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#### INTRODUCTION

#### CANADIAN PORK EXCELLENCE

#### 1 CANADIAN PORK EXCELLENCE (CPE) PLATFORM

The Canadian Quality Assurance (CQA) program was launched in 1998 and is continuously updated to meet the pork markets' requirements. The CQA program has been reviewed, restructured, given a new look and a new name. The new name of the on-farm programs platform is Canadian Pork Excellence (CPE).

The Canadian Pork Excellence (CPE) is a national platform that allows registered pork producers to demonstrate compliance with food safety, animal care, and traceability requirements. The CPE registration also allows pork producers to ship their hogs to federal abattoirs.

The Canadian Pork Excellence platform has three components:

- ▶ **PigSAFE** is the food safety and biosecurity component of CPE. It contains the same food safety components that were in the CQA program, which are based on the Hazard Analysis and Critical Control Points (HACCP) Model recognized internationally. PigSAFE modules are required components of the CPE platform. The Biosecurity module is based on the National Biosecurity Standard developed by the Canadian Swine Health Board in 2011 and is a highly recommended component of the CPE platform.
- **PigCARE** is the animal care component of CPE. It is based on the 2014 Code of Practice for the Care and Handling of Pigs. The PigCARE program is a required component of the CPE Program.
- **PigTRACE** is the traceability component of CPE. PigTRACE improves emergency management and mitigates risks. In the event of a food safety issue or foreign animal disease outbreak in the pork sector, traceability gives animal health officials the tools to quickly and effectively contain and deal with the situation. PigTRACE is required under Canadian legislation.

#### 2 OBJECTIVES OF THE PigSAFE AND PigCARE PROGRAMS

This Producer Manual includes the PigSAFE and PigCARE modules of the CPE platform:

- 1. PigSAFE objectives are to:
  - a. Prevent and control hazards affecting the safety of pork and promote the production of safe food;
  - b. Meet consumers' quality and food safety needs; and
  - c. Meet and exceed local, provincial, national and international market demands.
- 2. PigCARE objectives are to:
  - a. Promote and demonstrate ethical responsibility in meeting animal care needs; and
  - b. Ensure producers say what they do, do what they say, are able to prove it, and improve it.
- 3. The PigSAFE | PigCARE Programs will encourage the hog industry including: producers, feed manufacturers, researchers, and processors, to work together to accumulate new knowledge and techniques that ensure the safety of pork products and promote positive animal welfare outcomes.

#### 3 KEY CONCEPTS FOUND IN THIS PRODUCER MANUAL

#### 3.1 HACCP BASED PROGRAM

Say what you do, do what you say, prove it and improve it!

HACCP stands for Hazard Analysis and Critical Control Points. It is a preventive approach to food safety from biological, chemical, and physical hazards in production processes that can cause the finished product to be unsafe. Quality assurance programs, based on HACCP principles, can be put in place on any type of agricultural operation. To develop a HACCP based program on-farm, the following steps must be implemented:

- a. Understand biological, chemical and physical risks that can be found on-farm.
  - i. Biological risks might include bacteria such as, *Salmonella*, introduced by rodents or birds, or *Trichinella*, passed on through the improper use of food by-products.
  - ii. Chemical risks might include those posed by antibiotics, pesticides, herbicides, moulds and toxins.
  - iii. Physical risks might include, metal objects, plastics and wood.
- b. Say what you do: develop standard operating procedures to demonstrate how to minimize or eliminate these risks.
- c. Do what you say: adequately implement the standard operating procedures developed.
- d. Prove it: use records to demonstrate that the standard operating procedures have been adequately implemented.
- e. Improve it: identify areas for enhancement.

#### 3.2 GOOD PRODUCTION PRACTICES (GPP)

Good Production Practices (GPP) are considered a prerequisite to all components of the food processing industry. In hog production, Good Production Practices are the overall conditions necessary to implement and manage the PigSAFE | PigCARE programs, both from the food safety and animal care perspectives.

The PigSAFE | PigCARE programs count 9 Good Production Practices.

#	Good Production Practices	
1	Personnel Training	
2	Barn Maintenance and Sanitation	
3	Inputs	
4	Feed and Water	
5	Pharmaceuticals and Medical Supplies	
6	Pests, Domesticated Animals and Dead Stock Removal	
7	PigCARE	
8	Biosecurity	
9	Transportation	

#### 3.3 STANDARD OPERATING PROCEDURE (SOP)

A SOP is a set of step by step instructions that help workers minimize specific hazards while completing routine operations. SOPs are designed to help minimize the level of risks associated with each Critical Control Point and Good Production Practices.

SOP templates have been developed and can be found in the PigSAFE | PigCARE Producer Manual. The templates are designed to help producers create their own SOPs to meet requirements. The templates clearly indicate the mandatory elements that must be found in the SOPs. Producers are free to add other measures or good production practices (GPP) as they apply to their respective operation.

#### 3.4 RECORDS

A Record is a form the producer must fill and keep up-to-date to demonstrate that Good Production Practices, Critical Control Points and SOPs are adequately implemented on-farm. A record can also serve as a receipt for the producer to clearly demonstrate that a task has been accomplished. It allows the producer to prove that they implement what they say they do.

#### 3.5 OUTDOOR ACCESS AND MULTIPLE SPECIES CERTIFICATES

Producers giving outdoor access to pigs or raising pigs with other species in the same barn must meet the PigSAFE|PigCARE programs requirements and also complete the certification 10.2 Outdoor Access and/or 10.3 Multiple Species.

#### 4 FOOD SAFETY CRITICAL CONTROL POINTS (CCP)

A Critical Control Point (CCP) is a step or a specific procedure in the production process where an action can be taken to manage a risk.

In order to manage a Critical Control Point (CCP), Standard Operating Procedures (SOPs) must be developed, records must be complete and kept on file and a yearly verification must be completed.

The PigSAFE program identified four Critical Control Points (CCP):

CCP#	Critical Control Point	PigSAFE Program
1	Medicated Water	4.2 – Medicated Water
2	Medicated Feed	4.4 – On-Farm Feed Mill
Σ		4.5 – Feed Distribution
3	Broken Needles	5.3 – Risk Management of Broken Needles
4	Medication Withdrawal	5.4 – Medication Withdrawal

#### 5 ANIMAL CARE CRITICAL POINTS (CP)

The development of the PigCARE program involved the identification of animal care critical points (CP) which can be measured at the farm level. Animal Care Critical Points (CP) can be divided into three categories: the vulnerability of pigs; the interaction between pigs and their environment; and the interaction between pigs and people. The critical limits for each identified Animal Care Critical Point (CP) are based on defining when the welfare of an animal may be at risk throughout its lifecycle and must involve a measurable parameter. The PigCARE program identified four Critical Points (CP):

CP#	Critical Point (CP)	PigCARE Modules
1	Feed and Water	7.2 – Management Strategies for Feed and Water
2	Sick and Injured pigs	7.6 – Care of Sick and Injured Pigs
3	Handling	7.9 – Handling Practices
4	Euthanasia	7.10 – Euthanasia

#### 6 MONITORING, DEVIATION AND VERIFICATION MEASURES

#### **6.1 MONITORING MEASURES (PROTOCOL)**

Monitoring measures determine the what, who, when, how and the documents that are required:

What: Monitoring measures apply to all requirements stated in the Producer Manual as they relate to Good Production Practices (GPP), which have a important impact on food safety, and to Critical Control Points (CCP), which have a very important impact on food safety.

#### Monitoring measures ensure that:

- a. The personnel in charge adequately perform the various tasks to meet the requirements and ensure that the product is acceptable from a food safety standpoint.
- b. The records are completed and the documents (e.g., signed feed delivery slips, letters of guarantee, laboratory results) confirm that monitoring has taken place and the product is acceptable.

**Who:** Monitoring measures (protocols) must be performed by the personnel in charge of the Good Production Practices or the Critical Control Points requirements.

When: The frequency matches that of the activity itself (according to the established frequency for each requirement or as identified on the record R-4 Monitoring Record (daily, periodically, annually).

#### How and required documents:

- a. Every Critical Control Point (CCP) SOP describes the monitoring measures for the CCP requirements.
- b. The monitoring measures linked to Good Production Practices (GPP) requirements are either described in the SOP of certain GPPs or described in Record R-4 Monitoring Record.

#### 6.2 DEVIATION MEASURES

Deviation measures determine the what, who, when, how and the documents that are required:

What: Deviation measures apply to all requirements stated in the Producer Manual as they relate to Good Production Practices (GPP), which have an important impact on food safety, and to Critical Control Points (CCP), which have a very important impact on food safety.

#### Deviation measures ensure that:

- a. The personnel make the necessary corrections to meet the requirements, ensure that the product is acceptable from a food safety standpoint and prevent the deviation from reoccurring. For example: additional personnel training.
- b. The records are completed and the documents (e.g., signed feed delivery slips, letters of guarantee, laboratory results) confirm that the deviations have been corrected and the product is acceptable.

**Who:** Deviation measures must be performed by the designated personnel of the Good Production Practices or the Critical Control Points requirements when the deviation is encountered. This person is also responsible for any follow-up regarding the deviation.

When: As soon as the deviation is noticed.

#### How and required documents:

- a. Every Critical Control Point (CCP) SOP describes the deviation measures for the CCP requirements.
- b. The deviation measures linked to Good Production Practices (GPP) requirements are described in each section of the producer manual, either;
- **>** Each SOP includes a deviation measure,
- **>** Each section of the producer manual not covered with a SOP
  - refer to this section (section 6.2) to provide more details on the different deviation measures, requirements and procedures
  - describes the action to take if a requirement is not met
  - indicates the records to complete (R-2 Incident Report)
- In all cases of deviation, R-2 Incident Report must be completed

#### **6.3 VERIFICATION MEASURES**

Verification measures determine the what, who, when, how and the documents required:

What: The verification measures were included in the CQA program and remains an important requirement of the PigSAFE | PigCARE programs, but apply only to Critical Control Points (CCPs). Verification is conducted periodically to ensure that SOPs are implemented adequately.

#### Verification measures ensure that:

- a. practices in place comply with the written SOP
- b. personnel correctly carry out the tasks
- c. records are properly completed.

Who: The verification measures can be carried out by someone other than the person responsible for the SOP and who is properly trained. This includes other staff members, other family members or consultants familiar with the written SOP.

When: The review of written SOPs must be completed yearly.

#### How and required documents:

- a. The person who conducts the verification must:
  - i. Observe the personnel responsible for the SOP performing their various tasks.
  - ii. Review records to ensure they are being completed and kept accurately.
- b. The following records must be reviewed:
  - i. R-B: Training Record
  - ii. R-P: Medication and Vaccine Usage Plan
  - iii. R-R: Rations Used On-Farm
  - iv. R-S: Feed Sequencing, Mixing and Distribution Record
  - v. R-T: Treatment Record

c. R-1 or a different Verification record including R-1 elements must be maintained and include: the date, what was verified (SOP, Record, personnel observation), the description of any problems or deviations and the signature of the verifier.

#### 7 REGISTRATION AND VALIDATION PROCESS

'Registration' is the term used for the process of validating and recognizing a site on the PigSAFE | PigCARE programs. The term validation will continue to refer to the review of SOPs, records and facilities by a program Validator. When a site has successfully completed a validation and earns its recognition by the program, that site will be referred to as a 'PigSAFE | PigCARE Registered Site'.

#### 7.1 VALIDATION CYCLE

The validation cycle of the PigSAFE | PigCARE programs is three years. To maintain a valid Registration, a Full Validation must be completed at least once every three years as shown in the table below. A site can decide to complete a Full Validation every year if desired.

Cycle	Validation Type
Year #1	Initial Validation
Year #2	Partial Validation
Year #3	Partial Validation
Year #4	Full Validation

Validation Type	Description
Implementation	The day a site starts to implement the requirements included in the PigSAFE   PigCARE programs.
Initial Validation	An Initial Validation is based on an on-site assessment of all PigSAFE   PigCARE programs' requirements to verify that they are adequately implemented.
	The site can be registered within 90 days after implementation of the PigSAFE   PigCARE programs, as long as all mandatory SOPs are completed and at least 90 days of records have been maintained.
	The Validator will also complete the Animal Based Measures (Section 7.1) according to the Validation Sampling Plan.
Full Validation	A Full Validation is based on an on-site assessment of all PigSAFE   PigCARE programs requirements to verify that they are adequately implemented.
	The Site Manager must demonstrate that required SOPs have been completed and records have been maintained for a minimum of 12 months or since the last validation.
	The Validator will also complete the Animal Based Measures (Section 7.1) according to the Validation Sampling Plan.
	During a Full Validation:
	<ul><li>i. Each site and barn is visited, and</li><li>ii. A sample of records from each barn is reviewed.</li></ul>

Validation Type	Description
Partial Validation	Partial Validation is based on an assessment of the entire written portion of the PigSAFE   PigCARE programs including a review of all the mandatory written SOPs and Records. An on-site assessment is not a requirement of a Partial Validation.  The site manager must demonstrate that mandatory records have been maintained for a minimum of 12 months or since the last validation.

#### 7.2 LEVELS OF NON-COMPLIANCE

When a requirement is not met and there is a non-compliance, a Corrective Action Request will be issued. The table below describes the three levels of non-compliance and identifies the timeline for resolution of a Corrective Action Request:

	Timeline for resolution		
Definition of levels of non-compliance	Critical Control Points	Good Production Practices	
Minor Non-Compliance	Maximum of 60 days	Maximum of 12 months	
Food Safety or Animal Care requirement that, if not met, may lead to a risk to food safety or animal welfare.  *The Minor Non-Compliance Corrective Action Request detailed Action Plan must be completed within 30 days.  The Action Plan must include the dates the corrective actions will be completed and must be approved by the Validator.			
Major Non-Compliance	Maximum of 30 days	Maximum of 60 days	
Food Safety or Animal Care requirement that, if not met, is most likely to lead to a risk to food safety or animal welfare and where safety of the product and welfare of pigs might be compromised.			
Critical Non-Compliance	Maximum of 24 hours	-	
An omission or deficiency of Food Safety requirements with proof that the product was compromised. The contaminated product has reached the slaughter establishment or the consumers.  As for Animal Care there is evidence that the pig welfare has been compromised.			

A revocation of PigSAFE | PigCARE registration will occur when a Critical Non-Compliance is not rectified within 24 hours.

#### 7.3 CORRECTIVE ACTION REQUEST (CAR)

When a non-compliance is observed, the validator will issue a Corrective Action Request (CAR) (Record R-3).

The producer has the responsibility to complete the CAR according to the Validator's request within the specified timeframe. In some cases, Minor or Major Non-Compliance can be rectified, and the proof can be sent to the Validator electronically.

When a Minor Non-Compliance Corrective Action Request is not completed within the required timeframe, it will become a Major Non-Compliance. If the Major Non-Compliance is not completed within the required timeframe, it will turn into a Critical Non-Compliance and the CAR must then be completed within 24 hours, otherwise the PigSAFE | PigCARE registration of the site will be withdrawn.

#### 7.4 PROGRAM AUDITS

A number of registered sites in each province are selected at random to be part of an audit process every year. These site audits are being conducted to ensure that validations are occurring as required by the PigSAFE | PigCARE programs and consistently across the country. This activity will allow the Canadian Pork Council to evaluate and improve the registration process.

Sites selected for the program audit process will be contacted to notify them of their selection, to arrange for the audit visit and to ensure that the auditor is aware of any necessary biosecurity requirements. The audit will be conducted by either a Provincial Coordinator or person assigned by the provincial organization. Producers may not refuse to participate in an audit.

Refusal to participate in an audit will result in the loss of PigSAFE | PigCARE registration status for the site. There will be no monetary cost to the producer, but the site manager and staff assistance will be required during the audit, similar to a validation.

#### 8 GLOSSARY OF TERMS

#### 8.1 TERMINOLOGY SPECIFIC TO THE CPE PLATFORM

Terminology	Description
Certified Trainer	The Certified Trainer is registered with the PigSAFE   PigCARE programs and recognized by the Canadian Pork Council (CPC) to teach the PigSAFE   PigCARE programs to the Site Managers and barn personnel, in a group or individual setting.
Personnel	All individuals (family members or hired help) working full or part-time.
Pig Barn	A building holding pigs. Multiple barns can be found on one PID site. Multiple stages of production can be found in one barn.
PigCARE	The animal care component based on the 2014 Code of Practice for the Care and Handling of Pigs.
Pig Owner	The owner of the animals (livestock owner), the Pig Owner can also be the Site Manager.
PigSAFE	The food safety component based on the internationally recognized HACCP Model.
Premise Identification (PID) Number	A Premises Identification Number provides a unique identifier to a parcel of land where livestock or poultry may be located. Premise identification traces animal to geographic locations.
Site	A production site with an assigned Premise Identification (PID) Number. A site can have a single or multiple barns.
Site Manager	The person in charge of the daily management and maintenance of the PigSAFE   PigCARE programs on-farm, who ensures the records are properly kept. The Site Manager must have completed the PigSAFE   PigCARE training.

