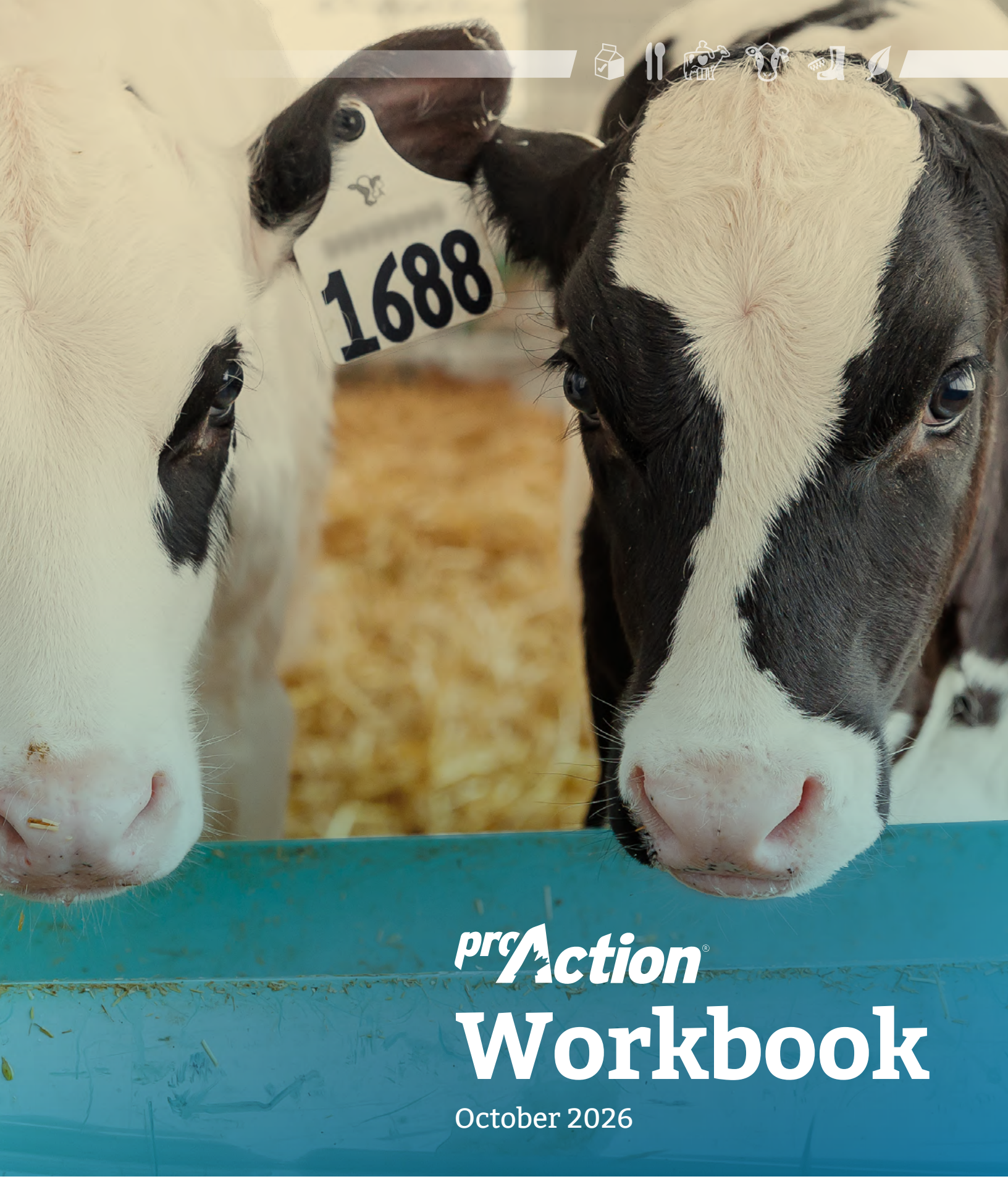

proAction® Workbook

October 2026

Sustainable Canadian Agricultural Partnership

Canada

Workbook

Table of Contents

Introduction **4**
- proAction® Overview 4
- Workbook 4
- Reference Manual 4
- Requirements 4
- Records 5
- Implementing proAction 6
- Farmer Commitment 6
- Scope 6

Farmer Self-Evaluation Questionnaire **7**
- Dairy Facilities and Pesticides 7
- Feed and Water 11
- Traceability 11
- Biosecurity and Cattle Health 13
- Medicines and Chemicals Used on Livestock 14
- Milking Management 15
- Cooling and Storage of Milk 16
- Facility and Equipment Sanitation 16
- Handling and Shipping Animals 17
- Environment 17
- Staff Training and Communication 18

Mandatory Records 19
SOP #: 20
SOP 1: Standard Operating Procedure (SOP) for Pre-Milking 21
SOP 2: Milking 21
SOP 3: Milking Cattle with Abnormal or Treated Milk 21
SOP 4: Post-Milking Cleaning 21
SOP 5: Treating Cattle 21
SOP 6: Shipping Cattle 21
SOP 7: Feeding Medicated Feed 21
Sop 8: Colostrum Feeding Management, Calf Feeding and Calf Weaning 21
SOP 9: Animal Health Practices and Branding 21
SOP 10: Down Cattle Management 21
SOP 11: Euthanasia 21
SOP 12: Vaccinating Cattle Against Specific Diseases of Concern 21
SOP 13: Introduction of New Cattle to the Herd 21
SOP 14: Returning Cattle to the Herd 21
SOP 15: Visitors and Service Providers 21
Record 1: Animal Birth Record | Tag Activation (**LT3**) 22
Record 5: Tag Replacement/Tag Lost | Cross Reference Log **(LT2)** 23
Record 6: Cattle Health Declaration **(FS14)** 24
Record 6B: Dairy Farm Biosecurity General Risk Assessment Questionnaire **(BIO1)** 25
Dairy Farm Biosecurity Incremental Management Plan 31
Record 6C: Calf Mortality Corrective Action Plan 32
Record 7: Cattle Assessment Summary Sheet **(Ac14)** 33
Record 7B: Cattle Assessment Corrective Action Plan 35
Record 8: Veterinary Directions for Extra-Label Drug Use **(FS17)** 36
Record 9: List of Medicines and Chemicals Used on Livestock **(FS15)** 37
Record 10: Animal Health and Treatment Record **(FS20)** 38
Record 11: Broken Needles **(FS18)** 39
Record 11B: Sample Letter Of Guarantee/Shipping Record **(FS27)** 40
Record 12: Bulk Tank Temperature Log **(FS28)** 41
Record 13: Milking Equipment Sanitation Record **(FS30)** 42
Record 14: Cleaning And Sanitizing Chart **(FS29)** 43
Record 14B: Sample Annual Wash System Evaluation **(FS32)** 44
Record 15: Water Record **(FS39)** 45
Record 16: Corrective Action Plans **(FS42)** 46
Record 17: Deviation and Corrective Action Record **(FS43)** 49
Environmental Questionnaire Question List (EN2) 50
1. Soil health 50
2. Greenhouse gases 51
3. Water 52
4. Biodiversity 53
5. Waste 54
6. Other 54
Environmental Questionnaire Glossary 54

Introduction

proAction® Overview

Canada's dairy farmers are recognized as world leaders in producing quality milk and meat. Both processors and customers believe this to be true and have confidence in the food we produce. The key to our ongoing and future success, however, is to maintain both processor and customer confidence in the quality and sustainability of the Canadian milk and meat that go into the food they enjoy.

proAction is Dairy Farmers of Canada's (DFC) on-farm quality assurance program that groups six key modules under one umbrella:

1. Milk Quality
2. Food Safety (Canadian Quality Milk)
3. Animal Care
4. Livestock Traceability
5. Biosecurity
6. Environment

DFC utilizes the national framework that was developed for the Canadian Quality Milk (CQM) program for proAction, which will allow Canada's dairy industry to continue its business leadership in producing quality milk and meat by integrating on-farm customer assurance programs on farmers' terms and realistic timelines.

In May 2015, DFC was pleased to receive a Letter of Recognition from the Canadian Food Inspection Agency, which officially stated that the Food Safety program (CQM program) successfully completed the recognition process under the Food Safety Recognition Program. Since this time, the program has been revised to become proAction by including additional elements pertaining to animal care, traceability, biosecurity and environment. However, please note that at the time of publication of this document, the recognition only applies to the Food Safety component of proAction.

Workbook

The Workbook is designed to outline the minimum mandatory tasks that you must do to satisfy the program's requirements. This Workbook contains a Farmer Self-Evaluation Questionnaire, which is designed to allow you to assess your current practices, and determine which requirements you need to implement or improve.

The Workbook also contains the minimum mandatory records, standard operating procedures and corrective action plans that you are required to develop and maintain for the program. **You may use the samples provided or your own versions,** provided all the same key points are recorded.

Reference Manual

The Reference Manual contains detailed information on each requirement and a full explanation on how to meet each requirement. The Reference Manual also is designed to be a useful tool for you as you develop your farm plans and train your staff (e.g., troubleshooting guides).

Requirements

The Farmer Self-Evaluation Questionnaire outlines a number of requirements that must be met for proAction. To be registered, the farm or farmer must meet the following criteria, all of which can be found in detail in the Reference Manual:

- For all components:
  - Implement the mandatory requirements.
  - Maintain the record keeping requirements. identified in this Workbook.
- For Food Safety specifically:
  - Be licensed to ship milk by the provincial regulatory authority.
  - Meet the minimum standards set out in the Dairy Regulations of your province, as well as any pertinent Federal regulations (e.g., feed regulations) related to milk and meat safety.
  - Monitor the Critical Control Points (CCPs) through the use of permanent records.
  - Implement the mandatory Best Management Practices (BMPs).
- For Traceability specifically:
  - The standards set out by the proposed amendment to Part XV (Animal identification) of the Health of Animals Regulations – Government of Canada.
  - Report required traceability details to the national traceability database.

Requirements are evaluated by a validator as:

- In conformance: meeting the intent of the requirement.
- Non-conformance: not meeting the intent of the requirement, and scored as either:
  - Major or minor non-conformance.
    - A **Major** non-conformance is a clear violation of the requirements. For example, in the Food Safety module, a Major non-conformance may have immediate food safety consequences.
    - A **Minor** non-conformance is a deficiency that requires corrective action, but may not have immediate consequences. For example, in the Food Safety module, a minor non-conformance does not have immediate food safety consequences.
  - Demerits – from 0 to 5 demerits for each demerit requirement. Zero demerits mean that you are in conformance with the requirement, while 1 to 5 demerits reflect the severity of non-conformance.

You must correct all major or minor problems within a specified time frame identified by the validator; however, you can be registered with some demerits. The demerits allow farmers to have some flexibility and promote continuous improvement. The Workbook Farmer Self-Evaluation Questionnaire identifies if a requirement is a major/minor or demerit question.

Shaded areas within both the Workbook and the Reference Manual are mandatory.

