix C: Accessing Milk Quality Information

a) MILKLINE

Dial 1-800-386-9109.

Follow menu options for “Language”, “Province” and “Producer Services”

Enter Licence #

Enter Password

Follow menu options for Composition and Quality Results

b) Website

Go to www.milk.org

Select “Login” and enter your Username (licence #) and password.

Select the appropriate heading from the options on the left (e.g. Daily Test Results, Historical Test Results, Monthly Test Penalties, Farm Inspection Reports, etc.)

Note:

Producers who do not know their password can contact DFO Web Support at websupport@milk.org or 905-821-8970 to have a new password supplied to them.

Appendix D: Raw Milk Quality Recognition Program

Criteria	General Certificate	Gold Certificate
Quality Penalties	None	None
Bacteria Count	Average of all tests less than or equal to 25,000.	Average of all tests less than or equal to 10,000.
Somatic Cell Count	Annual weighted average SCC less than or equal to 225,000.	Annual weighted average SCC less than or equal to 150,000.
Production	Shipments in January and December.	Shipments in January and December.
Milk Rejection	(a) Not responsible for a load rejection at a dairy plant; (b) No bulk tank rejections by an official grader (BTMG).	(a) Not responsible for a load rejection at a dairy plant; (b) No bulk tank rejections by an official grader (BTMG).
Farm Premises	Grade A at all times during the year.	Grade A at all times during the year.

Appendix E: Ontario's Raw Milk Quality Program Penalties

Quality Area	Penalty Range	Test/ Inspection Frequency	Penalties Applied if	Penalties Applied per	Penalty Levels				Shut-off Level
					1st	2nd	3rd	4th	
Bacteria	>121,000 IBC	weekly	test >121,000 in the third month of any 3-month period and at least 5 more tests >121,000 in the same 3-month period	hL on monthly shipments	\$3	\$4	\$5	\$5	4th and subsequent penalty in 12 months
SCC	>499,000 IC/mL *	all bulk tanks	weighted monthly average is >499,000 in the 4th month of any 4-month period and is >499,000 in 3 out of 4 months in the same 4-month period	hL on monthly shipments	\$3	\$4	\$5	\$5	4th and subsequent penalty in 12 months
Abnormal Freezing Point	>-0.507°C	all bulk tanks	Cryoscope result is >-0.507°C	hL on monthly shipments	\$2	\$4	\$6	\$8	4th and subsequent penalty in 12 months
Inhibitors - Bulk tanks	positive by official test	monthly	sample is positive	hL on monthly shipments	\$6	\$9	\$12	\$12	2nd and subsequent penalty in 12 months
Inhibitors - Loads	positive by official test	all loads screened	positive producer on a load that is positive	hL on monthly shipments	\$6**	\$9**	\$12**	\$12**	2nd and subsequent penalty in 12 months
Grade A	Non-Grade A	minimum of once in a 2-yr period	farm is Non-Grade A on inspection	hL on monthly shipment	\$2	\$4	\$8	\$8	4th and subsequent penalties in 12 months
Grade A	Unsanitary Non-Grade A	minimum of once in a 2-yr period	farm is Non-Grade A on inspection	n/a	n/a	n/a	n/a	n/a	immediate
<p>* Effective August 1, 2012, the SCC standard will change to 400,000 IC/mL.</p> <p>** In addition, there is no payment for shipment of milk that caused contamination. Load losses and costs are assessed to the producer who caused the contamination.</p> <p>IBC = individual bacteria count IC = individual cells</p>									