#### 8.2 GENERAL TERMINOLOGY

Terminology	Description
Acceptable Level of a Food Safety Hazard	The level at which the finished product will not cause harm to the consumer when it is prepared and/or consumed according to its intended use.
Action Plan	The implementation of a set of measures, within a specified timeframe, to correct a non-compliance that has been identified when control measures demonstrated that the acceptable limits were not met, and to avoid the reoccurrence of the non-compliance.
Audit	A systematic and objective evidence gathering process where a recognized auditor examines a supplier's activities to determine whether the food safety, sanitation and program management activities and related results comply with the systems' documentation and program requirements. The evidence is evaluated to determine whether the activities are implemented effectively and are suitable to achieve objectives.
Auditor	A person authorized to check a supplier's system. In the case of the Canadian Pork Excellence Program, this is a person authorized by the provincial and Canadian organizations to verify the compliance and effectiveness of this program.

Terminology	Description
Biologic Vector	A vector is a living being capable of ensuring the active and passive biological transmission of a pathogenic agent (virus, bacteria, parasite), from one vertebrate to another vertebrate, while itself being infected.
Biosecurity	Measures put in place that reduce the risk of introduction and spread of pathogens. These measures require the adoption of attitudes and behaviors aimed at the effective management of food safety, animal life and health, plant life and health and associated environmental risks to which food-producing animals may be exposed. (See Biosecurity Module and National Biosecurity Standard for definition of terms specific to biosecurity elements).
Certification cycle	The annual period between a site's certification/re-certification audits.
Codex Alimentarius Commission	The Codex Alimentarius Commission is the international body responsible for implementing the Joint FAO/WHO Food Standards Program. Established jointly by FAO and WHO in 1962, the Program aims to protect consumer health and facilitate international food trade.
Compendium of Medicating Ingredient Brochures	The Compendium of Medicating Ingredient Brochures (CMIB) is the document that lists those medicating ingredients permitted by Canadian regulation to be added to livestock feed. This includes drug products that may only be used under a veterinarian prescription as well as products that may be used in the manufacture of livestock feed without veterinarian approval (over the counter products). This document specifies the species of livestock, the level of medication, the directions for feeding and the purpose for which each medicating ingredient may legally be used, as well as the brand of each medicating ingredient that is approved for use in Canada. In addition, it sets out the labelling requirements to ensure compliance to prescribed labelling standards (e.g. medication level, approved claim, directions for use, warnings and cautions). All medicated feed manufactured, used, or sold in Canada must be prepared in such a way as to adhere to the specifications of the Compendium of Medicating Ingredient Brochures, in order to comply with Section 14 of the Feeds Regulations.
Compromised Animal	Refers to an animal that is not fit for transport, unless it has special provisions that will not increase its suffering. Compromised animals may be transported locally with provision for care, or may be euthanized or humanely slaughtered.
Contamination	Introduction or presence of a contaminant in a feedstuff, or animal environment.
Control Measure	Any action or activity that can be used to prevent or eliminate a food safety hazard or reduce it to an adequate level.
Corrective Action (CA)	Action to eliminate the cause of a detected non-conformity or other undesirable situations identified. A corrective action includes a cause analysis to prevent recurrence.
Corrective Action Request (CAR)	Request made following the identification of any non-compliance during the audit. The site shall perform corrective action to resolve the immediate problem (correction) and undertake an analysis of the underlying cause of the nonconformity (root cause) and develop a preventive action plan to resolve the root cause and avoid any recurrence.
Creep Area	A section of the farrowing crate which is inaccessible to the sow.
Critical Control Point	A Critical Control Point (CCP) is a step or a specific procedure in the production process where an action can be taken to manage a risk in food safety.

Terminology	Description
Critical Limit	For an identified CCP (Control Critical Point), the critical limit is a criteria that distinguishes what is adequate from what is not.
Deviation	Failure to meet established critical limits for a critical control point or a requirement of a prerequisite program or process control measure.
Deviation Measure	A set of written instructions that must be carried out when a deviation occurs.
Disinfection	Application of a physical or chemical process to a surface for the purpose of destroying or suppressing the activity of pathogens.
Distress	When an animal can no longer cope with stress (environmental, biological or mental). Exhaustion or difficulty breathing would be obvious signs of distress.
Feed	Edible material(s) such as hay, grain, or other processed, semi-processed or raw food which are consumed by animals and contribute energy and/or nutrients to livestock.
Feed Ingredient	A component, part or constituent of any combinations or mixture making up a livestock feed. An ingredient may or may not provide nutritional value to the animals (e.g. food additive).
Fomites	Any non-pathogenic substance or inanimate object (e.g. shovel, earth) other than food that is capable of harbouring or mechanically transmitting pathogenic microorganisms.
Food Safety	A concept that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.
Food Safety Recall	A food recall is an action by a manufacturer, to remove unsafe food products from the market to help protect the public.
Full Outdoor Access	Facilities that allow the pigs to have direct nose to nose contact with wildlife (i.e., penning is not completely solid) and/or access to earthen ground.
Good Production Practices (GPP)	Good production practices are considered a prerequisite for any production in the food production and processing industry. In the field of pig breeding, GPPs dictate the conditions of production which are the basis of food safety and animal welfare.
HACCP Plan	A written document designed to control food safety hazards associated with specific processes and/or products within an establishment.
HACCP System	System that includes prerequisite programs, one or more HACCP plans, validation documentation of control measures having a direct impact on food safety, as well as updating and re-evaluation procedures.
Hazard	A hazard can be a biological, chemical or physical agent in a food, or a condition thereof, which may cause harm to health.
Hazard Analysis and Critical Control Points (HACCP)	A system, which identifies, evaluates and controls hazards which are significant for food safety. (Codex alimentarius -CAC / RCP 1-1969).
Health Status	Knowledge of the presence or absence of specific pathogens within a herd; usually, a "high" health status means the absence of specific pathogens, while a "low" health status corresponds to the presence of specific pathogens and the associated risk of disease.

Terminology	Description
Medicated Feed	Any feed containing medication or vaccines.
Monitoring	The act, by company personnel, of conducting a planned sequence of observations, tests or measurements to assess whether a CCP, a process control and/or a prerequisite program is under control. This includes recording the results of those observations.
Non-Ambulatory Pig	A pig that is non-ambulatory and/or non-weight bearing on the affected limb when either standing or walking. It is reluctant to walk and exhibits halted movements. It is unable to rise or to remain standing without assistance.
Partial Outdoor Access	Facilities that are not fully enclosed but have a full, solid floor that prevents the pigs from accessing earthen ground, solid penning that prevents direct nose to nose contact between the pigs and wildlife and bird netting can be considered conventional, such as natural ventilation barn.
Pest	Any mammal, bird or insect that harbour diseases which can be transmitted to livestock and which can lead to an increased risk of disease in the herd.
Preventative Measure	A corrective action resulting from an investigation to determine the root cause of a deviation. A preventative measure includes the subsequent steps required to prevent reoccurrence of the deviation.
Procedure	A set of written rules that specify the methods to carry out an activity or a process.
Protocol	Different from the procedure, a protocol is a detailed or technical instruction specific to a task. It is the "how to" of a procedure (according to ISO, a protocol relates to the know-how and the work instructions).
Regulatory Requirements	All pertinent acts, regulations and directives. An obligation that is specified by an authority which gets its mandate from a legislative body.
Risk	An estimate of the likely occurrence of a hazard and the severity of possible adverse health effects.
Sanitize	A physical or chemical treatment to adequately treat surfaces by a process that is effective in destroying undesirable microorganisms.
Standard	Criteria or specifications that can be judged or evaluated and that defines the limit of acceptability associated with prerequisite programs and process controls.
Standard Operating Procedure (SOP)	A SOP is a set of step by step instructions that help workers minimize specific hazards while completing routine operations. SOPs are designed to help minimize the level of risks associated with each Critical Control Point and Good Production Practices.
Task	Operational activities that are carried out by designated employees to prevent a food safety hazard. For example, the equipment maintenance program describes the tasks to be performed by the maintenance staff at a predetermined frequency.
Validation (System Verification)	Obtaining evidence that a control measure, if properly implemented, is capable of controlling the hazard to a specified outcome.
Validator	Licensed veterinarian or qualified agronomist who is responsible for performing site validation to determine if a site meets all CPE program requirements.

Terminology	Description
Verification	A company's use of methods, procedures, tests and other evaluations, in addition to monitoring, to determine its compliance to, and the effectiveness of its HACCP system.
Veterinary Drugs	Any substance or mixture of substances for use in the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or for use in restoring, correcting or modifying organic functions in animals, such as in milk or meat-producing animals, fowl, fish or bees.
Veterinary Health Product	Products used to maintain or promote the health and welfare of companion or food- producing animals. They are not used to treat, prevent or cure disease. They contain ingredients such as: vitamins, minerals and traditional medicine.
Withdrawal Period	Time that must elapse after a medication treatment before an animal can be slaughtered and its meat be safe for human consumption. Withdrawal times are specific to each medication and are required to ensure pigs are safely marketed as residue free and meet transportation and other pre-slaughter requirements.
Zoonotic Disease	An infectious disease that can be transmitted from animals to humans either directly, indirectly or by a vector.

#### 8.3 ABBREVIATIONS

Abbreviations				
ABM	Animal Based Measures			
ССР	Critical Control Point			
CFIA	Canadian Food Inspection Agency			
СМІВ	Compendium of Medicating Ingredient Brochures			
СР	Critical Point			
ELDU	Extra-Label Drug Use			
HR	Highly Recommended			
MD	Mandatory			
PID number	Premises Identification Number			
PID Site	Production site with a PID number			
SOP	Standard Operating Procedure			

#### 9 PROGRAMS POLICIES

The following sections include the Vaccine and Drug Use Policy (Tab #1) as well as the Animal Welfare Policy (Tab #2). The Vaccine and Drug Use Policy reflects the pork industry's commitment to the responsible and proper use of veterinary pharmaceuticals in food animals. The Animal Welfare Policy reflects pork producers' moral and ethical commitment to provide humane treatment to animals in their care. The policies are assessed through programs requirements.

NOTES			

# VACCINE AND DRUG USE POLICY





#### **VACCINE AND DRUG USE POLICY**

#### 1 PigSAFE | PigCARE VACCINE AND DRUG USE POLICY

Updated December, 2022

The Vaccine and Drug Use Policy of the PigSAFE | PigCARE programs reflects the pork industry's commitment to the responsible and proper use of veterinary pharmaceuticals in food animals. It recognizes the importance of food safety, antimicrobial resistance and the necessity of being transparent to maintain public trust in Canada's pork producers.

Canadian pork producers are proud to raise the healthy hogs needed to produce wholesome, high-quality pork. Producers understand their role in mitigating the development of antimicrobial resistance and are committed to the responsible and prudent use of antimicrobials. Antimicrobials are a key tool in any health system. Preserving the efficacy of antimicrobials is crucial to animal health, animal welfare, food security and public health. Canadian pork producers are proud to promote a comprehensive "health for all" sustainability model: healthy people living and working with healthy animals for a healthy planet.

The Vaccine and Drug Use Policy reflects Health Canada regulations.

#### **OBJECTIVES OF THE PIGSAFE | PIGCARE VACCINE AND DRUG USE POLICY**

1. Food safety

Ensure the proper use of veterinary products to prevent drug residue in pork.

2. Antimicrobial resistance

Encourage the responsible use of antimicrobials to reduce the development of antimicrobial resistance that could pose a risk to human and animal health.

3. Antimicrobial stewardship

Demonstrate that Canadian pork producers are committed to antimicrobial stewardship and the sustainable use of antimicrobials.

#### The following products/activities may be used on PigSAFE | PigCARE registered farms:

- Medications labelled for swine in Canada, bearing a Drug Identification Number (DIN) assigned by Health Canada and in a dosage form.
  - a. When used per the directions on the label, veterinary drugs approved for sale by Health Canada are safe and effective. All approved products bear a Drug Identification Number (DIN) assigned by Health Canada and will appear in the Drug Products Database and for in-feed products also in the Compendium of Medicated Ingredients Brochure. An unapproved drug is defined as a drug that does not have a valid DIN, and whose sale has not been authorized in Canada. The use of unapproved drugs in swine presents a complex set of issues with potentially serious public health implications.
  - b. For extra-label use, the veterinarian and owner bear the full responsibility for animal and food safety.

## 2. Medications labelled for another food-producing animal in Canada, bearing a Drug Identification Number (DIN) assigned by Health Canada and in dosage form.

- a. Used under the direction and prescription of a licensed veterinarian with whom you have a valid veterinary-client-patient-relationship (VCPR) and the decision to use this medication has been properly documented in that veterinarian's medical records.
- b. For extra-label use, the veterinarian and owner bear the full responsibility for animal and food safety.
- c. When used per the directions on the label, veterinary drugs approved for sale by Health Canada are safe and effective. All approved products bear a Drug Identification Number (DIN) assigned by Health Canada and will appear in the Drug Products Database and for in-feed products also in the Compendium of Medicated Ingredients Brochure. An unapproved drug is defined as a drug that does not have a valid DIN, and whose sale has not been authorized in Canada. The use of unapproved drugs in swine presents a complex set of issues with potentially serious public health implications.

#### 3. Active Pharmaceutical Ingredients (APIs)

The PigSAFE | PigCARE programs do not support the use of Active Pharmaceutical Ingredient (API) antimicrobials unless used under specific conditions. Medications labelled for swine in Canada, bearing a DIN assigned by Health Canada, or labelled for another food-producing animal in Canada, bearing a DIN assigned by Health Canada, should be selected for use preferentially over an API. If an API is used in swine in Canada it should be under the following conditions.

- a. Health Canada regulatory changes have increased the oversight of APIs for veterinary use. To comply with these changes, the following conditions must be met:
  - i. The API must be manufactured according to good manufacturing practices (GMPs).
  - ii. Individuals who fabricate, import, package, label and tests APIs for veterinary use must hold a drug establishment license (DEL).
  - iii. Pharmacists, veterinarians or those compounding a drug under the supervision of a licensed veterinarian must hold a DEL to import medically important antimicrobials that are on List A List of Certain Antimicrobial Active Pharmaceutical Ingredients.
- b. APIs should only be used in accordance with the Therapeutic Decision Cascade for Animal and Public Safety as published by the Canadian Veterinary Medical Association.
- c. APIs should only be used in accordance with the Therapeutic Decision Cascade for Animal and Public Safety as published by the Canadian Veterinary Medical Association.
- d. APIs may only be used under the direction and prescription of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the APIs has been properly documented in that veterinarian's medical records.
- e. The PigSAFE | PigCARE programs strictly prohibit the use of Health Canada Veterinary Drug Directorate (VDD) Class 1 antimicrobials as an API.
- f. If an API drug is used in an extra-label manner, the veterinarian and owner bear the full responsibility for animal and food safety.

#### 4. Autogenous Veterinary Biologics (AVB)

- a. The PigSAFE | PigCARE programs allow for the use of Autogenous Veterinary Biologics. The authority for regulating veterinary biologics, including autogenous veterinary biologics, is provided under the *Health of Animals Act* and Regulations. The Canadian Centre for Veterinary Biologics of the Canadian Food Inspection Agency (CFIA-CCVB) is responsible for licensing and regulating veterinary biologics in Canada.
- b. AVB may only be used under the direction and prescription of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR) and the decision to use the AVB has been properly documented in that veterinarian's medical records.
- c. If an AVB drug is used in an extra-label manner the veterinarian and owner bear the full responsibility for animal and food safety.

#### 5. Veterinary Health Products (VHPs)

Veterinary Health Products labelled for swine in Canada, that have been approved and are listed by Health Canada in List C of the Food and Drugs Act and its Regulations. Veterinary Health Products are low risk drugs in dosage form. They are used to maintain or promote the health and welfare of food-producing animals. They are not for use to treat, prevent or cure disease. VHPs contain ingredients such as vitamins, minerals and traditional medicines.

#### 6. Products for Own-Use Importation (OUI)

- a. The PigSAFE | PigCARE programs allow for OUI only if the imported products have been approved and are listed by Health Canada in List B of the *Food and Drugs Act* and its Regulations. Under these rules no person can import a drug for use in food-producing animals or animals intended to be consumed as food (including horses) unless authorized by Health Canada.
- b. Criteria for adding a drug to List B
  - The drug does not require a prescription for veterinary use in Canada.
     (Drugs requiring a prescription are not eligible to be included on List B.)
  - ii. The drug is in final dosage form and within commercial packaging.
  - iii. The drug is not a medicated premix.
  - iv. The drug is not a medically important antimicrobial on List A.
  - v. The drug is approved by a recognized foreign regulator.
  - vi. The drug has established Maximum Residue Limits (MRLs) in Canada.
  - vii. There is a comparable drug approved in Canada with a Drug Identification Number (DIN).
  - viii. There are no unresolved safety issues with the drug or the comparable Canadian drug.
- c. If a drug is used in an extra-label manner, the veterinarian and owner bear the full responsibility for animal and food safety.

#### 7. Products accessed under the Emergency Drug Release (EDR) Program

- a. Health Canada's Emergency Drug Release (EDR) program is supported by the Food and Drug Regulations. Under the EDR program, Health Canada considers requests for access to drugs for veterinary use if:
  - i. the drug is unavailable for sale in Canada, and
  - ii. the request is submitted by a veterinary practitioners, for the purpose of diagnosing or treating a medical emergency in a patient (or group of animals) under their care.
- b. A drug released under the EDR program may be used only if prescribed by and used under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the EDR has been properly documented in that veterinarian's medical records.
- c. If the drug is used in an extra-label manner, the veterinarian and owner bear the full responsibility for animal and food safety.
- d. The veterinarian assumes full responsibility for the use of a non-marketed drug with respect to safety and efficacy in the intended species and drug withdrawal times relative to potential residues in food derived from treated animals.