Unshaded areas within both the Workbook and the Reference Manual are recommended. Review the recommendations and select those that are applicable to your operation.

Records

Farmers must monitor and control the proAction requirements through records, reporting and BMPs. Farmers who are new to the program must have a complete set of three months of records and reporting before a validation or before applying for registration. Once registered, farmers **must keep records for a minimum of one (1) rolling year, with the exception of the Traceability records (Records 1 to 5) which must be kept for a minimum of five (5) rolling years (ten (10) years in Alberta) and the Animal Health and Treatment Record (Record 10) for a minimum of three (3) rolling years (as of April 1, 2029).** Records will be kept in the national traceability database for more than five (5) years. On-farm records must be complete and must also be easily accessible to staff at all times, including electronic records.

Routine Records and Reports

The routine records are permanent, written records where data is collected for easy recall and evaluation.

Reports are permanent, information that is collected and recorded into a national traceability database (DairyTrace or SimpliTRACE (Attestra)). The Livestock Traceability module requires farmers to report the following:

- Animal birth.
- Animal move-in (including import).
- Tag retirement (animal on-farm disposal and export).
- Tag replacement and/or tag losses (cross-reference).

Standard Operating Procedures

Standard Operating Procedures (SOPs) are documented step-by-step instructions describing how you want a particular task done. Examples of acceptable SOP methods are: written, pictorial, videoed or electronic files. **Note:** SOPs in electronic format should be backed-up. Establishing SOPs helps everyone on your farm apply procedures in a consistent manner, as well as clearly understand your expectations. Furthermore, if something goes wrong, the SOP can be re-evaluated to determine if it can be improved to prevent the problem from re-occurring and, if needed, updated.

Corrective Action Plans

Corrective Action Plans outline the steps family and staff should take to correct a problem if a problem occurs. For proAction, farmers are required to write Corrective Action Plans for some specific scenarios. The Corrective Action Plan should contain detailed instructions applicable to your operation.

Deviations and Corrective Actions

If a problem or deviation occurs at a CCP or at some BMPs in the Food Safety module, farmers are required to implement corrective actions to correct the problem and try to prevent the same problem from re-occurring. The program also requires that each deviation and chosen corrective action be documented. Many of the sample records in the Workbook have a place for deviations and corrective actions to be recorded and a separate sheet is provided as well (Record 17).

Verification

You must have your plans and records for the CCPs checked or verified to ensure that they have been put into place and are being followed on the farm. Validators will verify your plans and records during your validation.

Implementing proAction

To implement proAction, you have to meet the mandatory requirements and keep the required records. All records, SOPs and corrective action plans must be accessible to everyone working on the farm. Moreover, you must train your employees to ensure that they understand the program requirements and that they implement them in a consistent way. Employees must be supervised to ensure they are following the proAction requirements and retrained if needed.

Once you have implemented the program, an on-farm validator will assess your farm by conducting a validation (i.e., an audit) of the requirements. You are responsible for demonstrating conformance to the program requirements and to making your records available to the validator. The validator then will make a recommendation to the provincial organization as to whether or not your farm adequately meets the program's requirements. You may be required to implement corrective actions before you can be registered. Once you are registered, you will undergo regular validations to ensure you are continuing to meet the program's requirements.

Your records and reports must be maintained on a continuous basis. At least one person on the farm must be responsible for ensuring that proAction is properly maintained and updated if needed.

Farmer Commitment

As part of proAction, you, or your authorized proAction farm contact, will be required to sign a declaration stating your commitment to produce safe milk and meat and to continue to maintain the proAction requirements. The declaration will ask you to declare that you understand the information listed in it and declare that you follow it. The declaration will contain information similar to:

- **ALL** of the mandatory requirements defined in the proAction Reference Manual have been addressed.
- For an initial validation, a minimum of 3 months of records are available.
- Registration may be withdrawn for cause by DFC or the Provincial Delivery Agent.
- The authorized farm contact may voluntarily terminate Registration without cause.
- The farm's Registration status will not be made publicly available by DFC without authorization from the farm.
- The proAction Reference Manual will be revised and re-issued regularly.
- Registration carries the responsibility for the authorized farm contact to:
  1. Maintain the on-farm program in conformance with the proAction Reference Manual.
  2. Accept regular validations and submit self-declarations and respond to the findings.
  3. Inform the Provincial Delivery Agent of ownership or management changes on the farm.
  4. Respect the restrictions related to the use and control of the proAction certificate.

Scope

The scope of the proAction program includes all dairy cattle (lactating and dry cattle, dairy beef and cull cattle, bulls, replacement cattle, young stock and calves), and raw dairy cattle milk. Some dairy farms also have beef or veal cattle on the farm. These animals can be excluded from the scope of proAction registration, as those industries have their own on-farm quality assurance programs, but only under certain conditions.

As a guideline, once a dairy calf is weaned and it has been castrated and/or moved to another facility for non-dairy purposes, it becomes a beef or veal animal. Specific to traceability, farmers should use dairy-approved double tags (e.g., DairyTrace tags) for any animal that may potentially remain in the dairy industry (may ever be a milk cow or breeding bull for the dairy industry).

Some examples of cattle that are in or out of scope for proAction registration are:

- A clean-up beef bull used with the dairy herd is in scope.
- Cattle that start in the dairy herd but then move over to become a beef or veal animal are in scope until they are moved over to the other sector (e.g., leave the farm). For example, any calves (e.g., bull calves or cross-bred calves) born to the dairy herd must be fed, housed, tagged, their births recorded and reported, etc. according to proAction requirements.
- Veal/beef/dairy-beef cattle housed: a) in another barn but on the same property; or, b) in the same barn but in different pens or areas, are out of scope. In these cases, a farm may or may not operate the business separately.
- Veal/beef/dairy-beef cattle housed in the same barn and mixed in with dairy cattle (e.g., young stock): since many requirements will be evaluated for the dairy cattle anyway, these animals are in scope. In these cases, a farm may have just a few animals or many.
- Beef cattle moved back to the farm from community pasture and are housed with the dairy cattle are technically out of scope; however, farmers should consider recording and reporting their move-in activity for traceability purposes.

Farmer Self-Evaluation Questionnaire

Dairy Facilities and Pesticides

Farmer Requirements Reference Manual, Chapter 1		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Regulatory Requirements						
FS1	**Licensed dairy farm:** Is your farm currently licensed to ship milk by the provincial regulatory authority?				✓	
Pesticides and Chemicals						
FS2	Do you **only** use pesticides registered for use in the: • milk house? • barn? • fields?					✓
FS3	Do you use registered pesticides according to the label and follow pre-harvest intervals to harvest or grazing?					✓
FS4	Do you store pesticides, treated seed and fertilizer in a safe and secure manner and according to provincial dairy regulations?					✓
FS5	Is any hose connected to the milk house or barn water system used for filling pesticide sprayers or containers? ☐ Yes ☐ No If yes, do you have an anti-backflow device?					✓

Farmer Requirements Reference Manual, Chapter 1		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Cattle Facilities						
AC1	Do you ensure that ANY housing systems for unweaned calves: **a.** Is maintained in good condition to minimize injury and lameness? **b.** Allows calves to easily stand up, lie down, turn completely around, stand fully upright (without touching the top of the enclosure), adopt sternal and lateral resting postures and groom themselves? **c.** Provides a resting surface with enough bedding to achieve insulation, dryness, comfort, traction, and cleanliness? **d.** Permits calves to have visual contact with other cattle? **e.** Provides fresh air and prevents the buildup of harmful gases, dust and moisture, and reduces the risk of heat and cold stress? **f.** If group housing, provides a bedded area large enough to allow all calves to rest comfortably at the same time? Do you ensure that INDOOR housing for unweaned calves: **g.** Does not include tethering? **h.** Do you have a plan for transitioning to pair/ group housing by 2031? Do you ensure that OUTDOOR housing for unweaned calves: **i.** Allows physical contact with other calves? **j.** If tethered, allows calves to have access to an area out of the hutch and must include a collar?					✓
AC2	Do you ensure that housing for weaned heifers, including flooring: **a.** Is maintained in good condition to minimize injury and lameness? **b.** Allows heifers to easily stand up, lie down, adopt normal resting postures (including in a head back position) and groom themselves? **c.** Provides a resting surface with enough bedding to achieve insulation, dryness, comfort, traction, and cleanliness? **d.** Permits heifers to have physical contact with other cattle? **e.** Provides fresh air and prevents the buildup of harmful gases, dust and moisture, and reduces the risk of heat and cold stress? **f.** If tethered, allows heifers to rest in a head back position?					✓

Farmer Requirements Reference Manual, Chapter 1		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
AC3	Do you ensure that breeding bull housing, including flooring (if applicable to your farm): **a.** Is maintained in good condition to minimize injury and lameness? **b.** Permits bulls to easily stand up, lie down, turn around, adopt normal resting postures, groom themselves and mount safely? **c.** Provides a resting surface with enough bedding to achieve comfort, traction, and cleanliness? **d.** Provides fresh air and prevents the buildup of harmful gases, dust and moisture, and reduces the risk of heat and cold stress?					✓
AC21	Do you ensure that lactating cattle housing, including flooring: **a.** Is maintained in good condition with sufficient traction to minimize injury and lameness? **b.** Allows cattle to easily stand up, lie down, adopt normal resting postures and groom themselves? **c.** Provides a resting surface with enough bedding to achieve insulation, dryness, and comfort? **d.** Permits cattle to have visual and physical contact with other cattle? **e.** Provides fresh air and prevents the buildup of harmful gases, dust and moisture, and reduces the risk of heat and cold stress? **f.** If tethered, allows lactating cattle to rest in a head back position?					✓
AC22	Do you ensure cattle are not housed in stanchions?				✓	
AC23	Do newly built barns allow for: **a.** Lactating and/or dry cows to have daily, untethered freedom of movement and social interactions year-round? **b.** Cows to calve in an area that allows them to turn around?				✓	
AC24	Do you provide opportunity for freedom of movement for cows during the production cycle (calving to calving)?					✓