#### 8. Products that have an Investigational New Drug (IND) Certificate

- a. These are products approved by Health Canada for use by a licensed veterinarian under an Investigational New Drug (IND) certificate.
- b. An appropriate withdrawal time must be established with Health Canada and the VDD before the drug can be used.
- c. An IND may be used only if prescribed by and used under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the IND has been properly documented in that veterinarian's medical records.
- d. If the drug is used in an extra-label manner, the veterinarian and owner bears the full responsibility for animal and food safety.

#### 9. Products that have an Experimental Study Certificate (ESC)

- a. This applies to products approved for use by a Health Canada and a licensed veterinarian under an Experimental Study Certificate (ESC).
- b. An appropriate withdrawal time must be established with Health Canada and the VDD before the drug can be used.
- c. A drug that has been issued an ESC must be prescribed by and used under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the ESC has been properly documented in that veterinarian's medical records.
- d. If the drug is used in an extra-label manner, the veterinarian and owner bear the full responsibility for animal and food safety.

The following products and activities are strictly prohibited on PigSAFE | PigCARE registered farms:

#### 1. Antimicrobials listed under Category 1 Antimicrobials: Very High Importance

- a. The PigSAFE | PigCARE programs strictly prohibit the **preventive** use of Category I antimicrobials. If Category I antimicrobials are used, it must be for **treatment** purposes only, and only if prescribed by and used under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the product has been properly documented in that veterinarian's medical records.
- b. The PigSAFE | PigCARE programs strictly prohibit the use of Health Canada (VDD) Category I antimicrobials as APIs.

#### 2. Growth Promotion

a. The PigSAFE | PigCARE programs strictly prohibit the use of medically important antimicrobials (i.e, Category I, II, III) for Growth Promotion. If medically important antimicrobials are used, it must be only for the purpose of **prevention** (Category II and III) or **treatment** (Category I, II, III) and such use must be prescribed by and under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the product has been properly documented in that veterinarian's medical records.

#### 2 PigSAFE | PigCARE EXTRA-LABEL DRUG USE (ELDU)

Extra-label drug use (also known as off-label use) is a recognized tool in the practice of veterinary medicine for animals within a valid veterinary-client-patient relationship (VCPR). It is important for producers to know which products are labelled for use in swine in Canada and the withdrawal times for each. "Extra-label" refers to a Health Canada-approved drug being used in a manner that is not in accordance with the label or the package insert. Extra-label Drug Use also includes the use of all unapproved drugs, including bulk active pharmaceutical ingredients (APIs) and compounded drugs.

# Extra-label use exists when the use of a medication differs from the label directions for any of the following parameters:

- dosage
- duration or frequency of treatment
- > purpose of treatment
- > route of administration
- > species of animal
- age or stage of production

Extra-label drug-use policies apply to prescription drugs and medications available over the counter, including but not limited to injectable, feed, water soluble and topical antimicrobials as well as other medications and vaccines.

A WITHDRAWAL TIME must be established prior to the use of any drug in an extra-label manner. To establish an adequate withdrawal period your licensed veterinarian should access the Canadian global Food Animal Residue Avoidance Database (CgFARAD) service. The CgFARAD is an educational and scientific advisory service which collects, organizes, analyzes, and shares residue avoidance information, strategies and algorithms with Canadian veterinarians and global partners.

# There are possible human health risks related to extra-label drug use in animals which must be managed. These include:

- a. The presence of drug residues in food derived from treated animals and in the environment.
- b. The development of antimicrobial resistance.

#### The PigSAFE | PigCARE programs permit the extra-label use only under the following conditions:

- a. There must be a prescription for the drug with written directions that include a recommended withdrawal time. The extra-label use must be conducted under the direction of a licensed veterinarian with whom you have a valid veterinary-client-patient relationship (VCPR). The decision to use the product in an extra-label manner has been properly documented in that veterinarian's medical records.
- b. Treatment records are maintained per the PigSAFE | PigCARE programs.

#### **Decision Cascade**

The PigSAFE | PigCARE programs recommend all medications and vaccines be used in accordance with the Therapeutic Decision Cascade for Animal and Public Safety as published by the Canadian Veterinary Medical Association.

Approved Veterinary Product for Swine, Labelled for pigs

Approved Veterinary Products for Swine, Extra-Label Drug Use (ELDU)

> Veterinary Products Approved for Canadian Food Animals Extra-Label Drug Use (ELDU)

API – Active Pharmaceutical Ingredient Compounded Product that meets Health Canada's Regulations

If a drug is used in an extra-label manner, the veterinarian and owner bear the full responsibility for animal and food safety.

# ANIMAL ELFARE POLICY

# ANIMAL WELFARE POLICY



#### ANIMAL WELFARE POLICY

#### WILFUL ACTS OF ABUSE OR NEGLECT

All barn personnel have a moral and ethical obligation to provide humane treatment to animals in their care.

# 1. WILFUL ACTS OF ABUSE, CRUELTY OR NEGLECT ARE UNACCEPTABLE AND WILL NOT BE TOLERATED.

#### Wilful acts of abuse include, but are not limited to:

- intentionally applying prods to sensitive parts of the animal such as the eyes, ears, nose, genitals or rectum.
- malicious hitting or beating of an animal. This includes forcefully striking an animal with a closed fist, a foot, handling equipment (e.g., sorting board, rattle paddle) or other hard or solid object that can cause pain, bruising or injury.
- > excessive prod use as defined in the Handling Practices section 7.9.
- driving pigs off high ledges, platforms or steps while moving, loading or unloading, causing the pigs to fall to the ground.
- dragging a conscious animal by any part of its body except in the rare case where a non-ambulatory animal must be moved from a life-threatening situation. Non-ambulatory pigs may be moved by using a drag mat.
- > purposefully dropping or throwing an animal.
- causing physical damage to the snout or tusks of a boar as a way to reduce aggression. This excludes tusk trimming.
- ailure to provide sufficient food, water or proper care, resulting in significant harm or death.

# 2. NEGLECT IS DEFINED AS INTENTIONAL FAILURE TO PROVIDE SUFFICIENT FOOD, WATER OR CARE, RESULTING IN SIGNIFICANT HARM OR DEATH TO AN ANIMAL.

If a wilful act of abuse or neglect is observed, the observer should immediately report the incident to the site manager, the production manager or a licensed veterinarian within 24 hours of the incident.

If you are unsure about what constitutes correct and humane animal care, it is your responsibility to seek assistance and guidance from the site manager, the producer or a licensed veterinarian.

#### WILFUL ACT OF ABUSE OBSERVED DURING VALIDATION

If the validators observe staff committing a wilful act of abuse during validation, this will result in a critical non-compliance and remedial action will need to be implemented as deemed appropriate by the validator. Wilful abuse and neglect are unacceptable and will not be tolerated.

NOTES			





### PigSAFE | PigCARE

#### MANDATORY PROGRAMS ELEMENTS

This section summarizes all the mandatory elements of the PigSAFE  $\mid$  PigCARE Programs. This checklist facilitate the preparation of a program validation.

Prior to your first validation make sure to prepare the following Records and Standard Operating Procedures (SOPs). For additional details see the corresponding section for each required element.

#### **MANDATORY RECORDS**

Recor	d Names	Section	Checklist
R-1	Verification Record	4.2; 4.4; 4.5; 5.3; 5.4	
R-2	Incident Report (if applicable)	4.2; 4.4; 4.5; 5.3; 5.4	
R-3	Corrective Action Request (when applicable)	Introduction element 7.3	
R-4	Monitoring Record	Modules 2, 3, 4, 5, 6, 10	
R-A R-A1	Personnel and Responsibilities List or Personnel Tasks and Training List	1.1	
R-B	Training Record	1.1	
R-C	Code of Conduct	1.1	
R-G	Swine Movement Document	3.1	
R-M	Mortality Record	6.3	
R-N	Animal-Based Measures Record (if applicable)	7.3	
R-P	Medication and Vaccine Usage Plan	5.1	
R-R R-R1	Rations Used On-Farm Record Rations Used On-Farm Record (Québec)	3.2	
R-S	Feed Sequencing, Mixing and Distribution Record	4.4	
R-T	Treatment Record	5.1	
R-W	Letter of Guarantee – Recycled Food Products and Distillers' Grains	3.3	
R-X	Calibration Record (if applicable)	4.4	

Recor	d Names	Section	Checklist
R-Y	Letter of Guarantee – Licensed Veterinarian	5.1	
R-Z	Space Allowance Record (nursery and grow/finish barns only)	7.3	

#### MANDATORY STANDARD OPERATING PROCEDURES (SOPs)

SOP No	umbers and Names	Checklist
2.2.1 2.2.2	Sanitation SOP and/or Alternative Cleaning SOP	
4.2	Medicated Water	
4.4	Feed Sequencing, Mixing and Distribution	
4.5	Feed Distribution	
5.2	Needles and Injections	
5.3	Risk Management of Broken Needles	
5.4	Medication Withdrawal	
6.1.1 6.1.2	Pest Management – With an Exterminator or Pest Management – In-House	
7.6	Care of Sick and Injured Pigs	
7.7.1	Farrowing Room	
7.7.2	Newly Weaned Pigs	
7.8	Elective Husbandry Procedures	
7.10	Euthanasia	
7.11	Emergency Plan	
9.2	Humane Transportation	

#### OTHER DOCUMENTS THAT MUST BE VERIFIED DURING THE VALIDATION

Other Documents, if applicable	Section	Checklist
Prescription(s)	3.2; 4.2; 4.4; 4.5; 5.1; 5.4; 10.2	
Feed Delivery Slips	3.2	
Written Assurance for Wood Shavings (if wood shavings are used on-farm)	3.4	
Material Safety Data Sheet (MSDS) for livestock markers and tattoo ink	3.5	
Water Test Result (if applicable)	4.1	
Sow Cards	5.1	
Cats Vaccine Certificate for rabies and invoice or certificate to confirm they are neutered or spayed	10.3	

# ? AUDIT QUESTIONS LIST

			٧	/erificatio	n				
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	NC- Critical	N/A			
MODUL	MODULE 1: PERSONNEL TRAINING								
Q1.1.1	Has the Site Manager completed the PigSAFE   PigCARE training, either online or with a certified trainer?								
Q1.1.2	Is the site manager keeping a Personnel and Responsibilities List (R-A) on file?								
	Has the Site Manager trained and maintained an up-to-date training file for each worker including:								
Q1.1.3	a. Record R-B: Training Record								
	b. Record R-C: Code of Conduct								
Q1.1.4	Has the site manager participated in continuing education at least once every three years?								
Q1.1.5	Have all personnel been trained on the Food Safety Critical Control Points (CCP) associated with their production areas?								
Q1.1.6	Have all personnel been trained on the Animal Care Critical Points (CP) associated with their production area?								
Q1.1.7	Has the Verification Record (R-1) been adequately implemented and completed in the last 12 months?								
Q1.1.8	Has the Monitoring Record (R-4) been adequately implemented and completed in the last 12 months?								
MODUL	E 2: BARN MAINTENANCE AND SANITATION								
Q2.1.1	Are the barns that are used to house pigs free of obvious deterioration that could interfere with the production of safe pork?								
Q2.1.2	Are the ventilation, heating and cooling systems maintained adequately?								
Q2.1.3	Are the housing system or other areas accessible to pigs free from any treated wood?								

			٧	Verification			
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	NC- Critical	N/A	
	<ul> <li>a. If the Sanitation SOP (SOP 2.2.1) is used, does it include:</li> <li>i. at least one cleaning measure?</li> <li>ii. at least one washing measure?</li> <li>iii. at least one disinfection measure?</li> </ul>						
Q2.2.1	If a sanitation program does not include cleaning, washing and disinfection, go to question 2.2.1b, below.						
	<ul><li>b. If the Alternative Cleaning SOP (SOP 2.2.2) is used, does it include:</li><li>i. at least one cleaning measure?</li><li>ii. at least one disinfection measure?</li></ul>						
Q2.2.2	Is the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) applied at least once every 12 months in every section of the barn(s)?						
Q2.2.3	Are feeding and feed storage areas and any areas that pigs can access (including alleyways) free from chemicals products (e.g., pesticides and disinfectants)?						
Q2.2.4	Are measures to minimize contamination of the feeding area by urine or feces in place?						
Q2.3.1	Is there adequate drainage in all areas of the barn?						
	For production units using bedding:						
Q2.3.2	a. Are the bedded pens kept dry?						
	b. Is the bedding and the manure removed at least once a year and stored away from the pigs?						
MODUL	E 3: INPUTS						
Q3.1.1	Have the Swine Movement Documents (R-G) from all incoming pigs been kept on file, and do they include all required elements?						
	Are all incoming pigs sourced from PigSAFE   PigCARE registered farms or from a farm registered with a recognized on-farm food safety program?						
Q3.1.2	Incoming pigs sources PID number(s):						
Q3.2.1	Does the Rations Used On-Farm Record (R-R or R-R1) include all PigSAFE-required elements?						

		Verification					
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	NC- Critical	N/A	
Q3.2.2	Is the Rations Used On-Farm Record (R-R or R-R1) up to date?						
02.22	<ul> <li>Do the feed medications and dosages used comply with the manufacturer's label or the veterinarian's prescription?</li> </ul>						
Q3.2.3	b. Do the feed medications withdrawal periods comply with the manufacturer's label or the veterinarian's prescription?						
Q3.2.4	Are copies of feed medication prescriptions available for all extra-label drug usage?						
Q3.2.5	Have feed delivery slips been checked and signed by designated personnel and kept on file for a minimum of 12 months or since the last validation?						
Q3.2.6	Are pigs only given feed that has not come into contact with raw meat and that contains no raw or cured meat products or by-products?						
Q3.3.1	If recycled food products and/or distillers' grains are used on-farm, has the supplier completed the Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W) and a copy is kept on file on-farm?						
Q3.3.2	If a registration number is required for a recycled food product and/or distillers' grains, has the number been included on the Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W)?						
Q3.4.1	If wood-based bedding (e.g., wood chips, sawdust) is used for pig housing, has the Site Manager received written assurance or a Letter of Guarantee - Bedding (R-H) that the bedding is free of pentachlorophenol (PCPs), chromated copper arsenate and other wood-preserving agents?						
Q3.5.1	Are livestock markers (crayon and spray) and topical wound treatments used on-farm free from these substances:  a. crystal violet  b. leucocrystal violet  c. brilliant green  d. leucomalachite green  e. malachite green						
Q3.5.2	Are the livestock tattoo inks and markers used on-farm approved for food animals?						
Q3.5.3	Are surgical staples prohibited on-farm?						

Q#	Audit Questions	Verification						
		Compliant	NC- Minor	NC- Major	NC- Critical	N/A		
MODULE 4: FEED AND WATER								
If the barn is supplied by municipal water, answer "Compliant."								
	rn is not supplied by municipal water, answer "N/A" plete questions Q4.1.2 and Q4.1.3.							
Q4.1.1	If the barn is not supplied by municipal water, was a water test performed in the last 12 months and were all required elements included?							
Q4.1.2	<ul> <li>a. Is the water test result for nitrate levels at or below 300 mg/L (300 ppm) or, if the test result exceeds this limit, has an action plan been established?</li> </ul>							
	b. Is the water test result for total coliform at or below 10 CFU/100 mL or, if the test result exceeds this limit, has an action plan been established?							
Q4.1.3	If water disinfectants or additives are used to treat the water, are they approved for use in food animals?							
Q4.2.1	Is water-administered medication used on-farm? (If not, go to Section 4.3)							
Q4.2.2	Are water-administered medications and vaccines recorded on the Treatment Record (R-T)?							
Q4.2.3	Are water-administered medications and vaccines recorded on the Medication and Vaccine Usage Plan (R-P)?							
Q4.2.4	Does the site have a Medicated Water SOP (SOP 4.2) that include	s:						
	a. the protocol with all PigSAFE-required elements?							
	<ul> <li>the deviation measures describing what to do if something goes wrong?</li> </ul>							
	c. the verification measures?							
Q4.2.5	Has a Medicated Water SOP (SOP 4.2) been implemented adequately?							

Q#	Audit Questions	Verification							
		Compliant	NC- Minor	NC- Major	NC- Critical	N/A			
	Are the farm areas used for storing and mixing feed and/or feed ingredients:								
Q4.3.1	a. clean and adequately maintained?								
	b. kept dry?								
	<ul> <li>c. free of easily detectable bird and animal feces (organic materials)?</li> </ul>								
	<ul> <li>d. free of chemical contaminants (e.g., pesticides, cleaning and disinfection products, oils, fertilizers)?</li> </ul>								
	e. free of foreign materials (physical hazards (eg., metal, screw,etc))?								
Q4.3.2	Are all of the following items clearly identified:								
	a. feed and feed ingredient bins?								
	b. feed distribution and transfer lines?								
	c. other feed transfer systems (e.g., switches, carts, pails)								
Q4.4.1	Is medicated feed that is batch-mixed (including feed for other species) and sequenced being recorded on a Feed Sequencing, Mixing and Distribution Record (R-S)?								
	Does the site have a Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) that includes:								
Q4.4.2	a. the protocol with all PigSAFE-required elements?								
	<ul> <li>the deviation measures describing what to do if something goes wrong?</li> </ul>								
	c. the verification measures?								
Q4.4.3	Has the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) been adequately implemented?								
Q4.5.1	Does the site have a Feed Distribution SOP (SOP 4.5) that includes:								
	a. the protocol with all PigSAFE-required elements?								
	<ul> <li>the deviation measures describing what to do if something goes wrong?</li> </ul>								
	c. The verification measures?								
Q4.5.2	Has the Feed distribution SOP (SOP 4.5) been adequately implemented?								

Q#	Audit Questions	Verification						
		Compliant	NC- Minor	NC- Major	NC- Critical	N/A		
MODULE 5: PHARMACEUTICALS AND MEDICAL SUPPLIES								
Q5.1.1	<ul> <li>a. Is a valid veterinarian–client–patient relationship (VCPR) in place?</li> </ul>							
	<ul> <li>Are all prescription drugs that are used on-farm prescribed by a veterinarian licensed to practice in your province or territory with whom you have a valid veterinarian—client—patient relationship (VCPR)?</li> </ul>							
Q5.1.2	Is the PigSAFE Vaccines and Drug Use Policy respected and implemented?							
	a. If applicable, are copies of prescriptions available and do they indicate the withdrawal periods to be respected for all veterinary drugs labelled and extra labelled?							
	<ul> <li>b. Are written directions available for the use of all veterinary drugs?</li> </ul>							
Q5.1.3	Does the Medication and Vaccine Usage Plan (R-P) include all PigSAFE-required elements?							
Q5.1.4	Does the Treatment Record (R-T) include all PigSAFE-required elements?							
Q5.1.5	<ul> <li>Are individual and group treatments for all animals beyond weaning (including breeding stock) recorded on the Treatment Record (R-T)?</li> </ul>							
	b. If treatments are recorded on the sow cards, are the required elements recorded?							
Q5.2.1	Is a Needles and Injections SOP (SOP 5.2) in place that includes all the PigSAFE-required elements?							
Q5.2.2	Has the Needles and Injections SOP (SOP 5.2) been adequately implemented?							
Q5.2.3	Are only detectable needles being used at this site?							
Q5.3.1	Are pigs that have (or are suspected to have) broken needle fragments and have not been euthanized recorded on a Treatment Record (R-T)?							

	Audit Questions		V	erificatio	n	
Q#			NC- Minor	NC- Major	NC- Critical	N/A
	Does the site have a Risk Management of Broken Needles SOP (SOP 5.3) that includes:					
05.20	a. the protocol with all PigSAFE-required elements?					
Q5.3.2	b. the deviation measures describing what to do if something goes wrong?					
	c. the verification measures?					
Q5.3.3	Is the Risk Management of Broken Needles SOP (SOP 5.3) adequately implemented?					
	Does the site have a Medication Withdrawal SOP (SOP 5.4) that in	ncludes:				
Q5.4.1	a. the protocol with all PigSAFE-required elements?					
Q5.4.1	<ul> <li>the deviation measures describing what to do if something goes wrong?</li> </ul>					
	c. the verification measures?					
Q5.4.2	Has the Medication Withdrawal SOP (SOP 5.4) been adequately implemented?					
MODUL	E 6: PESTS, DOMESTICATED ANIMALS AND DEAD STOCK CO	NTROLS				
	a. Has a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been developed and does it include the PigSAFE-required elements?					
Q6.1.1	<ul> <li>Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2))</li> <li>been adequately implemented on-farm?</li> </ul>					
	c. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented in the on-farm feed mill?					
Q6.1.2	If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1), does it include the PigSAFE-required elements and is it adequately implemented?					
Q6.2.1	Does barn personnel ensure dogs do not have access and are kept out of the same barn/building as pigs and on-farm-feed-mill?					
Q6.2.2a	Does barn personnel ensure cats do not have access and are kept out of the same barn/building as pigs and on-farm-feed mill?					

		Verification					
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	NC- Critical	N/A	
Q6.2.2b	If cats are given access to the barn/building and on-farm feed mill, are the requirements related to cats of Section10.3 Multiple Species Certification implemented?						
Q6.2.3	If other domesticated animals have access and are kept in the same barn as pigs and/or on-farm feed mill, has Section 10.3 Multiple Species Certification been completed?						
Q6.3.1	Are dead pigs removed from the pen as soon as reasonably possible, and at least daily?						
Q6.3.2	Are mortalities recorded?						
MODUL	E 7: PigCARE						
Q7.1.1	Do 1% or less of the sampled breeding stock have a body condition score (BCS) of less than 2?						
Q7.1.2	Are 1% or less of the sampled breeding stock severely lame?						
Q7.1.3	Do 5% or less of the sampled breeding stock have injuries?						
Q7.1.4	Do 1% or less of the sampled suckling pigs have a body condition score (BCS) of less than 2?						
Q7.1.5	Are 1% or less of the sampled suckling pigs severely lame?						
Q7.1.6	Do 5% or less of the sampled suckling pigs have injuries?						
Q7.1.7	Do 1% or less of the sampled non-breeding pigs have a body condition score (BCS) of less than 2?						
Q7.1.8	Are 1% or less of the sampled non-breeding pigs severely lame?						
Q7.1.9	Do 5% or less of the sampled non-breeding pigs have injuries?						
Q7.2.1	Do pigs have daily access to feed?						
Q7.2.2	Do pigs have access to suitable water in sufficient quantity to meet their needs?						
Q7.2.3	If a liquid-feeding system is being used, is supplemental water provided as needed?						
Q7.2.4	Are measures taken when breeding stock become overweight?						
Q7.3.1	Is the flooring and equipment in the pig housing areas in a condition that does not pose an immediate risk of injuring the pigs?						

				Verification					
Q#	Audit Questions		NC- Minor	NC- Major	NC- Critical	N/A			
Q7.3.2	Are pigs housed in a system that does not use tethers routinely to house them?								
Q7.3.3	Are farrowing crates sized according to Pig Code of Practice requirements?								
Q7.3.4	Are mated gilt and sow stalls sized according to Pig Code of Practice requirements?								
Q7.3.5	Are individual boar stalls sized according to Pig Code of Practice requirements?								
Q7.3.6	Are boars housed in stalls provided with opportunities to exercise at least four times a week?								
Q7.3.7	For holdings of bred gilts and sows newly built or rebuilt or brought into use for the first time after July 1, 2014, are the Group Sow Housing Certification requirements met?								
Q7.3.8	For holdings newly built or brought into use for the first time after July 1, 2014, are boars provided with sufficient space so that they can turn around?								
Q7.3.10	Has a Space Allowance Record (R-Z) been completed for all nursery pens?								
Q7.3.11	Are all nursery pigs provided with sufficient space according to the Code of Practice requirements?								
Q7.3.12	Has a Space Allowance Record (R-Z) been completed for all grow/finish pens?								
Q7.3.13	Are all grow/finish pigs provided with sufficient space according to the Code of Practice requirements?								
	<ul> <li>a. Is the temperature suitably controlled at all stages of production?</li> </ul>								
Q7.4.1	<ul> <li>b. Is the ventilation adequately controlled at all stages of production?</li> </ul>								
	<ul><li>c. Is an adequate amount of lighting provided at all stages of production?</li></ul>								
Q7.5.1	Are two or more enrichment options provided to pigs at all stages of production?								
Q7.6.1	Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?								
Q7.6.2	Is the Care of Sick and Injured Pigs SOP (SOP 7.6) adequately implemented on-farm?								
Q7.6.3	Does the site have the ability to segregate sick or injured pigs in a separate area?								

		Verification					
Q#	Audit Questions		NC- Minor	NC- Major	NC- Critical	N/A	
Q7.7.1	Has a Farrowing Room SOP (SOP 7.7.1) been developed that includes all required elements?						
Q7.7.2	Has a Farrowing Room SOP (SOP 7.7.1) been adequately implemented?						
Q7.7.3	Has a Newly Weaned Pigs SOP (SOP 7.7.2) been developed that includes all required elements?						
Q7.7.4	Has the Newly Weaned Pigs SOP (SOP 7.7.2) been adequately implemented?						
Q7.8.1	Have SOPs been developed for all elective husbandry procedures (SOP 7.8) that are performed on-farm and do they include all required elements?						
Q7.8.2	Are the SOPs for elective husbandry procedures (SOP 7.8) adequately implemented?						
Q7.9.1	Are personnel responsible for handling, moving and restraining animals trained in low-stress pig-handling techniques?						
Q7.9.2	If electric prods are used, are they used according to Pig Code of Practice requirements?						
Q7.10.1	Has an on-farm Euthanasia SOP (SOP 7.10) been developed in consultation with a licensed veterinarian, and includes all required elements?						
Q7.10.2	Is the Euthanasia SOP (SOP 7.10) adequately implemented on-farm?						
Q7.11.1	Has an Emergency Plan SOP (SOP 7.11) been developed in case of a power failure, mechanical breakdown, water interruption or contamination and other emergencies relevant to the farm's location that includes all required elements?						
MODUL	E 9: TRANSPORTATION						
Q9.2.1	Has a Humane Transportation SOP (SOP 9.2) been developed that includes all PigCARE-required elements?						
Q9.2.2	Are loading and unloading facilities constructed and maintained to facilitate ease of movement and to prevent pigs from falling off, escaping or becoming injured?						

			Verification					
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	N/A			
MODUL	E 10: OTHER CERTIFICATION PROGRAMS							
10.2	Outdoor Access Certification							
Q10.2.1	Have personnel consulted the Fact Sheets F-8 Toxoplasma and F-9 Trichinella and do they understand the risks associated with these parasites?							
	a. Are the barns or housing structure used to house pigs free of obvious deterioration that could interfere with the production of safe pork?							
Q10.2.2	b. Are the ventilation, heating and cooling systems adequately maintained?							
	c. Are the housing system and other areas accessible to pigs free from any treated wood?							
	<ul> <li>a. Does the site have a Sanitation SOP (SOP 2.2.1) that includes: <ol> <li>i. at least one cleaning measure?</li> <li>ii. at least one washing measure?</li> <li>iii. at least one disinfection measure?</li> </ol> </li> <li>If a sanitation program does not include cleaning, washing and disinfection, go to question 10.2.3 b, below.</li> </ul>							
Q10.2.3	<ul><li>b. Does the site have an Alternative Cleaning SOP (SOP 2.2.2) that includes:</li><li>i. at least one cleaning measure?</li><li>ii. at least one disinfection measure?</li></ul>							
	c. Is the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) applied at least once every 12 months to all solid flooring and penning in the barn(s) or housing structure(s)?							
	a. Has a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been developed and includes all the PigSAFE-required elements?							
	<ul> <li>b. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented on-farm?</li> </ul>							
Q10.2.4	c. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented in the on-farm feed mill?							
	d. If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1), does it include the PigSAFE-required elements?							
	e. Are outdoor feeding areas designed, maintained and kept clean to prevent pests and wildlife from accessing them?							

		Verification					
Q#	# Audit Questions		NC- Minor	NC- Major	N/A		
Q10.2.5	Is the Multiple-Species Certification (section 10.3) completed?						
Q10.2.6	Is the usage of nose rings prohibited on-farm?						
Q10.2.7	Are measures in place to ensure that pigs are protected from hypothermia, hyperthermia and sunburn?						
Q10.2.8	Do all areas of the barn and/or outdoor housing structure have adequate drainage to prevent accumulation of stagnant water and/or manure and provide a dry resting area?						
010.3.0	a. Has a Parasite Management SOP (SOP 10.2) that describes how pigs are protected from parasites been developed in consultation with a licensed veterinarian?						
Q10.2.9	b. Has a Parasite Management SOP (SOP 10.2) that describes how pigs are protected from parasites been adequately implemented?						
Q10.2.10	Are appropriate measures in place to prevent predators and wildlife from accessing the outdoor pens and pasture?						
10.3	Multiple Species Certification						
	Have the following measures been implemented if cats are kept in	n the barn	or on si	te:			
	a. Have personnel received training on the additional risks associated with having cats in the barn or on site and on implementing good production practices to mitigate the risk of toxoplasmosis?						
Q10.3.1	b. Have the cats been vaccinated for rabies?						
	c. Are only mature and neutered cats allowed in the barn and near the on-farm feed mill?						
	d. Are feed carts and feeders covered?						
	<ul> <li>e. Is the cat litter located in an area accessible only to cats (and people) and kept clean?</li> </ul>						
Q10.3.2	Have measures ensuring that wildlife is kept out of the barn/building and the on-farm feed mill been implemented?						
	For cattle, other ruminants, horses and other non-avian species:						
Q10.3.3	<ul> <li>Are cattle, other ruminants, horses and other non-avian species penned separately from pigs?</li> </ul>						
	b. Has a Multiple Species Manure Management SOP (SOP 10.3) that includes how the manure-management system can mitigate the cross-contamination of pathogens been adequately implemented?						

		Verification					
Q#	Audit Questions	Compliant	NC- Minor	NC- Major	N/A		
	For poultry and other avian species:						
	<ul> <li>a. Are poultry and other avian species housed in a room that is separate from the pigs?</li> </ul>						
Q10.3.4	b. Has an Multiple Species Manure Management SOP (SOP 10.3) that includes how the ventilation and manure-management systems can mitigate the cross-contamination of pathogens been adequately implemented?						
Q#	Audit Questions	Yes	No	N/A			
10.4	Group Sow Housing Certification						
Q10.4.1	If the producer is using a sow management system in continuous flow (other than a batch farrowing system), is the actual percentage of bred gilts and sows in pens in the breeding and gestation area(s) greater than or equal to 60%?						
Q10.4.2	If the producer is using a batch farrowing system, is the actual percentage of bred gilts and sows in the pens in the breeding and gestation area(s) greater than or equal to 50%?						
Q10.4.3	Are all group-housed sows provided with sufficient space for separation of dunging area from lying and feeding areas?						



## MODULE 1





1.1 General, Technical and Critical Elements Training

#### Section 1.1

# General, Technical and Critical Elements Training

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-1	Verification Record	
R-2	Incident Report	
R-4	Monitoring Record	Mandatory
R-A	Personnel and Responsibilities List	Mandatory
R-B	Training Record	
R-C	Code of Conduct	
R-D	Quiz	Highly
R-A1	Personnel Task and Training List	Recommended

#### **SECTION 1.1**

#### GENERAL, TECHNICAL AND CRITICAL ELEMENTS TRAINING

#### **PREAMBLE**

All designated personnel must know and understand the following Food-Safety Critical Control Points (CCP).

	CCP#	Type of Hazard	Description	Module/Section
<b>(*)</b>	1	Chemical	<ul> <li>Residue from improper treatment (wrong animal, wrong medication, wrong dose or wrong route)</li> <li>Inadequate withdrawal periods may lead to chemical residue in the pork</li> <li>Extra-label use of drugs without veterinary consultation may lead to drug residue in the pork</li> </ul>	Section 4.2 Medicated Water
*	2	Chemical	<ul><li>Improper sequencing, mixing or flushing</li><li>Incorrect level or type of medication in medicated feed</li></ul>	Section 4.4 On-Farm Feed Mill Section 4.5 Distribution
*	3	Physical	<ul><li>Broken needle fragments left in the muscle of the pig</li><li>Lost needles (could be eaten by or injure a pig)</li></ul>	Section 5.3 Risk Management of Broken Needles
	4	Chemical	<ul> <li>Residue from improper treatment (wrong animal, wrong medication, wrong dose or wrong route)</li> <li>Inadequate withdrawal period may lead to chemical residue in the pork</li> <li>Extra-label use of drugs without veterinary consultation may lead to drug residue in the pork</li> </ul>	Section 5.4 Medication Withdrawal

#### All designated personnel must know and understand the following Animal-Care Critical Points (CP).

	CP#	Description	Module/Section
<b>(*)</b>	1	<ul> <li>Animals have access to feed and suitable water in sufficient quantity to meet their nutritional needs</li> <li>Appropriate feed-management strategies are crucial to ensure pigs' varying nutritional needs are met throughout the production process</li> </ul>	Section 7.2  Management  Strategies for Feed and Water
<b>(*)</b>	2	Animals need to be assessed on an ongoing basis for illness and injuries to ensure they are treated promptly, effectively and humanely in order to avoid suffering and prevent the spread of infectious disease to other animals	Section 7.6 Care of Sick and Injured Pigs
	3	Using low-stress pig handling and restraint techniques will reduce stress on the pigs and provide a safer environment for the personnel	Section 7.9 Handling Practices
	4	Pigs are euthanized in a timely and humane manner using the best method and performed by trained and competent personnel	Section 7.10 Euthanasia

#### REQUIREMENTS

#### **General and Technical Training**

- 1. The Site Manager must have completed the PigSAFE | PigCARE training either online or with a certified trainer.
- 2. The Site Manager must keep a Personnel and Responsibilities List (R-A) or a Personnel Task and Training List (R-A1) on file. This list must include the following information about each worker:
  - a. Full name
  - b. Original hiring date
  - c. Production area where the employee works
  - d. The SOPs and records the employee is responsible for
- 3. The Site Manager must ensure all personnel are trained and a training file must be kept for each individual before they are allowed to work unsupervised. The training file must include:
  - a. Record R-B: Training Record
  - b. Record R-C: Code of Conduct
- 4. The Site Manager must take part in continuing education at least once every three years for general, critical and technical responsibilities, or according to modifications made to the PigSAFE | PigCARE programs.