Farmer Requirements Reference Manual, Chapter 1		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
AC18	Do you ensure that dry cattle housing, including flooring: **a.** Is maintained in good condition to minimize injury and lameness? **b.** Allows cattle to easily stand up, lie down, adopt normal resting postures and groom themselves? **c.** Provides a resting surface with enough bedding to achieve insulation, dryness, comfort, traction and cleanliness? **d.** Permits cattle to have visual and physical contact with other cattle? **e.** Provides fresh air and prevents the buildup of harmful gases, dust and moisture, and reduces the risk of heat and cold stress? **f.** If tethered, allows dry cattle to rest in a head back position?					✓
AC4	Do you ensure that dry cattle and lactating cattle housing provides adequate stocking densities?					✓
AC19 (FS)	Do your animal husbandry, manure and waste management systems ensure the cleanliness of lactating cattle's udders, legs and flanks?					✓
AC5	Do you ensure that the calving area (prior to and after delivery of calf): **a.** Provides a resting surface with enough bedding to achieve insulation, dryness, comfort, traction, and cleanliness? **b.** Is separated from the lactating herd? **c.** Provides enough space for the cow to be assisted?					✓
AC6	Do you have a designated area for the segregation and treatment of sick, lame and injured cattle and does it include enough bedding to achieve insulation, dryness, comfort, traction, and cleanliness?					✓
AC7	Use of electricity for crowd gates and tie stall trainers: **a.** Do you ensure that crowd gates are not electrified? For tie-stall barns, are electric trainers: **a.** Adjustable and positioned correctly to enable normal eating, standing, and lying behaviour? **b.** Only used when needed to train or retrain individual cattle?					✓
FS7	Do you restrict cattle access to manure storage or manure run-off?					✓
FS8	At the time of milk pick-up, is the laneway and loading area free of manure contamination?					✓
FS9	If you use sewage sludge, do you have the necessary approval/permits required to use sewage sludge on your farm?					✓

Feed and Water

Farmer Requirements Reference Manual, Chapter 2		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
FS10	Do you use medicated feed? ☐ Yes ☐ No If yes: have you established and implemented a Standard Operating Procedure for feeding medicated feeds? (SOP 7)					✓
FS11	Do you receive medicated feeds with milk or meat withdrawals or that are prohibited for use in lactating cattle? ☐ Yes ☐ No If yes, are feed bins and storage containers clearly marked for those who deliver the feed and for those that use it?					✓
FS12	Do you have pet foods on your farm or feeds that are labeled not for use for ruminants (i.e., clearly labeled with the warning: Feeding this product to cattle, sheep, deer or other ruminants is illegal and is subject to fines or other punishment under the Health of Animals Act)? ☐ Yes ☐ No If yes, do you store and handle those feeds to avoid feeding those feeds to cattle or cross-contaminating feeds for cattle?				✓	
AC8	Have you established and implemented a Standard Operating Procedure for colostrum feeding management, calf feeding and calf weaning? (SOP 8)					✓
AC9	Do all cattle receive daily access to feed: **a.** In sufficient quantity that is adequate for maintaining body condition, health, vigour, promotes satiety, and is palatable? **b.** In a manner that provides adequate linear feed bunk space?					✓
AC10	Do all cattle have access to a clean and palatable water source in sufficient amounts to meet their needs?					✓

Traceability

Farmer Requirements Reference Manual, Chapter 3		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
LT1	Do you have a Premises Identification Number?				✓	

Farmer Requirements Reference Manual, Chapter 3		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
LT2	Are your dairy cattle double-tagged with approved dairy tags (DairyTrace/Attestra)? (Record 5) * Calves must be tagged within 7 days of birth or before the animal leaves the farm of origin, whichever occurs first. * Any calves born on farm and destined for purposes other than dairy production may be identified with a single RFID ear tag (approved dairy tag) except for provinces that require double-tagging.				✓	
FS13	Do you identify all cattle to allow for the maintenance of treatment records (e.g., barn tags, neck chains, etc.)?				✓	
LT4	Are you recording and reporting animal birth information to the national traceability database? * Birth information must be recorded within 7 days of the event or before the animal leaves the farm, whichever occurs first. * Birth information must be reported within 45 days of the event or before the animal leaves the farm, whichever occurs first.				✓	
LT6	For animal move-in (reception of an animal at the farm, including import): Are you reporting the information to the national traceability database? * Information must be reported within 7 days of the event or before the animal leaves the farm, whichever occurs first.				✓	
LT8	For tag retirement (on-farm animal disposal or export): Are you reporting the event information to the national traceability database? * Information must be reported within 7 days of the event.				✓	
LT9	For animal move-out (Departure of an animal from the farm, excluding on-farm animal disposal or export): Are you reporting the information to the national traceability database? * Information must be reported within 7 days of the event.					✓

Biosecurity and Cattle Health

Farmer Requirements Reference Manual, Chapter 4		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Cattle Health Management						
FS14	Do you have a Cattle Health Declaration signed by your veterinarian annually and the most recent version kept on file? (Record 6)				✓	
AC11	Have you established and implemented a Standard Operating Procedure for animal health practices (e.g., disbudding/dehorning, castration, supernumerary teat removal, hoof trimming, severe acute clinical mastitis treatment) that includes appropriate pain control where required? (SOP 9)				✓	
AC12	Do you provide prompt medical care for cattle that are sick, injured, too thin (BCS ≤2), lame, experiencing dystocia, in pain or suffering?				✓	
AC20	Have you established and implemented a Standard Operating Procedure for managing down cattle? (SOP 10)				✓	
AC13	Have you established and implemented a Standard Operating Procedure for euthanasia? (SOP 11)				✓	
AC14	Have you: **a.** Had a cattle assessment conducted by an independent assessor on your milking herd for Body Condition Score; hock, knee and neck scores; and mobility score? (Record 7) **b.** Documented and implemented an appropriate corrective action plan for results in the red zones to meet the program's timelines for continuous improvement? (Record 7b)				✓	
AC15	Do you comply with the ban on tail docking unless medically necessary?				✓	
BIO1	In the past two years, have you completed the biosecurity risk assessment with your veterinarian to identify and address biosecurity risks on your farm? (Record 6b) As part of the biosecurity risk assessment, have you: **a.** Calculated your calf mortality for female calves aged 2 to 60 days. If greater than 10%, have you completed a corrective action plan (Record 6C)? **b.** Reviewed your annual herd health records with your veterinarian?				✓	

Farmer Requirements Reference Manual, Chapter 4		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
BIO2	Do you record notable disease events for all animals and maintain that record for a minimum of 3 rolling years? (Record 10)					✓
BIO3	Have you established and implemented an SOP, in consultation with your veterinarian, for vaccinating against specific diseases of concern? (SOP 12)				✓	
Cattle Additions and Movement						
BIO4	Have you established and implemented an SOP, in consultation with your veterinarian, to prevent the introduction of infectious diseases when bringing new cattle into your facilities from other herds? (SOP 13)				✓	
BIO5	Have you established and implemented an SOP, in consultation with your veterinarian, to prevent the introduction of infectious diseases by cattle returning to your facilities from other herds, cattle shows, etc.? (SOP 14)				✓	
Personnel, Visitors, Vehicles and Equipment						
BIO6	Have you established and implemented an SOP, in consultation with your veterinarian, to prevent the introduction of infectious diseases by family, employees, farm visitors and service providers? (SOP 15)				✓	
BIO7	Do you have biosecurity signage posted on the main access point, which is visible from the main parking area?				✓	

Medicines and Chemicals Used on Livestock

Farmer Requirements Reference Manual, Chapter 5		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
FS15	Do you maintain a list of all medicines and chemicals that you use on livestock? (Record 9)				✓	
FS16	Do you store and handle livestock medicines and chemicals: **a.** (Including syringes and needles) in a clean and sanitary manner, in a dedicated place, according to label directions? **b.** In a manner that will not contaminate: milk? meat? feeds? **c.** For non-lactating and lactating dairy cattle, and products not intended for dairy cattle in separate areas or cupboards?				✓	

Farmer Requirements Reference Manual, Chapter 5		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
FS17	Do you use **only** livestock medicines (including medicated foot-baths): • Approved in Canada for use in dairy cattle? • According to the label? • According to written veterinary directions, which must be available for every treatment administered not according to the label and for every veterinary drug used that is not approved for use in Canada? (Record 8)				✓	
FS18	Do you check for and record the identity of any animal and treatment site whose treatment resulted in an irretrievable broken needle? (Record 11)				✓	
FS19	Do you mark all treated cattle in the milking herd that have milk withdrawals (e.g., leg bands)? Specify type: _____				✓	
FS20	Do you maintain a permanent written record of all medicines and chemicals used on livestock that have a milk or meat withdrawal? (Record 10)				✓	
FS21	Have you established and implemented a Standard Operating Procedure for treating cattle? (SOP 5)				✓	

Milking Management

Farmer Requirements Reference Manual, Chapter 6		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Milking Management						
FS22	Have you established and implemented a Standard Operating Procedure for pre-milking? (SOP 1)					✓
FS23	Have you established and implemented a Standard Operating Procedure for milking? (SOP 2)					✓
FS24	Do you ensure that all teats are thoroughly cleaned, sanitized and dried (e.g., manure and teat dips removed) before milking, using approved products?					✓
FS25	Have you established and implemented a Standard Operating Procedure to minimize the risk of shipping abnormal milk? (SOP 3)					✓

Farmer Requirements Reference Manual, Chapter 6		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Milking Treated Animals						
FS26	Have you established and implemented a Standard Operating Procedure to minimize the risk of shipping milk from treated cattle? (SOP 3)				✓	
FS27	Do you test milk from new animals for inhibitors before shipping their milk, not ship the milk unless the results are negative and record the results? (Record 10) Or do you have a letter of guarantee from the previous owner? (Record 11b)				✓	

Cooling and Storage of Milk

Farmer Requirements Reference Manual, Chapter 7		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
FS28	Is the bulk tank temperature recorded and checked after every milking for each bulk tank? (Record 12)				✓	

Facility and Equipment Sanitation

Farmer Requirements Reference Manual, Chapter 8		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Equipment Sanitation						
FS29	Do you use approved cleaning products according to the accessible milk house cleaning and sanitizing chart? (Record 14)				✓	
FS30	Do you regularly inspect and record the cleanliness of milking equipment for each washing system, including checking and recording the temperature of the hot water from the tap or wash water, at least monthly? (Record 13)				✓	
FS31	Have you established and implemented a Standard Operating Procedure for post-milking system cleaning? (SOP 4)				✓	
FS32	Do you have each wash system evaluated annually by an industry professional and have the deficiencies been corrected? (Record 14b)				✓	

Farmer Requirements Reference Manual, Chapter 8		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
Milk House						
FS33	Is the milk house used exclusively for cooling and storing milk and for cleaning, sanitizing and storing materials and equipment used in the production and handling of milk?				✓	
FS34	Are cleaning chemicals stored in a location and manner that will not contaminate milk?				✓	
FS35	Are the milk house and external surfaces of the milking and milk storage equipment kept clean?				✓	
FS36	Do you have a functioning safety switch or fail-safe system in place to avoid accidental entry of wash water into the tank?				✓	
FS38	Do all lights near the bulk tank opening have a protective covering or do the bulbs have a protective safety coating?				✓	
Use of Water for Cleaning Milk Contact Surfaces						
FS39	Do you: • Annually test the water used for milking equipment sanitation for the microbiological parameters determined by the provincial authority? • Ensure the water meets the microbiological parameters? • Keep or record the water test results? (Record 15)				✓	

Handling and Shipping Animals

Farmer Requirements Reference Manual, Chapter 9		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
AC16	Do you handle cattle using low-stress handling techniques without the use of electric cattle prods?					✓
FS40 (AC)	Have you established and implemented a Standard Operating Procedure for shipping cattle? (SOP 6)				✓	

Environment

Farmer Requirements Reference Manual, Chapter 10		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
EN2	Have you completed the questionnaire on soil health, greenhouse gases, water, biodiversity, and waste?				✓	
EN3	Is your milking centre wastewater managed with proper storage or a regulatory approved treatment system?					✓

Farmer Requirements Reference Manual, Chapter 10		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
EN4	Is your manure storage adequate to avoid contamination of surface and ground water and to avoid spreading manure on frozen, snow-covered or saturated ground?					✓
EN5	Do you manage nutrients on your farm to make optimal use of manure and/or fertilizer on land?					✓

Staff Training and Communication

Farmer Requirements Reference Manual, Chapter 11		Yes	No	N/A	Validation Info	
					Major/ Minor	Demerits
FS41 (AC, LT, BIO, EN)	Do you ensure personnel have the competencies to carry out the procedures that they are responsible for in the following ways? Do you: • Regularly train staff to implement all modules of the proAction program that relate to their duties? • Train new staff in the implementation of the proAction program? • Ensure staff have access to Standard Operating Procedures, corrective action plans and records that you have developed and maintained? • Regularly supervise staff to ensure that they are following the proAction requirements?					✓
FS42	Do you have a written corrective action plan on how to communicate and address: (Record 16) • Incorrect administration of medications or other chemicals to an animal (BMP)? • Entry of milk from a treated animal into the bulk milk tank (CCP)? • Improperly cooled or stored milk (CCP)? • Dirty milk contact surfaces (BMP)? • Improper water temperature (BMP)? • Milking equipment water contaminated with bacteria (BMP)? • Sale of a treated animal or an animal with a broken needle and the next buyer was not informed (CCP)?					✓
FS43	Do you keep a record of any problems that have occurred with, and the corrective actions taken regarding: • Any treatments administered to animals (Record 17)? • Inhibitor residues in milk (Record 17)? • Cooling and storage of milk (Record 12 or 17)? • Equipment sanitation and hot water/wash water temperature (Record 13 or 17)? • Water quality (Record 15 or 17)? • Shipping animals (Record 17)?				✓	

Mandatory Records

The following records must be kept in order to keep the requirements of proAction:

Standard Operating Procedures (SOPs):

SOP 1 SOP for pre-milking

SOP 2 SOP for milking

SOP 3 SOP for milking cattle with abnormal or treated milk

SOP 4 SOP for post-milking cleaning

SOP 5 SOP for treating cattle

SOP 6 SOP for shipping cattle

SOP 7 SOP for feeding medicated feed

SOP 8 SOP for colostrum management and calf feeding

SOP 9 SOP for animal health practices

SOP 10 SOP for down cattle management

SOP 11 SOP for euthanasia

SOP 12 SOP for vaccinating cattle against specific diseases of concern

SOP 13 SOP for introduction of new cattle to the herd

SOP 14 SOP for returning cattle to the herd

SOP 15 SOP for visitors and service providers

Record 1: Animal birth record | Tag activation

Record 5: Tag replacement and/or Tag loss | Cross-reference log

Record 6: Cattle health declaration

Record 6b Dairy farm biosecurity general risk assessment questionnaire

Record 6c: Calf mortality corrective action plan

Record 7: Cattle assessment summary sheet Cattle assessment record

Record 7b: Cattle assessment corrective action plan

Record 8: Veterinary directions for extra-label drug use

Record 9: List of medicines and chemicals used on livestock

Record 10: Animal health and treatment record

Record 11: Broken needles

Record 11b: Sample letter of guarantee/ shipping record

Record 12: Bulk tank temperature log

Record 13: Milking equipment sanitation record

Record 14: Cleaning and sanitizing chart

Record 14b: Sample annual wash system evaluation

Record 15: Water record or test results

Record 16: Corrective action plans

Record 17: Deviation and corrective action record

Environmental Questionnaire

The records in this Workbook have been field tested and proven to be the most popular with dairy farmers. **You may use them or you may provide your own.** If you choose to provide your own, they **must contain all the mandatory data.**

For Example: Animal Health and Treatment Records must contain:

- Animal ID#
- Treatment administered (product, dosage, mode of treatment)
- Withdrawal times (milk and meat)
- Date of treatment
- Completed withdrawals (milk and meat)
- Expiry date of product checked
- Person treating (signature)

SOP #: _____ Date written/updated _____

Purpose:

_____

Step 1 _____

_____

Step 2 _____

_____

Step 3 _____

_____

Step 4 _____

_____

Step 5 _____

_____

Step 6 _____

_____

Step 7 _____

_____

Step 8 _____

_____

Step 9 _____

_____

Step 10 _____

_____

Standard Operating Procedures (SOPs):

SOP 1: Standard Operating Procedure (SOP) for Pre-Milking

Describe the steps taken to set up your milking equipment to ensure cattle are milked with clean, properly functioning equipment. See Reference Manual Chapter 6 for details.

SOP 2: Milking

Describe the steps for milking, including equipment maintenance, to ensure animals are milked consistently. See Reference Manual Chapter 6 for details.

SOP 3: Milking Cattle with Abnormal or Treated Milk

Describe the steps taken to keep abnormal or treated milk residues out of the food supply. See Reference Manual Chapter 6 for details.

Note: If procedures are different for abnormal and treated milk, you may need 2 separate SOPs.

Note: Reference Record 16 if issues arise.

SOP 4: Post-Milking Cleaning

Describe the post-milking cleaning steps taken to ensure that milk is cooled and equipment is cleaned properly. See Reference Manual Chapter 8 for details.

Note: Reference Record 16 if issues arise.

SOP 5: Treating Cattle

Describe the steps taken when an animal is treated to prevent medicine or chemical residues in milk and meat. See Reference Manual Chapter 5 for details.

Note: Reference Record 16 if issues arise.

SOP 6: Shipping Cattle

Describe the steps taken to prevent the shipment of animals containing medicine or chemical residues, or broken needles, and to ensure humane transport. See Reference Manual Chapter 9 for details.

Note: Reference Record 16 if issues arise.

SOP 7: Feeding Medicated Feed

If you feed medicated feed, describe the steps taken to prevent residues from entering the human food supply. See Reference Manual Chapter 2 for details.

SOP 8: Colostrum Feeding Management, Calf Feeding and Calf Weaning

Describe your colostrum feeding management, calf-feeding and calf weaning program to ensure calves are fed enough to maintain their health, growth and vigour. See Reference Manual Chapter 2 for details.

SOP 9: Animal Health Practices

Describe methods used on your farm for performing animal health practices to ensure procedures are performed to minimize animal pain and distress. See Reference Manual Chapter 4 for details.

SOP 10: Down Cattle Management

Describe your farm's down cattle procedure o ensure that down cattle are properly cared for. See Reference Manual Chapter 4 for details.

SOP 11: Euthanasia

Describe your farm's method(s) to ensure that cattle are euthanized in a manner that minimizes pain and distress. See Reference Manual Chapter 4 for details.

SOP 12: Vaccinating Cattle Against Specific Diseases of Concern

Describe the steps taken to ensure the herd is vaccinated properly. See Reference Manual Chapter 4 for details.

SOP 13: Introduction of New Cattle to the Herd

Describe the steps taken to limit the risk of introducing pathogens when introducing animals into your herd. See Chapter 4 in the Reference Manual for details.

SOP 14: Returning Cattle to the Herd

Describe the steps taken to limit the risk of introducing pathogens when animals return to your herd. See Reference Manual Chapter 4 for details.

Note: If procedures are the same for new cattle and returning cattle, you may combine SOPs 13 and 14.

SOP 15: Visitors and Service Providers

Describe the steps taken to ensure staff understand the biosecurity measures required for visitors and service providers to prevent disease spread. See Reference Manual Chapter 4 for details.

Record 1: Animal Birth Record | Tag Activation (**LT3**)

			Year:
Date of Birth (Day/Month)	**Animal Identification Number 15 digits (last 9 digits must be recorded)**	**Premises Identification Number Where the Animal was Born**	**Date of Record (Day/Month)**
15/04	124 000 007 001 234	QC 321654 7	20/04

* 7 days of birth or before the animal leaves the farm of origin, whichever occurs first

Record 5: Tag Replacement/Tag Lost | Cross Reference Log **(LT2)**

			Year:
Date of Replacement (Day/Month)	**Original Animal Identification Number 15 digits (last 9 digits must be recorded)**	**New Animal Identification Number 15 digits (last 9 digits must be recorded)**	**Date of Record (Day/Month)**
15/04	840 000 123 456 789	124 000 007 001 234	20/04

* 7 days following the retagging of the animal or before the animal leaves the farm, whichever occurs first

Record 6: Cattle Health Declaration **(FS14)**

Farmer Name (Name on License): _____

License #: _____

Veterinarian Name: _____

Veterinarian Declaration:

As of this date, I have visibly observed the general health status of the cattle in this herd and found them to be healthy, or receiving satisfactory care and treatment for routine health conditions. I have verified that this farmer has in place a system for identifying treated and sick cows and for preventing milk from these cows from entering the farmer's bulk tank(s).

Veterinarian's Signature: _____

Date: _____

Notes:

The Declaration is valid for one year and must be renewed annually.

MB, ON and QC have different forms for the Declaration. Farmers should contact their provincial associations for these forms.

Guidelines for the Declaration:

The intent of the Cattle Health Declaration is to satisfy the export requirement from foreign countries to demonstrate that milk used in exported products is sourced from healthy animals. An annual herd health inspection conducted by a veterinarian is the minimum requirement.

A veterinarian should look for evidence or visible signs in the herd for a disease that is transmissible to humans by milk or that adversely affects the quality or flavor of the milk. If the milk is considered acceptable by the provincial regulatory body, the veterinarian should be able to sign the Declaration.

All Canadian farmers are required to obtain the Declaration because milk is co-mingled in Canada and milk destined for export products is not segregated.

The Cattle Health Declaration does not include animal welfare. It is specific to animal health.

Record 6B: Dairy Farm Biosecurity General Risk Assessment Questionnaire **(BIO1)**

Farm Name: _____ Assessment Date: (YYYY/MM/DD)_____

Contact Name: _____ Premises ID:_____

Mailing Address: _____

Farm address (if different from the mailing address): _____

Telephone: (_____) _____ - _____ E-mail address: _____

Please list the three diseases you are most concerned about on your farm: _____

As part of the Biosecurity Risk Assessment, the annual herd health records have been reviewed with a veterinarian for the following period:

_____ to _____.

The annual calf mortality rate, in female calves from 2 to 60 days of age, has been calculated to be _____ for the period noted above. If the mortality rate is greater than 10%, a corrective action plan must be completed (Record 6C).