#### **Critical Element Training**

- 5. All personnel must learn which food safety risks are associated with their production areas. See the following sections:
  - a. Section 4.2 Medicated Water
  - b. Section 4.4 On-Farm Feed Mill
  - c. Section 4.5 Feed Distribution
  - d. Section 5.3 Risk Management of Broken Needles
  - e. Section 5.4 Medication Withdrawal
- 6. All personnel must learn which fundamental elements of animal care are associated with their production area. See the following sections:
  - a. Section 7.2 Feed and Water Management Strategies
  - b. Section 7.6 Care of Sick and Injured Pigs
  - c. Section 7.9 Handling Practices
  - d. Section 7.10 Euthanasia
- 7. The Verification Record (R-1) must be completed for each critical control points (CCP) once a year.
- 8. The Monitoring Record (R-4) must be completed for each good production practices (GPP) once a year.

For your convenience, templates for the records listed above have been developed for you to use.

#### **RATIONALE**

- a. It is crucial for personnel who are responsible for food safety critical control point SOPs and animal care critical points to be adequately trained to reduce and prevent the food safety risk of contamination by medications, chemicals, and broken needles and ensure animal well-being.
- b. It is important for the Site Manager to ensure that all new personnel know how to accomplish their tasks and understand their responsibilities before they are allowed to work without supervision.
- c. It is crucial that personnel in charge of any technical aspects of a procedure that can affect food safety and animal care receive adequate training to ensure the procedure is completed according to requirements.

- d. An up-to-date training file will ensure that all personnel have received and understand the requirements of the PigSAFE | PigCARE programs.
- e. The Code of Conduct Record (R-C) defines the behaviours expected for both management and other personnel. While these codes will not eliminate inappropriate behaviour or fraud, they do provide personnel with legal and ethical standards that will influence their performance and commitment to the PigSAFE | PigCARE programs and the animals.
- f. Continuing education ensures that personnel are aware of any modifications made to the PigSAFE | PigCARE programs or federal regulations, and reinforces understanding of all program requirements.

#### **GUIDANCE**

- a. Delegating an important activity does not relieve producers of their responsibilities if personnel are not adequately trained.
- b. PigSAFE | PigCARE training for Site Managers can be taken either online or in person (in groups or individually).
- c. Site Managers are to complete continuing education in the form of online or paper quizzes about new program updates or revisions to the PigSAFE | PigCARE programs' critical control points.
  - A personnel training program should include how to identify deficiencies that could affect food safety and animal care and the appropriate corrective actions to take.
- d. It is important that personnel involved in maintaining or calibrating equipment that will affect food safety (for example, a mill used to mix medicated feed) are appropriately trained to perform these functions.
- e. Discuss with new barn personnel all tasks they will be responsible for. Asking questions will help ensure they understand what is expected of them.
- f. Holding regular meetings with barn personnel is recommended because it gives personnel the chance to share information and concerns. Allow personnel to read relevant materials and to ask questions related to a task.
- g. Allow your personnel to attempt technical tasks under trainer supervision. Correct where necessary.
- h. The personnel technical training program should include how to identify deficiencies that could affect food safety and what corrective actions to take.
- Demonstrate how to do specific tasks. i.
- It is recommended that the Quiz Record (R-D) be used to train barn personnel. j.
- k. Keep an archive of all Personnel and Responsibilities Lists (R-A) to keep track of past personnel.
- Personnel Task and Training List Record (R-A1) is highly recommended because it provides a good overview of the tasks and training required for each personnel.
- m. The training should include the measures related to personal hygiene and Biosecurity such as exposure to parasites from animal or human feces (Toxoplasma, Trichinella, and Taenia solium in reference with Fact Sheets F-8 and F-9 (employees do not use the pen for their natural needs)).

#### **AUDIT QUESTIONS**

Q#		Verification				
	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A	
O1 1 1	Verify whether the Site Manager has completed the PigSAFE   PigCARE training program, either online or with a certified trainer.	Full and Partial Validation:  Confirmed in national database				
Q1.1.1	Has the Site Manager completed the PigSAFE   PigCARE training, either online or with a certified trainer?					

		Verification
Q#	Audit Questions and Interpretations	Compliant NC-Minor NC-Major N/A
Q1.1.2	Verify that the Site Manager is keeping a Personnel and Responsibilities List (R-A) on file that includes the following information about each worker:  a. Full name  b. Original date hired by the company  c. Assigned production area  d. The SOPs and records the individual is responsible for.  Is the Site Manager keeping a Personnel and Responsibilities List (R-A) on file?	Full and Partial Validation:  R-A: Personnel and Responsibilities List or R-A1 Personnel Task and Training List is up to date
Q1.1.3	Verify whether the Site Manager has trained and is maintaining an up-to-date file on all personnel that includes:  a. The Training Record (R-B), and b. The Code of Conduct (R-C)  Ensure that personnel are thoroughly trained in all aspects of the tasks identified under general, technical and Critical Control Points (CCP) training before they are allowed to work unsupervised.	Full and Partial Validation:  R-B: Training Record  R-C: Code of Conduct
	Has the Site Manager trained and maintained an up-to-date training file for each worker including:	
	a. Record R-B: Training Record?	
	b. Record R-C: Code of Conduct?	
0111	Verify whether the Site Manager participates in continuing education at least once every three years.	Full and Partial Validation:  Confirmed in national database
Q1.1.4	Has the Site Manager participated in continuing education at least once every three years?	
Q1.1.5	Food Safety Critical Control Points (CCP):  Verify that all personnel responsible for a Critical Control Point (CCP) have completed the Food Safety Critical Control Point (CCP) section of the Training Record (R-B) to ensure that personnel are thoroughly trained in all aspects of tasks identified as a food-safety risk area (i.e., a Critical Control Point (CCP)) before they are allowed to work unsupervised.	Full and Partial Validation:  R-A: Personnel and Responsibilities List  R-B: Training Record
	Have all personnel been trained on the Food Safety Critical Control Points (CCP) associated with their production areas?	
Q1.1.6	Animal Care Critical Points (CP):  Verify that all personnel responsible for Critical Point (CP) have completed the Animal Care Critical Point (CP) section of the Training Record (R-B) to ensure that personnel are thoroughly trained in all aspects of the tasks identified under fundamental Animal Care Critical Points (CP) before they are allowed to work unsupervised.	Full and Partial Validation:  R-A: Personnel and Responsibilities List  R-B: Training Record
	Have all personnel been trained on the Animal Care Critical Points (CP) associated with their production area?	
Q1.1.7	Verify that the Verification Record (R-1) includes all mandatory elements and is implemented.	Full and Partial Validation:  R-1: Verification Record
<u></u>	Has the Verification Record (R-1) been adequately implemented and completed in the last 12 months?	

		Verification				
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A	
Q1.1.8	Verify that the Monitoring Record (R-4) includes all mandatory elements and is implemented.		Full and Partial Validation:  R-4: Monitoring Record			
21.1.0	Has the Monitoring Record (R-4) been adequately implemented and completed in the last 12 months?					

N/A = not applicable; SOP = standard operating procedure



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### **COMPLIANT**

- The Site Manager has completed the PigSAFE | PigCARE training program.
- The personnel training files include all required records.
- The Site Manager participates in continuing education at least once every three years.
- The Site Manager has completed Food Safety Critical Control Points (CCP) section in the Training Record (R-B) for each employee and their respective production area(s).
- The Site Manager has completed the Animal Care Critical Point (CP) section in the Training Record (R-B) for each employee and their respective production area(s).

#### MINOR NON-COMPLIANCE Timeline: 12 months

A record is not complete.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- The Site Manager has not completed the PigSAFE | PigCARE training program.
- The Site Manager has not participated in continuing education at least once every three years.
- > A record is missing.
- The Food Safety Critical Control Points (CCP) section in R-B Training Record is not complete for all designated employees. >
- The Animal Care Critical Points (CP) section in R-B Training Record is not complete for all designated employees.
- The Verification Record (R-1) and/or the Monitoring Record (R-4) are not available.



#### **DEVIATION MEASURES**

#### FOR GENERAL, TECHNICAL TRAINING

- If one of the mandatory records (Personnel and Responsibilities List (R-A), Training Record (R-B) and Code of Conduct (R-C)) is missing or inadequately completed, the Site Manager must ensure these records include all required elements and be kept on file.
- If the Site Manager has not completed PS|PC mandatory training, they must complete PS|PC training on line or with a Certified Trainer and take part in continuing education at least once every three years for general, critical and technical responsibilities, or according to modifications made to the PSIPC Programs.

#### FOR CRITICAL ELEMENTS TRAINING

If personnel who are responsible for Food Safety Critical Control Point (CCP) SOPs are not trained, the Site Manager must ensure all personnel must learn which food safety risks are associated with their production areas. The Site Manager must ensure necessary records include all required elements and be kept on file.



## **MODULE 2**





- 2.1 Barn Maintenance
- 2.2 Barn Sanitation
- 2.3 Barn Drainage and Pen Sanitation

### Section 2.1

## **Barn Maintenance**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Mandatani
R-4	Monitoring Record	Mandatory
R-E	Inspection Checklist	Highly recommended

#### **SECTION 2.1**

#### BARN MAINTENANCE

#### **REQUIREMENTS**

- 1. The barns used to house pigs must be free of obvious deterioration.
- 2. The barns' environmental control systems must be adequately maintained.
- 3. Pigs must not have access to treated wood (where pigs have the opportunity to chew on it), including pressure-treated wood (e.g., treated with pentachlorophenol, chromated copper arsenate or other wood-preserving agents) in their housing system.

#### **RATIONALE**

- a. Maintenance of the barns is essential to avoid introducing harmful pests or pathogens.
- b. Ventilation, heating and cooling systems are crucial to control the level of humidity in the barn. Humidity is the most important factor that impacts the survival of microorganisms. Therefore, maintaining an adequate humidity level is essential for food safety. Low humidity level will allow the barns to dry completely in situations where it is advantageous to do so from a health perspective, such as between batches and in the farrowing rooms.
- c. When ingested by pigs, the chemicals used to preserve treated wood will remain in their fat, which can result in residue in the meat.
- d. The barns' design and building materials (e.g., sharp materials, nails) are both crucial factors in facilitating sanitation, preventing injuries to the pigs and ensuring the safety of the meat that will be produced.
- e. It is good management practice to keep electrical panels, generators and transformers at least three (3) feet away from flammable materials.

#### **GUIDANCE**

- a. A hygrometer could be used to verify and record the barn's humidity level.
- b. A chute made of treated wood is acceptable, since pigs are not exposed for a significant period of time; however, it is not recommended. The wood should be treated with products approved for such use in Canada, not with homemade oil-derived products.
- c. Wood is difficult to clean and disinfect, and it can increase the risk of cross-contamination.

#### ? AUDIT QUESTIONS

0.11		Verification			
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A
Q2.1.1	Verify that the barns used to house pigs are free of obvious deterioration that could give the pigs access to:  a. chemical hazards  b. biological hazards  Verify the barn's exterior walls are free from obvious deterioration, which could give access to pests.  If pigs have access to the outdoors, go to section 10.2 to complete this question.	Full Valic			
	Are the barns that are used to house pigs free of obvious deterioration that could interfere with the production of safe pork?				
Q2.1.2	Verify that the ventilation, heating and cooling systems are maintained adequately by ensuring the following measures are in place to control temperature and humidity in the barn(s):  a. fans and heaters are working  b. air intakes are clear.	Full Validation:  > observation			
	Are the ventilation, heating and cooling systems maintained adequately?				
Q2.1.3	Verify that pigs do not have access to treated wood, including pressure-treated wood (e.g., treated with pentachlorophenols (PCPs), chromated copper arsenate or other wood-preserving agents) in their housing system or any other area accessible to pigs (i.e., where they could chew on it).  Treated wood chutes are acceptable, as pig are not exposed for a significant period of time.  If pigs have access to the outdoor, go to section 10.2 to complete this question.	Full and Partial Validation:  observation interview			
	Are the housing system or other areas accessible to pigs free from any treated wood?				

N/A = not applicable



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- The building is free of obvious deterioration that could interfere with the production of safe pork.
- Environmental controls are well maintained.
- Pigs do not have access to treated wood in their housing system.

#### MINOR NON-COMPLIANCE Timeline: 12 months

> Environmental controls are not maintained adequately.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- Obvious signs of deterioration are present which give the pigs access to chemical or biological hazards.
- Pigs have access to treated wood in their housing system.



#### **DEVIATION MEASURES**

- If an obvious deterioration is detected in the barn, the designated person must fix it to facilitate sanitation, prevent injuries to the pigs and ensure the safety of the meat.
- If the barns' environmental control systems are not working well, the designated person must ensure that the ventilation, heating and cooling systems are maintained adequately.
- If pigs have access to treated wood, the designated person must make sure to remove the sources of treated wood (except for

Complete record R-2 Incident Report

## Section 2.2

## **Barn Sanitation**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURES	
2.2.1	Sanitation	Mandatory
2.2.2	Alternative Cleaning	iviaridatory
RECORDS		
R-2	Incident Report	Mandatory
R-4	Monitoring Record	iviaridatory
R-F	Barn Sanitation and Cleaning Record	Highly recommended
FACT SHEE	ETS	
F-1	Barn Cleaning and Disinfection	
F-2	Lime Application	

#### **SECTION 2.2**

#### **BARN SANITATION**

#### **REQUIREMENTS**

- 1. A Sanitation SOP (SOP 2.2.1) and/or an Alternative Cleaning SOP (SOP 2.2.2) must be adequately implemented in each area of the barn(s).
  - a. A Sanitation SOP (SOP 2.2.1) must include:
    - i. at least one cleaning measure,
    - ii. at least one washing measure, and
    - iii. at least one disinfection measure.

If your barn sanitation program does not include cleaning, washing and disinfecting, complete the Alternative Cleaning SOP (SOP 2.2.2).

- b. An Alternative cleaning SOP (SOP 2.2.2) must include:
  - i. at least one cleaning measure, and
  - ii. at least one disinfection measure.
- 2. A Sanitation SOP (SOP 2.2.1) and/or Alternative cleaning SOP (SOP 2.2.2) must be adequately implemented at least once every 12 months in each area of the barn(s).
- 3. Feeding areas, feed storage areas and other areas that animals can access (including alleyways) must be free from chemical products (e.g., pesticides and disinfectants).
- 4. Measures to minimize contamination of the feeding areas by urine or feces must be in place.

For your convenience, templates for the SOPs listed above have been developed for you to use.

#### **RATIONALE**

- a. Sanitation and alternative cleaning SOPs are designed to minimize the risk of spreading food-borne pathogens that can contaminate pork.
- b. Good sanitation practices help to reduce disease and the need for antimicrobial agents, such as antibiotics.
- c. Infectious agents in nasal secretions, saliva, urine and manure promote the spread of disease. Their removal is critical to any sanitation program.

#### **GUIDANCE**

#### 1. Recommended procedures

- a. The sanitation SOP should be used in conventional barns and the alternative cleaning SOP should be used in bedded barns and barns without sufficient water for washing and disinfection.
- b. Clean all-in/all-out barns thoroughly between each pig production batch.
- c. Periodically free up sections of the barn and allow for thorough sanitation between groups of pigs to break disease cycles and reduce infectious pressure.
- d. Avoid cleaning and disinfecting when pigs are in the same room or pen. Pressure washing aerosolizes manure and microorganisms that can be inhaled by the pigs. These aerosolized particles may impact food safety by introducing pathogens (such as Salmonella) to previously uninfected pigs, or may cause other health problems in the animals.

- e. Allow cleaned surfaces to dry completely prior to introducing pigs.
- f. Adapt the biosecurity measures and SOPs according to your herd's health status.
- g. Record the type of sanitation SOP applied and date of application on the Barn Sanitation Record (R-F).
- h. Ask your suppliers of chemical products (e.g., medication, cleaning products, bait, insecticides, pesticides) how to adequately dispose of unused/expired chemical products.
- i. Remove dust and cobwebs, which offer a place for bacteria and viruses to grow and survive.
- j. Consider the use of foaming applicators, which make the application of cleaning and disinfecting agents more visible. This helps to ensure you have covered all surfaces and may help increase contact time with surface materials.

#### 2. Detergent

- a. The use of detergents facilitates the removal of biofilms. A biofilm is a type of organic matter that sticks to pen floors, partitions and walls that provides an environment that protects bacteria and viruses from being removed and disinfected easily.
- b. It is recommended that all loose, organic material (e.g., manure, dirt, bedding) be removed before using a detergent.

#### 3. Disinfectant

- a. The appropriate disinfectant should be chosen through consultation with a professional. The choice of an effective disinfectant should be based on the specific barn's criteria (construction materials, quality of the barn's water supply, etc.). Be aware that each disinfectant may require a different exposure time. It is recommended that all loose and organic material be removed before using a disinfectant.
- b. Read the label directions carefully to ensure proper dilution rates and exposure times. If pen surfaces (floor, walls and gates) are old and irregular (e.g., have cracks), the concentration should be increased.
- c. Hard water can deactivate many disinfectants and render then ineffective. It is recommended that you test the water to determine the most appropriate disinfectant for your type of water.
- d. Disinfectants are more effective with longer contact and drying time. Ideally, barn rooms should be completely dried before receiving pigs.