	Percent of time that each practice is implemented on this farm ➔	Never or No <5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
Section 1. Cattle Health Management								
1.1	How often do you maintain no contact between unweaned calves and older cattle?	◯	◯	◯	◯	◯	◯	
1.2	How often do you maintain no contact between weaned calves/heifers and cows?	◯	◯	◯	◯	◯	◯	
1.3	How often do you maintain no contact between dry cows and lactating cows? **proAction requirement	◯	◯	◯	◯	◯	◯	
1.4	How often do you prevent calves from nursing their dams?	◯	◯	◯	◯	◯	◯	
1.5	How often do you separate calves from their dam within 30 minutes of birth?	◯	◯	◯	◯	◯	◯	

	Percent of time that each practice is implemented on this farm →	Never or No < 5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
1.6	How often are newborn calves offered at least 4 litres of colostrum (2 litres for Jerseys) within 12 hours of birth (calf's first feed given no more than 6 hours after birth)? **proAction requirement	◯	◯	◯	◯	◯	◯	
1.7	How often do you feed your calves the following type(s) of milk?							
	• Milk replacer	◯	◯	◯	◯	◯	◯	
	• Whole milk from cows (saleable)	◯	◯	◯	◯	◯	◯	
	• Non saleable milk (abnormal or with drug residues)	◯	◯	◯	◯	◯	◯	
	• Nursing cow	◯	◯	◯	◯	◯	◯	
1.8	If you feed non-saleable (abnormal or with drug residues) milk, how often do you pasteurize before feeding it to calves?	◯	◯	◯	◯	◯	◯	
1.8b	If you feed saleable milk, how often do you pasteurize before feeding it to calves?	◯	◯	◯	◯	◯	◯	
1.9	Keeping in mind the disease prevention priorities of this farm, how often are calves housed in a way that minimizes disease? If group-housed, how ofen are severely sick calves are separated from the group?	◯	◯	◯	◯	◯	◯	
1.10	How often are the established veterinarian-reviewed vaccination protocols followed on farm? **proAction requirement	◯	◯	◯	◯	◯	◯	
1.10a	Against which diseases do you vaccinate your animals?							

	Percent of time that each practice is implemented on this farm →	Never or No < 5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
1.11	Do you have established and implemented Standard Operating Procedures (SOPs) for dealing with clinical cases of infectious diseases?	◯				◯		
1.11a	Which infectious diseases do you have SOPs for?							
1.12	How often are sick or infected cattle managed/milked after those that are healthy?	◯	◯	◯	◯	◯	◯	
1.13	How often do you review, with your veterinarian, health records to monitor the occurrence of infectious diseases in your herd?	◯	◯	◯	◯	◯	◯	
1.14	How often does your veterinarian perform necropsies on cattle that die of unknown causes?	◯	◯	◯	◯	◯	◯	
1.15	How often is manure spread on fields which will be grazed, or harvested for young cattle, during the same season?	◯	◯	◯	◯	◯	◯	
1.16	How often do you follow a veterinarian-reviewed parasite control program?	◯	◯	◯	◯	◯	◯	
1.17	How often do you use a well-managed footbath to control digital dermatitis?	◯	◯	◯	◯	◯	◯	
Section 2. Cattle Additions and Movement								
2.1	Have you introduced new cattle into your herd since this risk assessment was last performed (or in the last 2 years if no prior risk assessment was performed)? If yes:	◯				◯		
2.1a	• How often do you insist on receiving health records for these cattle before introducing them into your herd?	◯	◯	◯	◯	◯	◯	
2.1b	• How often do you insist that these cattle are vaccinated before introducing them into your herd?	◯	◯	◯	◯	◯	◯	

	Percent of time that each practice is implemented on this farm ➔	Never or No < 5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
2.1c	• How often do you isolate these cattle before introducing them into your herd?	◯	◯	◯	◯	◯	◯	
2.1d	• How often do you test these cattle for specific diseases of concern?	◯	◯	◯	◯	◯	◯	
2.2	In the time since the last risk assessment (or in the last 2 years if no prior risk assessment was performed) have cattle been reintroduced after being in contact with other cattle (e.g., shows, fairs, boarding, etc.)? If yes:	◯				◯		
2.2a	• How often do you isolate these cattle before introducing them back into your herd?	◯	◯	◯	◯	◯	◯	
2.3	How often do you isolate sick cattle from their herdmates?	◯	◯	◯	◯	◯	◯	
Section 3. Premises and Sanitation Management								
3.1	Are alleyways scraped or flushed frequently to prevent manure contamination of cow feet and legs?	◯				◯		
3.2	Are cow stalls cleaned and bedded frequently to prevent manure contamination of udders of lactating and dry cows?	◯				◯		
3.3	How often do you clean and sanitize pens that have housed sick cattle between each case?	◯	◯	◯	◯	◯	◯	
3.4	Do you have a designated area for housing sick cattle? **proAction requirement	◯				◯		
3.4a	How often are sick cattle and calving cows housed separately?	◯	◯	◯	◯	◯	◯	

	Percent of time that each practice is implemented on this farm →	Never or No < 5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
3.4b	Do you have farm map that includes biosecurity zones (i.e., Controlled Access Zone (CAZ), transition points, and a Restricted Access Zone (RAZ))? The RAZ includes high-risk areas such as animal housing and manure storage. The CAZ surrounds the RAZ, separating it from the house and yard. Transition points are where the CAZ and/or RAZ can be accessed.	◯				◯		
3.5	How often do you clean and sanitize the calving pen after each use?	◯	◯	◯	◯	◯	◯	
3.5a	In the event that you do not clean and sanitize the calving pen, how often do you remove soiled and wet bedding and add new bedding between uses?	◯	◯	◯	◯	◯	◯	
3.6	How often are cows' udders, flanks and lower legs free of manure contamination at calving?	◯	◯	◯	◯	◯	◯	
3.7	How often do you clean and disinfect on-farm animal health equipment (e.g., balling gun, dehorners, hoof knives, stomach tubes, etc.) after each use?	◯	◯	◯	◯	◯	◯	
3.8	If sick or infected cows cannot be milked last, how often do you clean the milking equipment before using it on a healthy cow?	◯	◯	◯	◯	◯	◯	
3.9	How often do you use separate tools and equipment (e.g., shovels, forks, loader buckets, etc.) for feeding and cleaning?	◯	◯	◯	◯	◯	◯	
3.9a	If separate tools and equipment are not used, how often are they cleaned between uses?	◯	◯	◯	◯	◯	◯	
3.10	When artificially inseminating, how often is a new rectal sleeve used for each cow?	◯	◯	◯	◯	◯	◯	
3.10a	When doing a rectal examination, how often is a new rectal sleeve used for each cow?	◯	◯	◯	◯	◯	◯	

	Percent of time that each practice is implemented on this farm →	Never or No < 5%	Rarely 5 - 19%	Some times 20 - 59%	Almost always 60 – 94%	Always or Yes ≥ 95%	Not applic-able	Comments
3.11	When vaccinating, taking blood samples or treating animals, how often is a new needle used for each animal?	○	○	○	○	○	○	
3.12	How often are dead (or euthanized) animals and fetuses removed and disposed in a manner that prevents cattle, dogs, cats, wildlife, birds and rodents from accessing them?	○	○	○	○	○	○	
3.12a	How often are the euthanized or dead cattle and fetuses removed from the other cattle/pen as soon as possible?	○	○	○	○	○	○	
3.13	How often do you prevent animals from having fence-line contact with livestock from other farms?	○	○	○	○	○	○	
3.14	How often is stored feed protected from contamination by cattle, dogs, cats, wildlife, birds and rodents?	○	○	○	○	○	○	
Section 4. Personnel, Visitors, Vehicles and Equipment								
4.1	How often do you require all workers, visitors and farm service providers and cattle transporters to wear clean or disposable coveralls and boots on your farm? **proAction requirement	○	○	○	○	○	○	
4.2	Have you posted visible signage on the farm, posted on the main access point that is visible from the main parking area, informing all visitors about where to report, who to contact, and areas of restricted access upon arrival? **proAction requirement	○				○		
4.3	Have you established and implemented an SOP for international visitors addressing footwear and clothing?	○				○		
4.4	Do you maintain a visitor log?	○				○		
4.5	How often do you maintain current inventory records on DairyTrace?	○	○	○	○	○	○	

Dairy Farm Biosecurity Incremental Management Plan

Farm Name: _____

Owner's Name: _____ Veterinarian: _____

Date of agreement on biosecurity management plan (YYYY MM DD): ☐☐☐☐ ☐☐ ☐☐

At least ONE priority best management practice (BMP) to improve biosecurity on the farm will be agreed to for implementation within the next year by the herd owner, but there may be more. It is essential that the owner is willing and able to implement the change(s). If the owner wishes to further improve biosecurity, a maximum of three BMPs may be agreed upon. It is important to understand that the intent of this Risk Assessment and Management Plan (RAMP) is to reduce, and if possible eliminate, the introduction of infectious diseases from outside the farm and their spread within the herd.

Recommendation(s) for management changes for this assessment:

1.

2.

3.

*To be considered complete by the proAction program, all questions of the Biosecurity Incremental Management Plan must be completed and the Plan must have at least one recommendation.

Confirmation that the Risk Assessment Questionnaire has been completed together by:

_____ _____

Owner's Signature Veterinarian's Signature

Record 6C: Calf mortality corrective action plan

Farm Name	

Corrective Action Plan Details

What is/are the root cause(s) of the issue(s)?			
What corrective actions are being put in place to resolve the root cause(s) and improve the issue(s)? (i.e., what will be done?)			
When will corrective actions be implemented?			
What method(s) will be used to assess if corrective actions are effective?			
Owner's Name and Signature	Name	Signature	Date
Dairy Professional's Name and Signature (e.g. veterinarian, dairy nutrition advisor, dairy specialist)	Name	Signature	Date

All elements of the table are MANDATORY

REMINDER

If the calf mortality rate for female calves from 2 to 60 days of age exceeds 10%, a corrective action plan must be established and implemented in consultation with a veterinarian or other qualified advisor.

Record 7: Cattle Assessment Summary Sheet **(Ac14)**

Farm	Name proAction Number		Premises ID	**Barn Type: (lactating only)**	☐ Free-stall ☐ Tie-stall ☐ Bedded-pack barn ☐ Pasture ☐ Other
Assessor	Name		Assessor Signature		
Dates	Cattle Assessment		Upcoming Validation	**Milking System:**	☐ Parlour ☐ Tie-stall ☐ Automatic milking system ☐ Other
Lactating Herd	Herd Size	Sample Size	# Identified Sick/Treated		

Summary:

Animal Based Measure		Herd Distribution By Score (# of Cattle)					Cattle Scored 'A' In Herd Sample		National Targets (% Acceptable)
		'A' Acceptable			'R' Requires Corrective Action		Total (#)	Percent (%)	
Body Condition Score		BCS >2			BCS ≤ 2				≥ 95%
Hock Score		0	1		2	3			≥ 90%
Knee Score		0	1		2	3			≥ 90%
Neck Score		0	1		2				≥ 90%
Mobility Score	In-stall score	< 2 indicators			≥ 2 indicators				≥ 90%
	Gait score	1	2	'M' Monitor 3 *	4	5			

* Up to 25% of the herd may receive a score of 3 without affecting the mobility result (gait scoring only); when this threshold is exceeded, the percentage above the threshold is automatically deducted from the herd's overall mobility score. For more information, refer to Appendix II of the Reference Manual.

Comments:

Cattle Assessment Record

Farm: _____ Date: _____ Assessor: _____

	Cattle ID	BCS	Hock Score	Knee Score	Neck Score	Mobility: Gait Score	Mobility: In-stall Score Indicators				Mobility: In-stall Score	Animal Comment
							Edge	Weight Shift	Rest	Uneven Movement		
1	*Sample 415*	*A*	*A*	*A*	*R*		*A*	*R*	*A*	*R*	*R*	
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
Sub-total # "As"												

Note: Remember to transfer the results to the Cattle Assessment Summary Sheet.

Record 7B: Cattle Assessment Corrective Action Plan

Farm Name	

Corrective Action Plan Details

Assessment results in the Red / Dark Red zone	☐ Body Condition Score ☐ Hock Score ☐ Knee Score ☐ Neck Score ☐ Mobility Score		
What is/are the root cause(s) of the issue(s)?			
What corrective actions are being put in place to resolve the root cause(s) and improve the issue(s)? (e.g., what will be done and when/how often?)			
When should improvements should be noticeable? (e.g., number of days, weeks, months)			
What method(s) will be used to assess if corrective actions are effective? (e.g., what will be observed, number of animals, frequency of monitoring, etc.)			
Owner's Name and Signature	Name	Signature	Date
Dairy Professional's Name and Signature (e.g. veterinarian, dairy nutrition advisor, dairy specialist)	Name	Signature	Date

All elements of the table are MANDATORY

REMINDER

A Dark Red zone result leads to a 12-month assessment cycle. Three consecutive Dark Red zone results for the same measure will lead to loss of registration, which could happen in less than 3 years.

Record 8: Veterinary Directions for Extra-Label Drug Use **(FS17)**

Clinic: _____

Veterinarian: _____

Emergency Contact Information: _____

Client/Farm: _____

Patient ID or Indications for Use: _____

Product(s) Name: _____

DIN(s)/Registration Number(s): _____

If DIN is not available, check the appropriate box:

☐ vaccine ☐ compounded product ☐ Veterinary Health Product (#_____) ☐ other

Instructions for Use (including dosage, frequency, route, maximum volume per injection site, duration of treatment):

_____

_____

_____

Milk Withdrawal: _____ **Meat Withdrawal:** _____

Special Instructions, Precautions, Warnings, Storage, etc. (if required)
(e.g. human safety, special storage, inhibitor testing):

_____

_____

Veterinarian's Signature: _____

Date of Issue: _____

Date Directions Valid Until: _____

Note 1: all items are mandatory, unless indicated otherwise. Vets may use their own format, as long as all required items are included.

Note 2: see Chapter 5 of the Reference Manual for examples of extra-label drug use.

Record 9: List of Medicines and Chemicals Used on Livestock **(FS15)**

Product Name	Approved for use in dairy (✓)	Product label, insert or written instructions from vet kept (✓)	Stored according to label (✓)

Product Name	Approved for use in dairy (✓)	Product label, insert or written instructions from vet kept (✓)	Stored according to label (✓)

Record 10: Animal Health and Treatment Record **(FS20)**

Animal ID	Expiry Date Valid (✓)	Disease Event (such as abortion, lameness, mastitis, diarrhea, pneumonia, death)[a]	Treatment Administered (product, dosage, mode of treatment)[b]	Withdrawal Time (Hrs/days)		Date of Treatment (✓ am or pm)	Completed Withdrawal (✓am or pm)		Residue Testing (+/-)[c]	Person Treating (Signature)
				Milk	Meat		Milk	Meat		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		
						Date: ☐ am ☐ pm	Date: ☐ am ☐ pm	Date: ☐ am ☐ pm		

a: Record: abortion (i.e., loss of a calf/fetus between 45 and 270 days of gestation), lameness, mastitis, diarrhea, pneumonia, death.

b: Mode of Treatment: IM = Intramuscular (in the muscle), IMM = intramammary (in the udder), IU = intrauterine (in the uterus), IV = intravenous (in the vein), OR = oral (in the mouth), SQ = subcutaneous (under the skin), TP = topical (on the skin)

c: Residue testing only required for new animals or a letter of guarantee from the previous owner.

Record 11: Broken Needles **(FS18)**

Animal ID	Date of Broken Needle	Location	Signature	Information Passed on to Next Buyer (✓)	Signature

Note: This record must be maintained for as long as the cattle listed remain in the herd.

Record 11B: Sample Letter of Guarantee/Shipping Record **(FS27)**

Seller's Info (Name & PID, if available): _____

Buyer/Recipient's Info (Name and PID): _____

Date Shipped: _____

Animal Identification Number(s): _____

Do any of the animals listed above have pending milk or meat withdrawal times or broken needles?

☐ No ☐ Yes

If yes, fill in the following table:

Animal ID	Date of Treatment	Product	Dose (✓)		Completed Withdrawal Date		Broken Needle? If yes, describe site
			According to label	Extra label	Milk	Meat	

I, the seller, have:

☐ Owned the animal(s) being sold for at least the last two months;

OR,

☐ A letter of guarantee from the previous owner(s);

OR,

☐ Tested the milk from the animal(s) for antimicrobials using _____ test or I sent the sample(s) to _____ (plant/ laboratory), and have proof of a negative antimicrobial test result(s).

Signature of Seller: _____

Signature of Buyer/Recipient: _____

Record 12: Bulk Tank Temperature Log **(FS28)**

	First Milking	**Second and Subsequent Milkings**
Recommended Cooling Range	Within 2 hours (½ hour preferred) 1°C – 4°C (34°F – 40°F)	• Blend temperature maximum 10°C (50°F) • Within 1 hour (½ preferred) 1°C – 4°C (34°F – 40°F)
Normal Range identified for your bulk tank *after* milking		

Month:							**Year:**
Day	**Bulk Tank Temperature**						**Corrective Action (if necessary)**
	am	**initial**	**mid-day**	**initial**	**pm**	**initial**	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

Note: Electronic chart recorders or logs may be substituted for this manual method. Check with a Food Safety advisor.
This record accommodates milking 3 times a day; if you milk only 2 times a day, just use two columns.

Record 13: Milking Equipment Sanitation Record **(FS30)** **AMS # OR NAME:** _____

Date	Check Sanitation Level of Equipment (✓ Clean x Unclean)																			Corrective Action
	Bulk Tank**					Milking Equipment***														
						Hot Water/ Wash Water T°*													Signature	

Potential areas to inspect: **Bulk tank: paddle, dipstick, surface, outlet, valve and gaskets. ***Milking equipment: receiver jar, pipeline inlets, inflations, milk hoses, claws, meters, weigh jars, gaskets, filter coil, buckets, pails, sanitary trap. *Note: If you use cold-water wash detergents for your system, you do not need to record the hot water temperature.

Record 14: Cleaning And Sanitizing Chart **(FS29)**

Farm Name:_____ **Date:** _____

Number of washes done in a 24-hour period:_____

Water Analysis: hardness_____ **grains pH**_____ **iron**_____ **ppm (mg/l)**

PIPELINE/AMS: #/Name: _____	**BULK TANK**
Cycle #1: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___
Cycle #2: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___
Cycle #3: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___
Cycle #4: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___
Cycle #5: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___
Cycle #6: _____	**Purpose:** _____
Product Name: _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___	**Product Name:** _____ Volume: _____ ml oz Temperature: (Cold Warm Hot) Water volume: _____ litres gallons Minimum start temperature: _____ ˚ ___ Minimum end temperature: _____ ˚ ___

Signed by: _____ Company: _____
(Equipment dealer/Industry professional)

Record 14B: Sample Annual Wash System Evaluation (FS32)

Note: Equipment dealers or industry professionals may use this form or their own wash system evaluation form. If they use their own form, they should include the items in this sample form. The Table in Section 8.1.1 of the Reference Manual provides guidance on acceptable parameters.

Purpose: The annual wash system evaluation is one step in a series of best management practices designed to help you minimize milk safety issues. The wash system evaluation is designed to help you identify problem areas so that you can prevent problems from occurring. The sample record is a guideline. Your industry professional may customize your wash system evaluation to best suit your equipment's needs. This record should be completed for **each** AMS or wash system (e.g. two robots washed by one wash sink).

Farm Name: _____ **AMS # or Name:** _____ **Date:** _____

Evaluation Parameters	Pipeline/AMS	Bulk Tank
1. Time: circulation/cycle time for: **a.** Cycle #1: _____ **b.** Cycle #2: _____ **c.** Cycle #3: _____ **d.** Cycle #4: _____ **e.** Cycle #5: _____ **f.** Cycle #6: _____ Comments/corrections:	_____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No	_____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No _____mins Adequate? ☐ Yes ☐ No
2. Temperature: Water temperature compares with the product manufacturer requirements or the Cleaning and Sanitizing Chart for: **a.** Cycle #1: _____ **b.** Cycle #2: _____ **c.** Cycle #3: _____ **d.** Cycle #4: _____ **e.** Cycle #5: _____ **f.** Cycle #6: _____ Comments/corrections:	Temperatures are in: ☐ C or ☐ F _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No	Temperatures are in: ☐ C or ☐ F _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No _____˚ Adequate? ☐ Yes ☐ No
3. Slugging Action: Comments/corrections:	Adequate slugging action for water flow (e.g., air injector or air compressor function)? ☐ Yes ☐ No	Adequate water spray? ☐ Yes ☐ No ☐ Manual Wash
4. Chemical Concentrations:		
a. Water analysis: hardness _____ grains pH _____ iron_____ ppm (mg/l)		
b. Chemical concentrations: correct amount and dispersal (i.e., are automatic dispensers working)? Comments/corrections:	Wash: ☐ Yes ☐ No Acid: ☐ Yes ☐ No Sanitize: ☐ Yes ☐ No ☐ Manual Wash – Buckets	Wash: ☐ Yes ☐ No Acid: ☐ Yes ☐ No Sanitize: ☐ Yes ☐ No ☐ Manual Wash – Buckets

Signed by: _____ Company: _____
(Equipment dealer/Industry professional)

Record 15: Water Record **(FS39)** (or keep the test results report from the lab as your record)

Source of Supply for Washing Milking Equipment**	Date Tested	Test Results						Corrective Action
		Bacteria			Others			

** DW – Dug Well IIW – Drilled T/CW- Town/City SW – Surface Water

Record 16: Corrective Action Plans **(FS42)** (Emergency Plans)

Area of Concern	Specific Incidence	Corrective Action to be Taken	Contact Person		
			Name	Phone	Cell Phone
Medicines and Chemicals Used on Livestock	Improper administration of livestock medicines or chemicals.				
Milking Treated Animals	Milk from treated animals enters the bulk tank.				
Shipping Animals	Animal is shipped with a chemical residue (e.g., antimicrobials) or broken needle in it and the next buyer is not informed.				