#### 4. Lime application

- a. Ground limestone can be used as desiccant (drying agent) to dry pens and flooring, and consequently act to reduce pathogen loads through the drying process. It can also increase pH to around 8 on the surface it is applied to, which might have an impact on certain pathogens as well, but its primary mode of pathogen reduction is through drying. Ground limestone could be used in place of a disinfectant on surfaces that are not conducive to the application of liquid disinfectant, such as earthen ground.
- b. Other forms of lime, such as quicklime and hydrated (slaked) lime, are much more corrosive when they come in contact with water or moist surfaces and can cause chemical burns on people and pigs. When mixed with water, they elevate the pH to above 12.5. After they dry again, they become less corrosive; however, reintroduction to water can once again drastically increase the pH until the lime has fully reacted and neutralized. Quicklime should not be used as part of a cleaning procedure, as it is even more dangerous to work with than hydrated lime. If you choose to use hydrated (slaked) lime as part of a cleaning procedure, e.g., "white-washing", you should first consult with an expert on the procedure, taking into account when it will be safe to introduce pigs back into the area, and ensure full personal protective equipment is used during the procedure.

Consult the Fact Sheet F-2 Lime Application for more details.

#### ? AUDIT QUESTIONS

0"		Verification			
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A
	Verify that the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) is in place and includes all required elements.  If pigs have access to the outdoors, go to section 10.2 to complete this question.  Full and Partial Validation  SOP 2.2.1: Sanitation  SOP 2.2.2: Alternative				aning
Q2.2.1	a. If the Sanitation SOP (SOP 2.2.1) is used, does it include:  i. at least one cleaning measure?  ii. at least one washing measure?  iii. at least one disinfection measure?				
	If a sanitation program does not include cleaning, washing and disinfection, go to question 2.2.1b, below.				
	<ul><li>b. If the Alternative Cleaning SOP (SOP 2.2.2) is used, does it include:</li><li>i. at least one cleaning measure?</li><li>ii. at least one disinfection measure?</li></ul>				
Q2.2.2	Verify that the Site Manager applies the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) at least once every 12 months in each area of the barn.  If pigs have access to the outdoors, go to section 10.2 to complete this question.	Full and Partial Validation:  SOP 2.2.1: Sanitation  SOP 2.2.2: Alternative Cleaning  observation (full validation only)  interview			
	Is the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) applied at least once every 12 months in every section of the barn(s)?				
Q2.2.3 _	Verify that feeding and feed storage areas, as well as any areas that pigs can access (including alleyways), are free from chemical products (e.g., pesticides and disinfectants).	Full and Partial Validation:  observation (full validation only) interview			n only)
Q2.2.0 =	Are feeding and feed storage areas and any areas that pigs can access (including alleyways) free from chemicals products (e.g., pesticides and disinfectants)?				
Q2.2.4	Verify that measures are in place to minimize contamination of the feeding area with urine or feces.	Full Valid  obse  inter	rvation		
	Are measures to minimize contamination of the feeding area by urine or feces in place?				



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

> SOP(s) are complete and implemented.

#### MINOR NON-COMPLIANCE Timeline: 12 months

**SOP(s)** are incomplete or not available.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- No Sanitation SOP (SOP 2.2.1) or Alternative Cleaning SOP (SOP 2.2.2) has been developed or implemented in the last 12 months (taking into account animal care and seasonality).
- > Chemical products are kept in feeding areas, feed storage areas, or areas that pigs have access to.

NOTES			



This standard operating procedure (SOP) can be used as a templa If you develop your own version, all required elements must be income.		PID#:
Site Manager: Pe	erson in charge:	
PROTOCOL		
This SOP must include at least one cleaning, one washing a once every 12 months to each area of the barn(s), either aft section of the barn, or when weather conditions permit.  List the production stage(s) at which this SOP is applied:		

Sanitation Measures	Applied On-Farm	Importance		
Cleaning (at least one cleaning measure must be identified).				
Scraping and sweeping of floors, slats of stalls, crates, pens and feeding areas.		Mandatan		
Other (describe):	Mandat			
Washing (at least one washing measure must be identified).				
Pressure washer machine.				
Name of detergent(s) used:		Mandatory		
Other (describe):				
Rinsing and drying.				
Rinsing.				
Drying methods and drying time:		Highly recommended		
Other (describe):				

Applied On-Farm	Importance	
	Mandatory	
	Highly	
	recommended	

#### **DEVIATION MEASURES**

	something goes wrong? s, designated personnel must take the following s.	Applied On-Farm	Importance
	If the Sanitation SOP (SOP 2.2.1);		
	a. has not been developed or is incomplete, or		
	<ul> <li>all mandatory measures have not been implemented adequately as planned, or</li> </ul>		
	<ul> <li>c. chemical products are kept in feeding areas or areas that pigs have access to,</li> </ul>		
1	the Site Manager or the designated personnel must fix the deviation and record it on the record R-2 – Incident Report.		Mandatory
	Corrective Action Examples:		
	<ul><li>Develop and implement a Sanitation SOP (SOP 2.2.1),</li></ul>		
	Personnel training,		
	Cleaning as soon as condition permits, considering animal care and seasonality.		

**RECORDS** 

Name of Record		Importance
R-2	Incident Report	Mandatory
R-4	Monitoring Record	Mandatory
R-F	Barn Sanitation and Cleaning Record	Highly recommended

NC	DTES		



#### **SOP 2.2.2** ALTERNATIVE CLEANING

This standard operating procedure (SOP) can be used as a temp If you develop your own version, all required elements must be in		PID#:
Site Manager: F	Person in charge:	
PROTOCOL		
This SOP standard operating procedure (SOP) must includ		
and must be applied at least once every 12 months to eac	:h area of the barn(s), w	hen weather conditions permit.
List the production stage(s) at which this SOP is applied:		

Sanitation Measures	Applied	Importance	
Cleaning (at least one cleaning measure must be applied).			
Scraping and sweeping of floors, stall slats, crates, pens and feeding areas.			
Cleaning of air inlets and fans.		Mandatory	
Other (describe):			
Disinfection (at least one disinfection measure must be applied).			
Application of lime or other disinfecting agents.			
Other alternative pathogen reduction measures identified with your licensed veterinarian.		Mandatory	
Other (describe):			

**DEVIATION MEASURES** 

	something goes wrong? s, designated personnel must take the following s.	Applied On-Farm	Importance
1	<ul> <li>If the barn Alternative Cleaning SOP (SOP 2.2.2);</li> <li>a. has not been developed or is incomplete, or</li> <li>b. all mandatory measures have not been implemented adequately as planned, or</li> <li>c. chemical products are kept in feeding areas or areas that pigs have access to,</li> <li>the Site Manager or the designated personnel must fix the deviation and record it on the record R-2 – Incident Report.</li> <li>Corrective Action Examples:</li> <li>Develop and implement an Alternative Cleaning SOP (SOP 2.2.2),</li> <li>Personnel training,</li> <li>Cleaning as soon as condition permits, considering animal care and seasonality.</li> </ul>		Mandatory

#### **RECORDS**

Name of Record		Importance
R-2	Incident Report	Mandatory
R-4	Monitoring Record	Mandatory
R-F	Barn Sanitation and Cleaning Record	Highly recommended

#### Section 2.3

## Barn Drainage and Pen Sanitation

#### REFERENCED IN THIS SECTION:

Number/
Identifier Name Importance

RECORDS

R-2 Incident Report

Mandatory

R-4 Monitoring Record

#### **SECTION 2.3**

#### BARN DRAINAGE AND PEN SANITATION

#### REQUIREMENTS

- 1. All areas of the barn must have adequate drainage to prevent accumulation of stagnant water and/or manure.
- 2. For bedded production systems:
  - a. Fresh and clean bedding material must be added whenever necessary to maintain a dry environment.
  - b. Bedding and manure must be removed at least once a year and stored away from the pigs.

#### **RATIONALE**

- a. Dirty pigs increase the risk of indirect contamination of pork at the slaughterhouse through cross-contamination with equipment and workers. Pigs shipped for slaughter should be clean the majority of the time.
- b. Pig cleanliness is crucial for decreasing the likelihood of carcasses becoming contaminated with *Salmonella* or other pathogens at the processing plant. Pigs with more than 25% of their skin visually contaminated by feces are almost three times more likely to test positive for *Salmonella* at the processing plant than pigs not visually contaminated.
- c. Inadequate barn drainage may lead to the flooding of pens and feeding areas with backed-up manure and will increase the risk of bacterial contamination of the meat.
- d. The manure may also contain some level of unabsorbed antibiotics that could contaminate pigs in the finishing stage.
- e. Proper manure removal and storage helps to reduce the risk of pathogens.
- f. Pathogens in the manure can be spread through direct contact and aerosol transmission as well as through indirect contact by humans, equipment, or vehicles. For example, it has been shown that *Salmonella* can survive nine months in manure.
- g. The presence of dirty pigs might indicate problems with temperature and ventilation.

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#### **GUIDANCE**

a. Flooding:

A rare occurrence in which the level of manure in the pits rises above the slatted floor.

- i. To avoid flooding:
  - » ensure adequate pit management and manure removal
  - » ensure water pipes are maintained in working condition.
- b. Pooling:

An occurrence that happens occasionally in which stagnant water, urine and/or feces accumulates on the floor.

- i. To avoid pooling:
  - » encourage pigs to urinate/defecate in dedicated areas (proper dunging patterns)
  - » design the floors for adequate drainage
  - » use effective cleaning procedures.

### c. Stagnation:

A drainage problem leading to permanent and reoccurring accumulation of stagnant water, urine and feces on the specific areas of the floor.

### i. To avoid stagnant water:

- » maintain the floors for adequate drainage
- use effective cleaning procedures.

### d. Bedded production:

- i. If the herd is affected by diseases or enteric problems (such as diarrhea), it is recommended that the bedding be changed after each production batch.
- ii. An adequate layer of absorbent bedding should be present, especially around the feeders and water area.
- iii. Ground limestone can be used as a drying agent to dry the ground before bedding is placed.

### e. Occasional and unanticipated issues:

- Manure pits may overflow, causing manure to come through the slats, or there may be minor flooding in an area caused by:
  - a water line break
  - a blockage or break in the manure system between the pits and the manure storage
  - spring thaw.
- ii. Allowing manure to remain in the pens permanently, or for extended periods of time, is a serious concern for food safety and animal welfare.

	Audit Questions and Interpretations		Verification				
Q#			NC-Minor	NC-Major	N/A		
Q2.3.1	Verify that the overall condition of the barn (including, pens, gestation stalls, feeding areas, alleyways, etc.) ensures there is no permanent flooding, pooling or stagnation of water, urine or manure.  If pigs have access to the outdoors, go to section 10.2		Full Validation:  • observation				
Q2.5.1	to complete this question.						
	Is there adequate drainage in all areas of the barn?						
	<ul> <li>Verify that the bedding in contact with the pigs is not saturated with manure and that all pigs can lie down at the same time in a dry area.</li> </ul>	Full and Partial Validation:  > observation (full validation only)					
	<ul> <li>Verify that the bedding is changed at least once a year and the soiled bedding is disposed of and kept away from the pigs.</li> </ul>	) interview					
Q2.3.2	For production units using bedding:						
	a. Are the bedded pens kept dry?						
	b. Is the bedding and the manure removed at least once a year and stored away from the pigs?						

N/A = not applicable



### **LEVELS OF COMPLIANCE – EXAMPLES**

### COMPLIANT

- There are no drainage issues in the barn.
- The soiled bedding is disposed of and kept away from the pigs.
- **>** Bedding, if applicable, is kept dry.

### MINOR NON-COMPLIANCE Timeline: 12 months

- > There is flooding and/or pooling of water or manure and no action plan is in place.
- > Soiled bedding, if applicable, is not removed at least once a year, disposed of and kept away from the pigs.

### MAJOR NON-COMPLIANCE Timeline: 60 days

- » There are signs of continuous flooding, pooling and/or stagnation with no corrective measures in place.
- » Bedding in contact with the pigs is saturated with manure.
- » All pigs cannot lay down at the same time in a dry area.

### **DEVIATION MEASURES**

- If there is an accumulation of stagnant water and/or manure in the barn, the designated person must take action to ensure adequate drainage in all areas of the barn.
- > If a dry environment is not provided to pigs raised on bedding, the designated person must ensure fresh and clean bedding material must be added whenever necessary and bedding and manure must be removed at least once a year and stored away from the pigs.

### Complete record R-2 Incident Report



# MODULE 3

# INPUTS







- 3.1 Incoming Pigs
- 3.2 Feed: Rations and Additives
- 3.3 Recycled Food Products and Distillers' Grains
- 3.4 Incoming Bedding and Bedding Storage
- 3.5 Other Inputs

### Section 3.1

# **Incoming Pigs**

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Mandatani
R-G	Swine Movement Document	Mandatory

### **SECTION 3.1**

### **INCOMING PIGS**

### **REQUIREMENTS**

- 1. The Swine Movement Document (R-G) must be received for all shipments of incoming pigs.
  - a. This document must include the following elements:
    - i. Premise Identification (PID) Number
    - ii. herd mark(s), (except for farm movements of weaned piglets, nursery and grow/finish pigs)
    - iii. number of pigs
    - iv. identification of any pigs with a broken needle fragment
    - v. a declaration that the pigs were produced in accordance with PigSAFE | PigCARE programs standards (applies to pigs being moved from farm to assembly yard, from farm to slaughterhouse or from farm to farm)
    - vi. a declaration that all drugs withdrawal periods have been respected or indicating the date when the longest outstanding drug withdrawal period ends (applies to pigs being moved from farm to farm)
    - vii. the signatures of the producer or Site Manager shipping the pigs, the transporter and the person receiving the pigs.
  - b. Each Swine Movement Document (R-G) received with incoming pigs must be kept at the PID site until the next validation (minimum of 12 months; paper and electronic copies are acceptable).
- 2. All incoming Canadian pigs are to be sourced from farms registered under PigSAFE | PigCARE programs. All pigs that are moved from another country to a PigSAFE | PigCARE registered farm must be sourced from a farm that is registered with a recognized on-farm food safety program.

For your convenience, a template for the Swine Movement Document (R-G) has been developed for you to use. An electronic version is available on the PigTRACE website.

### **RATIONALE**

a. The Swine Movement Document (R-G) includes a declaration from the producer stating that these pigs were produced in accordance with the standards of the PigSAFE | PigCARE programs regarding the use of veterinary drugs. This ensures the pigs have met all withdrawal periods as recommended by the manufacturer or ordered by a veterinarian so that pigs with potential drug residue are not marketed. It also ensures that pigs which (may) have needle fragments are identified and tracked through to processing.

### **GUIDANCE**

- a. Incoming pigs include replacement gilts, sows, boars, weaned piglets, nursery pigs, pre-growers, growers, and finisher pigs.
- b. From a food-safety perspective, the risk of introducing Salmonella or other microbial agents into the barn(s) increases as the number of sourced herds increases.
- c. It is recommended that the health status of the incoming pigs' herd be determined prior to delivery.
- d. Pigs that have a broken needle fragment are generally not accepted by processing plants. Contact your plant for more information.

	Audit Questions and Interpretations		Verification				
Q#			NC-Minor	NC-Major	N/A		
	Verify that the Swine Movement Document (R-G) for each load of incoming pigs was received, is kept on file and includes all required elements.	Full and	Partial Va	lidation:			
Q3.1.1	Verify whether the records R-G for the last 12 months (or since the last validation) are available. Alternative records may be used if all required elements are included.	R-G : Swine Movement Docume			ocument		
	Have the Swine Movement Documents (R-G) from all incoming pigs been kept on file, and do they include all required elements?						
Q3.1.2	Verify that incoming animals come from a farm with a PID number registered under the PigSAFE   PigCARE programs or, if sourced from outside Canada, from a farm registered with a recognized on-farm food safety program.  Verify the PigSAFE   PigCARE registration certificates of the sourced farms, or write down the premises identification (PID) numbers for all PID-registered sites where the pigs were purchased to ensure the sourced farms are registered with the PigSAFE   PigCARE programs.  If the pigs are being moved from the US to a Canadian farm to be further raised or bred (i.e., not destined for immediate slaughter), the sourced farm must be registered with the Pork Quality Assurance Plus (PQA+) program. Pigs coming from any other country must be recognized on an equivalent on-farm food safety program.	Full and Partial Validation:  R-G: Swine Movement Docum  interview			ocument		
	Are all incoming pigs sourced from PigSAFE   PigCARE registered farms or from a farm registered with a recognized on-farm food safety program?  Incoming pigs sources PID number(s):						

N/A = not applicable



### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

All required Swine Movement Documents (R-G) are available and complete.

### MINOR NON-COMPLIANCE Timeline: 12 months

Not all Swine Movement Documents (R-G) are available or some elements are missing.

### MAJOR NON-COMPLIANCE Timeline: 60 days

- No Swine Movement Documents (R-G) are available.
- Incoming pigs are not from a CPE-registered farm or, if the incoming pigs are from another country, they are not registered on a recognized on-farm food safety program.