Record 16: Corrective Action Plans **(FS42)** (Emergency Plans)

Area of Concern	Specific Incidence	Corrective Action to be Taken	Contact Person		
			Name	Phone	Cell Phone
Cooling and Storage of Milk	Milk is not cooled to between 1°C to 4°C within the acceptable cooling period.				
Equipment Sanitation	1. Visible milk residue build-up on milk contact surfaces.				
	2. Improper water temperature.				
Use of Water for Cleaning of Milk Contact Surfaces	Water test result reveals a form of contamination (e.g., high bacteria).				

Record 16: Corrective Action Plans **(FS42)** (Emergency Plans)

Area of Concern	Specific Incidence	Corrective Action to be Taken	Contact Person		
			Name	Phone	Cell Phone

Record 17: Deviation and Corrective Action Record **(FS43 and AC15)**

Date	Description of Problem or Deviation (i.e. what went wrong)	Description of Corrective Action Taken (i.e., how was it fixed)	Signature

Environmental Questionnaire Question List (EN2)

The Environmental Questionnaire is designed to help your farm note the positive actions you already take with respect to the environment and will provide an overview of performance on soil health, greenhouse gas mitigation, water protection, biodiversity preservation, waste management, and other environmental topics. Farm demographic questions are also included for farm benchmarking, should you choose to view your scorecard and see how your farm compares to others. The questionnaire will help identify potential areas that could further benefit your farm and mitigate any impacts on the environment. Some questions may be less applicable to your farm due to its specific location or circumstances. If this is the case, please answer to the best of your knowledge when filling out the questionnaire.

A glossary follows this list. Please note that the following list is provided for information only. You will need to complete the questionnaire online or with the assistance of a Provincial Coordinator for it to be valid. Completion of the questionnaire in this booklet will not be considered valid.

Aggregate data will be used by DFC and its members for national and provincial communications and planning efforts related to the proAction program and sustainability.

Environmental Questionnaire

FARM DEMOGRAPHICS

Barn type(s):

- ☐ Tie stall
- ☐ Free stall
- ☐ Pack barn
- ☐ Pasture access in addition to primary housing
- ☐ Other

Milking facility type(s):

- ☐ Tie stall
- ☐ Parlour
- ☐ Robot
- ☐ Robotic rotary
- ☐ Other

Milking herd size (not including dry cows):

- ☐ <40 milking cows
- ☐ 41-59 milking cows
- ☐ 60-99 milking cows
- ☐ 100-149 milking cows
- ☐ 150-299 milking cows
- ☐ 300+ milking cows

Amount of land that you own, rent, or manage related to dairy farming:

- ☐ 0 (farm does not have land for cultivation and/or grazing)
- ☐ 1-149 acres
- ☐ 150-249 acres
- ☐ 250-399 acres
- ☐ 400-599 acres
- ☐ 600-1199 acres
- ☐ 1200+ acres

1. SOIL HEALTH

1.1 The following are implemented on the farm to reduce soil compaction:
(Check all that apply)

- ☐ a) Controlled traffic patterns are used/traffic is limited to specific areas
- ☐ b) Traffic in fields is avoided when conditions are unsuitable (e.g., very wet)
- ☐ c) Frequency of traffic is limited overall
- ☐ d) Equipment that enters the fields is equipped with large-width tires, dual or triple wheels, or tracks
- ☐ e) Tractor tires are properly inflated, and the tractor is properly ballasted (balanced)
- ☐ f) Solid manure is added to fields to increase soil organic matter and improve soil structure
- ☐ g) Liquid manure is applied with a dragline (instead of with tankers)
- ☐ h) None of the above practices are implemented

1.2 The following are implemented on the farm to prevent or reduce soil erosion:
(Check all that apply)

- ☐ a) Minimum tillage is practiced consistently on most fields
- ☐ b) Grassed waterways or permanent covers are present in most areas prone to erosion
- ☐ c) Shelterbelts or tree windbreaks are present around (partially or completely) most fields
- ☐ d) Riparian zones or riparian strips are present to prevent soil loss to surface water
- ☐ e) Landscape restoration is practiced (i.e., soil is taken from hilltops to replace eroded soil)
- ☐ f) Cover crops are planted during the off-season or directly into standing long-season crops (interseeding)
- ☐ g) Cross-slope cropping or contour cropping is used
- ☐ h) Tile drainage is used

- ☐ i) Water and sediment control basins are used
- ☐ j) Drop inlets (or catch basins) are used
- ☐ k) Silage is stored and managed in a way that prevents seepage or runoff over exposed soil (e.g., storage on a concrete pad, covered in horizontal silos, vertical silos are well maintained to prevent leakage, etc.)
- ☐ l) Areas of low productivity or high salinity are treated differently (e.g., keep them in perennials, salt-tolerant crops)
- ☐ m) There is no/very little evidence of erosion on farm (examples of evidence include exposed subsoil on knolls, knolls are different colour than rest of field, inconsistent growth throughout the field, existence of rills or gullies, accumulation of soil in low areas of the field after heavy rain, dirty snow observed, springtime evidence of soil being carried to ditches, blowing soil observed during windy conditions)
- ☐ n) None of the above practices are implemented

1.3 The following are implemented on the farm to build soil carbon: (Check all that apply)

- ☐ a) Minimum tillage is practiced consistently on most fields
- ☐ b) There is a minimum of a 3-year crop rotation for most fields
- ☐ c) Deep-rooted or long-term perennials are used for at least 2 years in a row in most fields
- ☐ d) Crops are planted after harvest (e.g., cover crops), or intercropping is used
- ☐ e) Pasture areas are present (there is sufficient pasture grass for grazing, and not just an exercise yard)
- ☐ f) Rotational grazing is implemented
- ☐ g) Manure is spread at the right time and rate for crop requirements, in preference over the application of synthetic N fertilizer
- ☐ h) None of the above practices are implemented

2. GREENHOUSE GASES

2.1 The following are implemented on the farm to assess and/or reduce energy use: (Check all that apply)

- ☐ a) An energy audit/assessment has been performed in the past 5 years

  b) The farm is equipped with the following energy-efficient equipment:

  - ☐ lighting
  - ☐ ventilation (e.g., semi-permanent tarped walls, cleaned and maintained fans)
  - ☐ milk house equipment (e.g., efficient vacuum pumps, plate coolers, on-demand water heaters)
  - ☐ other farm equipment (e.g., irrigation equipment)

  c) The farm uses the following renewable energy sources:

  - ☐ solar (i.e., solar panels)
  - ☐ wind (i.e., wind turbines)
  - ☐ water (i.e., hydropower)
  - ☐ biodigester
  - ☐ other
  - ☐ the farm purchases renewable energy for use on the farm
- ☐ d) One or more pieces of farm machinery have been converted from diesel to (or replaced with) electric or renewable natural gas motors
- ☐ e) None of the above practices are implemented

2.2 The following manure management strategies are implemented on the farm to reduce greenhouse gas emissions: (Check all that apply)

- ☐ a) The manure storage is fully emptied 2+ times per year
- ☐ b) Manure is fully incorporated within 48 hours after application on cultivated lands
- ☐ c) Solid manure is composted with biomethanization (e.g., using a biodigester)
- ☐ d) Solid manure is composted without biomethanization (e.g., compost bedded pack)
- ☐ e) Solid and liquid manure are separated (e.g., with a centrifuge or a filter press)
- ☐ f) The farm only has solid manure (e.g., a bedded pack with no liquid or semi-solid/molehill manure) (move on to question 2.3)

  g) Liquid manure is managed using at least one of the following practices:

  - ☐ The liquid manure storage structure is covered with straw
  - ☐ The liquid manure storage structure is covered with a physical cover and/or flare system
  - ☐ An acidification process is applied to liquid manure
  - ☐ Liquid manure is injected below the surface on cultivated lands
- ☐ h) None of the above practices are implemented

2.3 The following fertilizer, nutrient, or other strategies are implemented on the farm to reduce greenhouse gas emissions: (Check all that apply)

- ☐ a) Methods are used to ensure the right rate, right source, and right placement of fertilizer on cultivated areas (e.g., precision agriculture technology)
- ☐ b) Organic amendments (e.g., compost, crop residues) are selected, applied, and/or incorporated into cultivated areas
- ☐ c) Enhanced efficiency fertilizers (e.g., slow-release, urease inhibitors, nitrification inhibitors) are applied on cultivated areas
- ☐ d) Nitrogen fertilizer is applied in split applications (i.e., nitrogen is applied in more than one pass to match crop uptake)
- ☐ e) Cover crops are grown to improve soil health and retain nutrients on cultivated lands
- ☐ f) The farm has participated in a research project related to greenhouse gases in the past 5 years
- g) The farm used one of the following on-farm tools in the past 2 years to estimate greenhouse gas emissions:
  - ☐ Cool Farm Tool
  - ☐ AgriClimat
  - ☐ Logiag
  - ☐ AgriSuite
  - ☐ Holos
  - ☐ CarbonOne
  - ☐ Other
- ☐ h) None of the above practices are implemented

2.4 The following are implemented on the farm to reduce enteric methane emissions: (Check all that apply)

a) The farm works with a ruminant nutritionist, veterinarian, or other industry professional with the aim of:

- ☐ achieving low milk urea nitrogen (MUN)
- ☐ targeting reduced enteric emissions (e.g., through feed additives)
- ☐ increasing feed efficiency
- ☐ improving animal health, herd longevity, cow productivity, and/or cull rate

b) The farm performs selective breeding for:

- ☐ animals with a high feed efficiency index
- ☐ animals with reduced methane emissions
- ☐ animals with improved health, longevity, and/or productivity
- ☐ c) The farm aims to feed a high-quality forage that represents more than 50% of the dairy rations
- ☐ d) None of the above practices are implemented

3. WATER

3.1 The following are implemented on the farm to reduce water usage or reuse water: (Check all that apply)

- ☐ a) Water consumption is monitored using a water meter
- ☐ b) A water pressure regulator is used
- ☐ c) Watering equipment that prevents animals from wasting water is used (e.g., automatic waterer)
- ☐ d) Watering equipment is installed in locations and at heights that prevent contamination with food or manure by animals
- ☐ e) Water pipes are maintained and leaks are fixed
- ☐ f) Rainwater is collected and used (e.g., for irrigation, to operate the manure pump)
- ☐ g) Milk cooling water is reused (e.g., as drinking water for animals, to wash the parlour)
- ☐ h) None of the above practices are implemented

3.2 The following are implemented on the farm (beneficial or detrimental*) in relation to wetlands and/or watercourses: (Check all that apply)