### **DEVIATION MEASURES**

If the Swine Movement Document (R-G) is missing when pigs are delivered, the designated personnel must obtain the documents in the following days. These documents must include all required elements and be kept on file (including incoming pigs coming from a farm with an equivalent on-farm food safety program).

Complete record R-2 Incident Report.

### Section 3.2

# Feed: Rations and Additives

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	
R-4	Monitoring Record	Mandatory
R-R	Rations Used On-Farm Record	Mandatory
R-R1	Rations Used On-Farm Record (for Quebec)	
R-V	List of Feed Suppliers	Highly recommended

### **SECTION 3.2**

### FEED: RATIONS AND ADDITIVES

### **REQUIREMENTS**

- 1. All medicated and non-medicated rations, feed additives, Veterinary Health Products or any other products added to a ration or given to pigs (e.g., top dressing of potato starch) must be identified on the Rations Used On-Farm Record (R-R or R-R1). This record must include:
  - a. the ration name or number
  - b. whether the ration was purchased complete or was mixed on-farm
  - c. the name of the supplier of the feed or feed ingredient(s)
  - d. whether the ration was medicated or not
  - e. the name of the medication
  - f. the amount of medication (kg) per 1,000 kg of feed
  - g. the number of grams of active ingredients per 1,000 kg of feed
  - h. the withdrawal period for each medication used.
- 2. The Rations Used On-Farm Record (R-R or R-R1) must be up to date.
- 3. The feed medications, the dosage and withdrawal periods must comply with either:
  - a. the manufacturer's label OR
  - b. the veterinarian's prescription.
- 4. All feed medication prescriptions must be available.
- 5. Feed delivery slips must be checked and signed by designated personnel and kept on file since the last validation.
- 6. Raw or cured meat products or any products that may come into contact with raw or cured meat must not be fed to pigs.



Requirements identified with a star are related to Module 5.4 (Medication Withdrawal) which is a CCP.

For your convenience, a template for the Rations Used On-Farm Record (R-R or R-R1) has been developed for you to use.

#### **RATIONALE**

- a. All feed ingredients used on-farm must be approved by the Canadian Food Inspection Agency (CFIA). The description and purpose of these ingredients are listed and defined in schedules IV and V of the Feeds Regulations, together with appropriate guarantees, standards and labelling requirements.
- b. It is crucial to keep a record (list) of all feed rations and feed ingredients used on-farm. The record is required to demonstrate that the Site Manager is in control of all rations used and to ensure the rations can be correlated with a prescription, if applicable. It is also information required under Hazard Analysis and Critical Control Points (HACCP) programs and a crucial element of the feed medication critical control point.
- c. Due to the risk of zoonotic and exotic diseases, it is illegal in Canada to feed meat products and by-products or any products not approved by the Canadian Food Inspection Agency (CFIA).
- d. In Canada, meat, meat by-products and any products that may come into contact with raw meat cannot be used as recycled food products due to disease transmission hazards.

### **GUIDANCE**

a. Any new rations, or changes to current rations, have to be added on the Rations Used On-Farm Record (R-R or R-R1).

- b. The list of suppliers is included on the Rations Used On-Farm Record (R-R or R-R1). However, it is recommended that a separate list of suppliers (R-V) be maintained that includes the names of the individuals in charge as well as their addresses, phone numbers and email addresses.
- c. It is recommended that producers choose a feed supplier that follows a feed quality assurance program. A HACCP or ISO quality program for feed and feed ingredients includes measures to control contamination by hazards such as drug residue, chemical products, pathogens, mycotoxins and animal feces. A feed quality assurance program also provides feed mill personnel and truckers with training to prevent this type of cross-contamination.
- d. It is recommended that producers ask their feed and feed-ingredient suppliers to provide a letter of guarantee that contains the following:
  - i. The name of the feed-quality assurance program they follow to prevent their feed from being contaminated by drug residue, chemical products, pathogens, mycotoxins, and animal feces.
  - ii. A declaration that feed mill personnel and truckers are trained in good production practices for feed handling.
- e. In the event that drug residue is detected in the meat of pigs from your operation, feed samples can help to identify if inappropriate levels of drugs were present in the feed provided by your suppliers. This can be useful to identify the origin of the residue, which may show that you are not responsible for the situation. It is recommended that medicated and non-medicated premixes be stored separately.
- f. When samples are kept, they should weigh between 0.5 kg and 1 kg. Samples should be kept for at least six months and stored in adequately sealed containers to protect them from rodents and birds.
- g. Veterinary Health Products (homeopathic, plant-based products, probiotics, etc.) used on-farm should be properly identified and labeled. The label should provide information about the strength or concentration of the natural health product, recommended dosage and the manufacturer. Such products should be purchased only from recognized manufacturers or authorized retailers. New supplies should be inspected to ensure their packaging is original, intact and sealed.
- h. All Veterinary Health Products, any products that goes in, on and around the pigs that is used on-farm (e.g., probiotics, prebiotics, enzymes, essential oils) should be listed on Record R-P1 Other Products Used On-Farm.
- i. It is recommended that producers refuse to accept any bulk or bagged complete feed that comes without proper documentation.
- j. All personnel should be aware of potential hazards posed by foreign objects in feedstuffs.
- k. Producers are encouraged to consider using water-medications, given the ease of flushing the system.
- I. The Rations Used On-Farm Record (R-R1) includes the option to record the following information to help producers calculate their antimicrobial usage on-farm:
  - i. duration of ration usage (days)
  - ii. kilograms of feed consumed per pig.

			Verification				
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A		
Q3.2.1	Verify that the Rations Used On-Farm Record (R-R or R-R1) includes all required elements and has been kept on file for at least one year.	Full and Partial Validation:  R-R or R-R1: Rations Used On-Farm Record					
	Does the Rations Used On-Farm Record (R-R or R-R1) include all PigSAFE-required elements?						
Q3.2.2	Verify that all rations are listed on the Rations Used On-Farm Record (R-R or R-R1).	<b>&gt;</b> R-R c	arm Recor	tions Used			
	Is the Rations Used On-Farm Record (R-R or R-R1) up to date?						
Q3.2.3	<ul> <li>a. Verify that the feed medications and dosages used comply with the manufacturer's label or veterinarian's prescription.</li> <li>b. Verify that the feed medications withdrawal periods are being followed according to the manufacturer's label or the veterinarian's prescription.</li> <li>Cross-reference the rations listed on the Rations Used On-Farm Record (R-R or R-R1) with prescriptions and feed delivery slips to verify consistency.</li> </ul>	R-R c	Partial Va or R-R1: Ra farm Recor inary preso	tions Used d			
	<ul> <li>Do the feed medications and dosages used comply with the veterinarian's prescription or the manufacturer's label (if there is no prescription)?</li> </ul>						
,	<ul> <li>Do the feed medications withdrawal periods comply with the veterinarian's prescription or the manufacturer's label (if there is no prescription)?</li> </ul>						
Q3.2.4	Verify that copies of prescriptions for any extra-label drug use are available and have been kept on file since the last validation.  Cross-reference the rations listed on the Ration Used On-Farm Record (R-R or R-R1) with prescriptions and feed delivery slips to verify consistency.	Full and Partial Validation:  R-R or R-R1: Rations Used On-Farm Record  veterinary prescription(s)					
	If applicable, are copies of feed medication prescriptions available and do they indicate the withdrawal periods to be respected for all veterinary drugs used on label or in an extra label manner?						
	Verify that feed delivery slips from commercial feed mills have been verified or electronic copies have been filed adequately or signed by designated personnel and have been kept on file since the last validation.						
0005	Electronic feed delivery slips are accepted whether they are filed in an electronic folder or printed, initialed and organized in a paper file folder (i.e., compliance cannot be verified by finding feed delivery slips through emails).	Full and Partial Validation:  • feed delivery slips					
Q3.2.5	For feed received from an off-site on-farm feed mill, feed delivery slips must also be available.						
	Unopened emails in an inbox is not a good indication that the rations are actually being checked before being used.						
	Have feed delivery slips been checked and signed by designated personnel and kept on file for a minimum of 12 months or since the last validation?						

Q#	Audit Questions and Interpretations		Verification				
			NC-Minor	NC-Major	N/A		
Q3.2.6	Verify that pigs are fed feed that has not come into contact with raw meat and contains no raw/cured meat products or by-products.	Full and Partial Validation:  R-R or R-R1: Rations Used On-Farm Record interview					
	Are pigs only given feed that has not come into contact with raw meat and that contains no raw or cured meat products or by-products?						

N/A = not applicable



### LEVELS OF COMPLIANCE – EXAMPLES

### COMPLIANT

The Rations Used On-Farm Record (R-R or R-R1) is complete and up to date.

### MINOR NON-COMPLIANCE Timeline: 60 days

- The Rations Used On-Farm Record (R-R or R-R1) is not up to date.
- The Rations Used On-Farm Record (R-R or R-R1) is missing some requirements.
- > Feed delivery slips have not been signed by the designated individual(s).
- Feed delivery slips have not been kept on file for a minimum of 12 months or since the last validation.

### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Rations Used On-Farm Record (R-R or R-R1) is not available.
- The medication, the dosages or the withdrawal periods do not comply with the prescription(s) or manufacturer's label.
- There has been extra-label drug use of medication(s) without a prescription.
- Pigs are being given or have been given feed containing raw meat products or by-products, or material that may have come into contact with raw meat.



### **DEVIATION MEASURES**

- If some rations or additives are not listed on Rations used on-Farm Record (R-R or R-R1), the designated personnel must ensure the R-R or R-R1 is completed, includes all required elements, is updated, and kept on file.
- If indications or veterinarian prescriptions are not available on site, the designated personnel must obtain them and keep it on file.
- If raw or cured meat is observed in the barn, the designated personnel must ensure these products are not given to pigs.

Complete record R-2 Incident Report.

NOTES			

### Section 3.3

## Recycled Food Products and Distillers' Grains

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	
R-W Letter of Guarantee – Recycled Food Products and Distillers' Grains		Mandatory
FACT SHEE	т	
F-20	Recycled Food Products and Distillers' Grains	

### **SECTION 3.3**

### RECYCLED FOOD PRODUCTS AND DISTILLERS' GRAINS

This section must be completed by producers that use recycled food products (RFPs) or distillers' grains (DGs).

#### **REQUIREMENTS**

- 1. If RFPs or DGs are used on-farm, a Letter of guarantee for the use of RFPs or DGs (R-W) must be provided by the supplier of the products demonstrating that the CFIA Feeds Regulations requirements have been met, i.e., that the ingredients provided are listed in schedules IV and V of the Feeds Regulations. This requirement does not apply if the complete feed is manufactured by a commercial feed mill.
- 2. If the RFPs or DGs used on-farm do not meet the ingredient description in Schedule IV, is a new ingredient not listed in the schedules Part I or is listed in Part II of Schedule IV and V, a registration number must be issued by CFIA for the product used.

For your convenience, a template for the Letter of Guarantee for the use of RFPs and DGs have been developed for you to use.

### **RATIONALE**

- a. Due to the risk of zoonotic and exotic diseases, meat products, meat by-products and products suspected of containing meat are not permitted in RFPs intended for livestock feed unless they:
  - have been processed in a manner which would prevent the introduction of disease (subject to approval by the CFIA's Animal Health Directorate) and
  - ii. have been registered as a feed or are listed in Schedule IV or V of the Feeds Regulations.
- b. Distillers' Grains (DGs) resulting from fuel ethanol production are not automatically considered equivalent to the DGs listed in the Feeds Regulations. It is apparent that some of the additives used in the fuel ethanol manufacturing process are different from those used in the beverage alcohol production process, and some have not been assessed for safety.

### **GUIDANCE**

a. What are Recycled Food Products (RFPs)?

RFPs are materials that remain after, or are produced during, the processing, manufacture, preparation or sale of human food. Under certain conditions, RFPs may be suitable for use as livestock feeds.

b. What are Distiller's Grains (DGs)?

DGs are the by-products obtained after the removal of ethyl alcohol (ethanol), for the production of human beverages or fuel.

c. Product registration:

Ingredients listed in Part I of either Schedule IV or V are exempt from registration provided they meet the standards for composition described in the ingredient definition, meet the standards as defined, and are labelled appropriately. The following feed ingredients require a product registration number from CFIA and it is the responsibility of the supplier, manufacturer or importer of these feed ingredients to register the product.

- Ingredients that are listed in Part II of either schedule must be registered separately by the CFIA for each source.
- ii. Ingredients with additional label guarantees or claims, or that carry labels in languages other than English or French.
- d. For additional information about the Feed regulation related to RFPs and DGs consult the Fact Sheet F-20 Recycled food products and Distillers' grains.

INPUTS

	Audit Questions and Interpretations		Verification					
Q#			NC-Minor	NC-Major	N/A			
Q3.3.1	The Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W) is to be signed by the supplier to confirm the recycled food product or distillers' grain is listed in Schedule IV, Part I of the Feeds Regulations.  This letter of guarantee demonstrates that the ingredients used are in accordance with the ingredient description, meet appropriate guarantees and standards, and that ingredient labelling requirements have been met.  This requirement does not apply if the complete feed is manufactured by a commercial feed mill.  If recycled food products and/or distillers' grains are used on-farm,		Full and Partial Validation:  R-W: Letter of Guarantee - Recycled Food Products and Distillers' Grains (R-W)					
	has the supplier completed the Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W) and a copy is kept on file on-farm?							
	The supplier must include the registration number issued by the CFIA on the Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W) if:	Full and Partial Validation:  R-W: Letter of Guarantee -						
Q3.3.2	<ul> <li>a. the recycled food products and/or distillers' grains used on-farm are not fed according to the standard and purpose listed in schedule IV or</li> </ul>	Recycled Food Products and Distillers' Grains (R-W) showing the registration number issued						
	<ul> <li>b. if the recycled food products and/or distillers' grains used on-farm are listed in Part II of schedules IV and V.</li> </ul>	by th	e CFIA					
	If a registration number is required for a recycled food product and/ or distillers' grains, has the number been included on the Letter of Guarantee for Recycled Food Products and Distillers' Grains (R-W)?							

N/A = not applicable



### LEVELS OF COMPLIANCE – EXAMPLES

### COMPLIANT

> The Letter of guarantee - Recycled Food Products and Distillers' Grains (R-W) is available for all recycled food products and/or distillers' grains used on-farm.

### MINOR NON-COMPLIANCE - Not applicable

### MAJOR NON-COMPLIANCE Timeline: 60 days

- > The Letter of guarantee Recycled Food Products and Distillers' Grains (R-W) is not available for recycled food products and/or distillers' grains.
- > There are no registration numbers for recycled food products and/or distillers' grains used on-farm that are listed in Part II of schedules IV and V or that do not meet the standard and purpose listed in schedule IV.



### **DEVIATION MEASURES**

If the record R-W - Letter of guarantee - Recycled Food Products and Distillers' Grains is not available, the designated personnel must obtain the R-W from the supplier, and it must include all required elements and be kept on file.

Complete record R-2 Incident Report.

### Section 3.4

# **Incoming Bedding and Bedding Storage**

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Mandatory
R-H	Letter of Guarantee – Bedding	Highly recommended

### **SECTION 3.4**

### INCOMING BEDDING AND BEDDING STORAGE

### **REQUIREMENTS**

1. A written assurance must be provided by suppliers of wood-based bedding confirming that any wood-based bedding being sold for use as housing for pigs is free of pentachlorophenols (PCPs), chromated copper arsenate and other wood-preserving agents.

#### **RATIONALE**

- a. Wood-based bedding containing PCPs, chromated copper arsenate or other wood-preserving agents can result in residue in the meat, making it unsafe for human consumption.
- b. If wood shavings that are contaminated with PCP, chromated copper arsenate or other wood preservatives and consumed by pigs, it can accumulate in tissue and be passed along to people.
- c. Bedding made from straw, sawdust, and wood chips can pose biological and chemical hazards when not adequately handled and stored.

### **GUIDANCE**

- a. It is highly recommended that producers ask bedding suppliers to complete the Letter of Guarantee Bedding (record R-H) to confirm the bedding is free from pentachlorophenols (PCPs), chromated copper arsenate and other wood-preserving agents.
- b. It is recommended that producers have measures in place to prevent the bedding from being contaminated with feces from birds, rodents, or wild or domestic animals (e.g., by knowing the origin of the bedding, having adequate handling practices in place, and having protected storage).
- c. Consult straw bedding suppliers to ensure the materials were produced and stored in an acceptable manner in order to minimize the risk of contamination by animal feces, molds, fungi and other pathogenic organisms.
- d. All personnel should be made aware of potential hazards posed by foreign objects in bedding materials.

0.11	Audit Questions and Interpretations	Verification				
Q#		Compliant	NC-Minor	NC-Major	N/A	
Q3.4.1	Verify that the supplier has provided written assurance or a Letter of Guarantee - Bedding (R-H) that the wood-based bedding being used is free from PCPs, chromated copper arsenate and other wood-preserving agents.  An email is acceptable as written assurance, as is a label or tag on the bagged bedding.	Full and Partial Validation:  R-H: Letter of Guarantee - Bedding (highly recommended)				
	If wood-based bedding (e.g., wood chips, sawdust) is used for pig housing, has the Site Manager received written assurance or a Letter of Guarantee - Bedding (R-H) that the bedding is free of pentachlorophenol (PCPs), chromated copper arsenate and other wood-preserving agents?					