- ☐ a) The farm does not have wetlands and/or watercourses (move on to question 3.3)
- ☐ b) Wetlands have been restored/enhanced in the past 10 years, including those constructed to filter manure or milking centre wastewater
- ☐ c) Wetlands have been drained in the past 10 years*
- ☐ d) Access points to wetlands or watercourses are fenced off or otherwise managed to limit livestock access
- ☐ e) A vegetated area or riparian zone is present to buffer watercourses and/or wetlands
- ☐ f) None of the above practices are implemented

3.3 The following are implemented on the farm to limit the production and runoff of silage seepage/leachate from the farm's silage storage: (Check all that apply)

- ☐ a) The farm does not use or store silage (move on to Section 4)
- ☐ b) A silage seepage collection system is installed and maintained on the farm
- ☐ c) Silage storage is located away from and down slope from surface water or directed away from wells and watercourses
- ☐ d) Silo(s) are located on a concrete pad
- ☐ e) Horizontal silos are covered or have a roof
- ☐ f) Vertical silos are well-maintained and there are no cracks/leaks
- ☐ g) Feed is harvested when the moisture content is ideal to avoid the production of silage seepage
- ☐ h) None of the above practices are implemented

4. BIODIVERSITY

4.1 The following are implemented on the farm (beneficial or detrimental*) to manage or protect biodiversity: (Check all that apply)

- ☐ a) Bat boxes, cavity nest boxes or bird boxes are present
- ☐ b) Natural areas for wildlife habitat are fenced off or maintained
- ☐ c) Corridors between natural areas are present and maintained (e.g., through active cropping, fencerows, ditches, buffer strips, shelterbelts, flower strips, prairie strips)
- ☐ d) Forest or native grassland has been converted into crop production in the past 10 years*
- ☐ e) Tame pastureland has been converted into crop production in the past 10 years*
- ☐ f) Cropland has been converted to forest or grassland in the past 10 years
- ☐ g) Piles of rocks are left undisturbed in uncropped areas (e.g., shelterbelts or field edges (for reptile habitat))
- ☐ h) Dead trees are left standing (for woodpeckers and cavity-nesting birds)
- ☐ i) Actions have been changed due to the presence of a particular species in the past 2 years (e.g., delayed hay harvest until after July 15th or left area uncut after seeing endangered species (i.e., bobolink), increased buffer around a wetland because of duck nesting)
- ☐ j) Rotational grazing is used
- ☐ k) A biodiversity plan has been developed in partnership with a conservation organization in the past 10 years
- ☐ l) A conservation/stewardship agreement or Conservation Easement has been signed with a conservation organization to set aside parts of your farm for wildlife habitat in the past 10 years (Examples of conservation organizations include: Ducks Unlimited Canada (DUC), Nature Conservancy of Canada (NCC), Manitoba Habitat Heritage Corporation (MHHC), Fondation de la faune (Wildlife foundation), or other agro stewardship group, or watershed or conservation authority)
- ☐ m) None of the above practices are implemented

4.2 The following are implemented on the farm to manage pollinator habitat and health: (Check all that apply)

- ☐ a) Beehives are present (e.g., for honeybees)
- ☐ b) The use of agro-chemicals, especially pesticides, is minimized through actions such as planting prairie strips, intercropping, maintaining a diverse habitat around fields, etc.
- ☐ c) Crop seeds are not treated with neonicotinoids or are only treated when advised to by an agronomist
- ☐ d) Integrated pest management (IPM) is practiced
- ☐ e) The farm is certified organic in its crop production
- ☐ f) Pesticides are not used (move on to Section 5)
- ☐ g) Blanket pesticide applications are avoided by monitoring and identifying pests prior to treatment
- h) Spray drift when applying pesticides is limited by:
  - ☐ applying in the early morning or evening
  - ☐ applying during no/low wind speeds
  - ☐ using anti-drift nozzles
- ☐ i) Pesticide application records are maintained (e.g., the farm keeps records of pesticide name, reason, threshold, rate and area applied, weather conditions)
- ☐ j) None of the above practices are implemented

5. WASTE

5.1 The following are implemented on the farm to manage plastic farm waste from chemical containers (e.g., bulk tank sanitizers, pesticides, teat dips, etc.) and avoid burning or burying it: (Check all that apply)

a) Plastic chemical containers are:

- ☐ disposed of at landfill
- ☐ recycled
- ☐ returned using a take-back program
- ☐ reused or repurposed

☐ b) Efforts are taken to use fewer plastic containers and/or choose products/product packaging that has a lower impact on the environment (e.g., reusable, biodegradable, less plastic)

☐ c) The farm does not have access to plastic waste disposal or recycling facilities for chemical containers

☐ d) None of the above practices are implemented

5.2 The following are implemented on the farm to manage other plastic farm waste (e.g., twine, bale wrap, silage covers, feed bags, etc.) and avoid burning or burying it: (Check all that apply)

a) Plastic waste is:

- ☐ disposed of at landfill
- ☐ recycled
- ☐ returned using a take-back program
- ☐ reused or repurposed

☐ b) Efforts are taken to use fewer plastics and/or choose products/product packaging that has a lower impact on the environment (e.g., reusable, biodegradable, less plastic)

☐ c) The farm does not have access to plastic waste disposal or recycling facilities for other plastic waste

☐ d) None of the above practices are implemented

6. OTHER

6.1 The farm has completed the following in the <u>past 10 years</u>: (Check all that apply)

- ☐ a) Environmental Farm Plan (EFP)
- ☐ b) Plan D'Accompagnement Agroenvironmental (PAA)
- ☐ c) Plan D'Accompagnement Agroenvironmental-équivalent (PAA-equivalent)
- ☐ d) Agri-Environmental Risk Assessment (AERA)
- ☐ e) None of the above

Environmental Questionnaire Glossary

Ballasted or balanced – The addition of fluid to tractor tires to help counterbalance weight across all tires, to help improve traction and lower the centre of gravity for larger tires. Assists in improving productivity of tractor use in the field and potentially reducing tractor ruts when spreading manure.

Biodigester (or anaerobic digester) – A tank that digests and decomposes organic material (manure, food waste, or crop residues) using bacteria in an oxygen-free (anaerobic) environment. The process creates a renewable energy called biogas (methane and carbon dioxide) and digested organic matter that can be applied to the land as fertilizer.

Biomethanization – The process of breaking down organic matter (ie manure) through anaerobic digestion to produce biogas. The biogas is mainly composed of methane and carbon dioxide, which can be used as a renewable energy source.

Dragline – Flexible hose that is usually 6-10" in diameter used to transport manure that is pumped from manure storage to field application equipment, can vary in length and be several miles long.

Contour cropping – The agricultural practice of planting across a slope that follows a field's elevation contour lines to help reduce erosion. These contour lines create a water break to help reduce the formation of rills and gullies during times of heavy water run-off.

Cool Farm Tool – A free online tool to assess greenhouse gas emissions, biodiversity management, and water management on individual farms. It is intended to help farmers choose management options that improve their environmental performance, and to track and measure improvement over time. Website: https://coolfarmtool.org/

Enteric emissions – Discharge of gas produced by a digestive process of microorganisms when feed is digested in the rumen of cattle. It is one source of greenhouse gas emissions from agricultural production and may be further managed by adjusting feed, ionophores and other practices.

Greenhouse gas (GHG) – Gas that absorbs and emits radiant energy. The primary GHGs in the earth's atmosphere are water vapour (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). It is estimated that agriculture contributes 8.4% of all greenhouse gas emissions in Canada.

Grassed waterway – A shaped or graded channel established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet, to help protect soil and riparian areas from erosion in higher water conditions. Can be natural and/or man-made with grass and other vegetation, and assists diverting water to a desirable location.

Holos – A free downloadable software tool developed by Agriculture and Agri-Food Canada to estimate and provide suggestions to reduce greenhouse gas emissions on individual farms. Users can select scenarios and farm management practices that best describe their operation and then adjust these practices to see the effect on emissions. Examples of these adjustments include changing livestock feed, reducing tillage, or including perennial forages in rotation.

Integrated Pest Management (IPM) – A decision-making process for managing pests in an effective, economical and environmentally sound way. It involves planning and managing agricultural production systems to prevent insects, plant diseases and weeds from becoming pests through prevention, monitoring and control. Controls can be biological, physical, behavioural or chemical.

Intercropping – An agricultural practice where two or more crops are grown together in the same field, used as a mechanism by which the functional diversity of an agroecosystem can be increased.

Minimum tillage (minimum till) – Soil conservation method to manage post-harvest residue from crops with the goal of minimum soil disturbance. Efforts include actions that avoid turning the soil over to minimize moisture and organic matter loss in the soil. Sometimes referred to as conservation tillage.

Natural area – A geographical area that has developed through natural growth without intervention from humans. Examples include native prairie grasslands, natural forests, or uncropped areas near wetlands.

Pollinator habitat – An area with a variety of flowering plants that provide food and nesting space for bees and other insects that carry pollen from plant to plant. This may be a natural setting, such as a prairie meadow, or a man-made area of flowering plants cultivated specifically for pollinators.

Riparian strip – A strip of land (ranging from 3 to 15 metres wide) between water and land environments that provides wildlife habitat, streambank stability, or a corridor for wildlife. It is adjacent to a permanent or temporary waterbody and helps recharge groundwater or enhance nutrient uptake. This area can include trees, grasses, shrubs and other enhancements to help stabilize soil or improve biodiversity.

Riparian zone – A transition zone between water and land environments along creeks, streams, gullies, rivers and wetlands. Healthy riparian areas may have any combination of trees, shrubs, and/or grasses depending on the local conditions. The term is derived from the Latin word ripa, which means riverbank.

Rotational grazing – Shifting of livestock to different units of pasture or grasslands in a sequence to enhance the recovery and growth of plants after grazing. The sequence considers livestock density, ground cover, forage utilization, and the time needed for plants to rest and re-grow before being grazed again. It can improve use efficiency of grazing land by ruminants.

Tile drainage – Use of tiles under agriculture land surfaces as a type of drainage system to remove excess water from soil below its surface. The use of tiles increases the amount of air in pores of the soil to augment conditions for optimal growth of crops.

Watercourse – A natural or artificial channel through which water flows, including the movement of water in rivers, creeks, and other streams which naturally pass over the surface of the land.

Water and sediment control basin – A basin that collects or stores runoff water and traps sediment, reducing erosion and preventing gully formation. It is usually placed at the lower end of slopes. Once the water is collected, it sits in the basin, allowing time for the particles, soil and nutrients to settle and separate from the water. Water is then slowly released through a tile intake and/or through soil infiltration, and sediment is periodically removed.

Wetland – A biologically diverse ecosystem permanently or seasonally flooded by water. Wetlands are areas where oxygen-free processes prevail and are characteristically comprised of aquatic plants that are adapted to the unique hydric soil. Wetlands help to purify water, process nutrients, stabilize shorelines and support plant and animal life.

DAIRY FARMERS OF CANADA

proAction

Workbook

dairyfarmersofcanada.ca/en/proaction