N/A = not applicable



### LEVELS OF COMPLIANCE – EXAMPLES

### COMPLIANT

The Site Manager has received written assurance or a Letter of Guarantee - Bedding (R-H) that the bedding used on-farm is free from PCPs, chromated copper arsenate and other wood-preserving agents.

### MINOR NON-COMPLIANCE - Not applicable

#### MAJOR NON-COMPLIANCE Timeline: 60 days

> The Site Manager has not received a written assurance or a Letter of Guarantee - Bedding (R-H) that the bedding used on-farm is free from PCPs, chromated copper arsenate and other wood-preserving agents.



### **DEVIATION MEASURES**

If a written assurance or a Letter of Guarantee - Bedding (R-H) is not provided for the wood based bedding, the designated personnel must obtain it from the supplier, and it must include all required elements and be kept on file.

#### Complete record R-2 Incident Report

NOTES			

### Section 3.5

# Other Inputs

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Mandatani
R-4	Monitoring Record	Mandatory

### **SECTION 3.5** OTHER INPUTS

#### **REQUIREMENTS**

- 1. Livestock tattoo ink and markers (crayon and spray) must be approved for use on food animals.
- 2. Livestock markers (crayon and spray) and topical wound treatment used on-farm must not contain any of the substances listed in the table below.

Table 1: Substances Not Approved for Use on Food Animals<sup>1</sup>

Name	Chemical Abstract Service Number
Crystal violet	548-62-9
Leucocrystal violet	603-48-5
Brilliant green	633-03-4
Leucomalachite green	129-73-7
Malachite green	569-64-2

<sup>&</sup>lt;sup>1</sup> Last updated January 2018.

3. Surgical staples are prohibited on-farm.

### **RATIONALE**

- a. Some livestock tattoo ink and markers ingredients can contaminate animal by-products that are used to feed other food animals.
- b. If a tattoo ink or marker is not approved for use on food animals, it may introduce a chemical hazard.
- c. The use of surgical staples for minor on-farm surgeries could result in a physical hazard that could ultimately lead to a food safety risk.

### **GUIDANCE**

- a. Ask the supplier to provide you with the product's material safety data sheet (MSDS). The MSDS should list the ingredients, accompanied by a chemical abstract service (CAS) number. Verify that none of these ingredients include a CAS number listed in Table 1, or ask a specialist, such as a veterinarian or agronomist, to verify if any of the substances listed above are found in the product(s) used on-farm.
- b. Inspect tattoo ink prior to use to ensure it is the same product that you routinely use.
- c. For additional recommendations, refer to Section 8.7 Fomites. Fomites include but are not limited to the following:
  - i. pharmaceutical packaging (e.g., antimicrobials bottle, antibiotics bottle, vaccines bottle, vitamins)
  - ii. medical equipment (e.g., syringes, needles and equipment used for castration, tail docking or teeth clipping)
  - iii. tools (e.g., shovels, scrappers, hammers, hoses, pails, buckets).
  - iv. other farm inputs (e.g., cellphone, footwear, clothing, lunch kit, identification devices, disinfectants, detergents, tattoo inks, tattoo hammers, bedding, baits, enrichment devices and artificial insemination equipment).

Full and	Partial Va	NC-Major lidation: data sheet	N/A
> mate	erial safety		
Full and Partial Validation:  > material safety data sheet > observation			
Full and Partial Validation:  interview  observation			
	Full and Inter	Full and Partial Va	Full and Partial Validation:  Interview



### **LEVELS OF COMPLIANCE – EXAMPLES**

#### COMPLIANT

- The livestock markers (crayon and spray) and topical wound treatment used on-farm are free from prohibited substances.
- The livestock tattoo ink and markers used on-farm are approved for food animals.

### MINOR NON-COMPLIANCE - Not applicable

### MAJOR NON-COMPLIANCE Timeline: 60 days

- The livestock markers (crayon and spray) and topical wound treatment used on-farm contain prohibited substances.
- The livestock tattoo ink and markers used on-farm are not approved for food animals.
- Surgical staples are used on-farm.



### **DEVIATION MEASURES**

- If the livestock markers (crayon and spray), topical wound treatment, tattoo ink and markers are not approved for food animals or contain prohibited substances, the designated personnel must immediately stop using the product and dispose of it according to the manufacturer.
- If surgical staples are used on-farm, the designated personnel must immediately stop using equipment and dispose of it.

Complete record R-2 Incident Report and R-4 Monitoring Record.

NOTES			



## **MODULE 4**







- 4.1 Water Quality
- 4.2 Medicated Water
- 4.3 Feed Quality and Storage
- 4.4 On-Farm Feed Mill
- 4.5 Feed Distribution

### Section 4.1

# Water Quality

Number/ Identifier	Importance	
-	Water Quality Test Result	Mandatory
RECORDS		
R-2	Incident Report	Mandatan
R-4	Monitoring Record	Mandatory
FACT SHEE	ĒΤ	
F-3	Water Sample Collection	-

### **SECTION 4.1**WATER QUALITY

#### **REQUIREMENTS**

- 1. Non-municipal water used in barns must be tested every 12 months for either:
  - a. nitrate levels, which must not exceed 300 mg/L

OR

b. total coliform, which must not exceed 10 colony-forming units (CFU) per 100 mL.

If either the nitrate or total coliform levels exceed the limits above, an action plan must be established to minimize the risk.

- 2. The water test report must include the following:
  - a. farm name, PID number, or legal land description
  - b. test results
  - c. date/year.
- 3. Water disinfectants or additives used to treat water must be approved for use in food animals.

### **RATIONALE**

- a. Water quality is crucial for food safety and for the health and welfare of pigs.
- b. Water may contain a variety of microorganisms, including bacteria and viruses.
- c. Among bacterial contaminants, Salmonella, Leptospira, and Escherichia coli are the most commonly encountered.
- d. Total coliforms in the water may indicate an elevated risk of salmonella infection in the herd.
- e. Due to potential nitrate toxicity, water with a nitrate level above 300 mg/L may reduce average daily weight gain in growing pigs.
- f. Testing can help determine if there is a problem. Testing also confirms the water is safe for the pigs to drink.

### **GUIDANCE**

#### General

- a. The presence of nitrates in water can indicate bacterial contamination. If the nitrate levels in your water are elevated, you should send a water sample for bacterial testing.
- b. The water-quality test sample should be taken at the water's closest access point into the barn, or at an access point immediately after it has passed through the in-barn water treatment system, if applicable.
- c. It is also recommended that you test your water quality at the pigs' drinking source to evaluate the cleanliness of the water lines.
- d. Contamination of incoming water by feces or agricultural chemicals should be actively prevented.
- e. A farm's drainage system should prevent its waste water from contaminating incoming water.
- f. It is recommended that a water treatment system (chlorination or other) be used for any surface water supplied to pigs.
- g. It is recommended that water lines be cleaned regularly, especially prior to administering water-soluble vaccines. Cleaning the water lines will also control the development of biofilm and accumulation of minerals.
- h. For additional information on water sampling, see the Water Sample Collection Fact Sheet F-3.

### 2. Microbiologic hazards

- a. Total coliform: These microorganisms are present in vegetation, animal feces, sewers and soil. A bacterial count is used as an indicator of the microbiological contamination of water.
- b. Fecal coliform: A subgroup of total coliforms, fecal coliforms are found in the intestines of warm-blooded animals. The most common type is *E. coli*, which is considered the best indicator of fecal contamination.
  - i. Fecal coliforms increase the risk of waterborne gastroenteritis (inflammation of the intestines).
  - ii. A fecal coliform count of 1 CFU/100 mL or higher can cause diarrhea in young pigs.
  - iii. It is recommended that the level of fecal coliforms be kept at <1 CFU/100 mL.
  - iv. It is recommended that producers use a recognized laboratory to complete fecal coliform and E. coli tests.
  - v. If your test results come back positive, a re-test is recommended to confirm the result.
- c. Water chlorination treatment will reduce coliform counts effectively.

#### 3. Chemical hazards

- a. The level of total dissolved solids (TDS) is a general indicator of water quality and water hardness.
  - i. Water with a TDS of less than 1,000 mg/L is ideal for all ages of pigs.
  - ii. Water with a TDS of less than 3,000 mg/L is considered satisfactory.
  - iii. Water with a TDS level exceeding 7,000 mg/L can lead to water refusal and serious health problems (e.g., diarrhea, dehydration).
  - iv. Water with a TDS level of over 10,000 mg/L is unfit for animal consumption.
  - v. TDS is also an indication of water hardness. Hard water can result in precipitation or inactivation of drugs delivered through the water medicator. It can also reduce the effectiveness of cleaning and disinfection products.

### 4. PH levels

- a. A low pH results in:
  - i. reduction of pathogen survival
  - ii. the activation of digestive enzyme proteins (pepsinogen to pepsin).
- b. The benefits of the acidification of water in pig production:
  - i. improves digestion
  - ii. supports diversity and microbial balance
  - iii. supports intestinal health and integrity.

### 5. In the event of contamination:

- a. If your test results come back positive, a second test should be done to confirm the result.
- b. Consult an expert to assist you in determining the source of contamination.
- c. Eliminate the root cause of the problem.
- d. Conduct water-quality testing to confirm the effectiveness of the corrective actions, as required.
- e. Implement an action plan to prevent water contamination in the future.

[4-1] 3

0,11	Audit Ougations or distance at the		Verification			
Q#	Audit Questions and Interpretations	Compliant NC-Minor NC-Major		N/A		
	If the barn <b>is</b> supplied by municipal water, answer "Compliant", and go to question 4.1.3. If the barn <b>is not</b> supplied by municipal water, answer "N/A", and complete questions 4.1.1. to 4.1.3.					
Q4.1.1	b. test results c. date (month, day and year). The primary water source must be tested.  If the barn is not supplied by municipal water, was a water test performed in the last 12 months and were all required		Full and Partial Validation:  Iab results			
Q4.1.2	Verify whether a water test was performed for one of the two following options and with the following results:  a. Nitrate level – Verify that the level is at or below 300 mg/L (300 ppm). If the test result exceeds that limit, verify whether a written action plan has been established. The action plan should (at least) include:  i. determining the source of the contamination  ii. using the appropriate water treatment (e.g., chlorination)  iii. testing again for nitrate level, or fecal coliform test  iv. performing a total coliform test.  OR  b. Total Coliform level – Verify that the level is at or below  10 CFU/100 mL. If the test result exceeds that limit, verify that a written action plan has been established. The action plan should (at least) include  i. determining the source of the contamination  ii. using the appropriate water treatment (e.g., chlorination) and iii. testing the total coliform level again.  If an action plan must be developed, consult with the herd veterinarian or water treatment specialist.	> lab re		ns or meas	ures are	
	<ul> <li>a. Is the water test result for nitrate levels at or below 300 mg/L (300 ppm) or, if the test result exceeds this limit, has an action plan been established?</li> <li>b. Is the water test result for total coliform at or below 10 CFU/100 mL or, if the test result exceeds this limit, has an action plan been established?</li> </ul>					

Q#	Audit Questions and Interpretations	Verification			
		Compliant	NC-Minor	NC-Major	N/A
Q4.1.3	Verify that the products used to treat the water, such as disinfectants or additives have been approved for use in food animals. Check material safety data sheets to confirm.	Full and Partial Validation:  review of the material safety data sheet(s)			ety
	If water disinfectants or additives are used to treat the water, are they approved for use in food animals?				

CFU = colony-forming units; N/A = not applicable; PPM = parts per million



### **LEVELS OF COMPLIANCE – EXAMPLES**

#### **COMPLIANT**

- > The site is supplied by municipal water.
- A water test was completed within the last 12 months.
- The water test result met all PigSAFE-required elements.
- The water test result shows:
  - » a nitrate level exceeding 300 mg/L OR
  - a total coliform count of at or above 10 CFU/100 mL BUT an appropriate corrective action plan was established.

### MINOR NON-COMPLIANCE Timeline: 12 months

The water test result shows a nitrate level exceeding 300 mg/L OR a total coliform count above 10 CFU/100 mL but no corrective actions were taken.

### MAJOR NON-COMPLIANCE Timeline: 60 days

- The site is not supplied by municipal water and no water tests were performed in the last 12 months.
- The disinfectant(s) or additive(s) used to treat the water are not approved for use in food animals.



### **DEVIATION MEASURES**

- If your test result exceeds the acceptable level, the designated personnel must develop an action plan, as described in the interpretation of question 4.1.2 a-b, with the herd veterinarian or water treatment specialist. Lab results must be kept on file.
- If water disinfectants or additives that are not approved are observed being used on-farm, the designated personnel must stop using the product and dispose of it according to the manufacturer.

Complete record R-2 Incident Report and R-4 Monitoring Record.

NOTES			

### Section 4.2

# **Medicated Water**

### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
Introduction	Vaccine and Drug Use Policy	_
STANDARD	OPERATING PROCEDURE	
4.2	Medicated Water	Mandatory
RECORDS		
R-1	Verification Record	
R-4	Monitoring Record	
R-B	Training Record	Mandatory
R-P	· ·	Mandatory
R-T	Medication and Vaccine Usage Plan Treatment Record	
R-X	Calibration Record	
R-2	Incident Report	
R-3	Corrective Action Request	Mandatory, if applicable
	Veterinary Prescription	- 15 15 - 5 - 5
R-U	Emergency Contact List	Highly recommended
FACT SHEE	T	
F-4	Water Medicator Calibration	-

### **SECTION 4.2**

### MEDICATED WATER



### THIS SECTION APPLIES ONLY TO SITES USING MEDICATED WATER SINCE THE LAST VALIDATION.

#### **REQUIREMENTS**

- 1. A medication or vaccine administered through drinking water must be entered in the Treatment Record (R-T). The Treatment Record (R-T) must include:
  - a. treatment start date
  - b. treatment end date
  - c. animal, pen, room numbers (IDs)
  - d. number of animals treated
  - e. weight of animals treated
  - f. product name
  - g. dosage (Highly Recommended)
  - h. amount given per animal
  - i. withdrawal period (days)
  - j. safe shipping date
  - k. whether any broken needles are present
  - I. the initials of designated personnel.
- 2. A medication or vaccine administered through drinking water must be entered in the Medication and Vaccine Usage Plan Record (R-P). This record must include:
  - a. a list of all injectable, oral, topical and water-administered medications and vaccines used during the last 12 months
  - b. the product names
  - c. the drug identification numbers (DINs) or CFIA numbers for autogenous vaccines (unless a prescription is available)
  - d. an indication whether prescriptions are available and up to date
  - e. the reasons for product usage
  - f. the dosages
  - g. the methods of administration
  - h. cautions and warnings
  - i. the location where medications are stored
  - i. the medication withdrawal periods.
- 3. A Medicated Water SOP (SOP 4.2) must be developed and include the following:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong)
  - c. the verification measure.
- 4. The Medicated Water SOP (SOP 4.2) must be adequately implemented.

For your convenience, templates for the Medicated Water SOP (SOP 4.2) and records listed above have been developed for you to use.

#### **RATIONALE**

- a. It is essential to treat the right pigs with the right medication at the right dosage at the right time.
- b. Following the Medicated Water SOP (SOP 4.2) helps ensure that all medication withdrawal periods have been met prior to sending pigs to slaughter.
- c. It is crucial that medicated water only be administered according to the instructions on the label or on the prescription issued by a licensed veterinarian.
- d. The frequent calibration of the water medicator by trained personnel is crucial to ensure the correct amount of medication is distributed.
- e. Identifying treated pigs reduces the risk of drug residue in pork.
- The Medication and Vaccine Usage Plan (R-P) and the Treatment Record (R-T) allow the producer to demonstrate that medications and vaccines use on-farm are administered at the approved dosage and respect the PigSAFE Drug Use Policy.

#### **GUIDANCE**

- a. It is recommended that pigs be identified by pen(s) or group(s).
- b. Read the manufacturer's directions on the use of your water medicator and ensure that it is properly set up.
- The calibration of the water medicator should be:
  - completed according to the manufacturer's specifications or the veterinarian's instructions and
  - ii. recorded.
- d. A Water medicator calibration Fact Sheet (F-4) is available in the Fact Sheet section of this manual.
- e. If necessary, appropriate stabilizers or chlorine binders should be used to ensure medications and vaccines will not be damaged by the stock solution or water.
- f. Water lines can become contaminated with accumulated organic matter, pathogens and mineral buildup. It is recommended that water lines and containers (e.g., bulk tank) used to mix the stock solution be cleaned prior to administering vaccines or other medication via water to ensure full treatment efficacy.
- g. Permanently colour-coding water valves and lines can help to ensure that only targeted pigs are treated.
- h. The solution should be mixed continuously to ensure no precipitation.
- It is recommended that a water meter be used to measure the volume of water used.
- Water consumption may increase 15% to 50% when barn temperatures exceed the upper limit for the pigs' comfort level.
- Table 1, on the following page, provides an overview of typical water consumption by type of pig.

MODULE 4

SECTION 4.2

**Table 1: Water Consumption by Swine** 

Туре	Weight Range (kg)	Water Requirement Range (L/Day) <sup>1</sup>	Average Water Use (L/Day)²
Weaner	7 to 22	1.0 to 3.2	2.0
Feeder pig	23 to 36	3.2 to 4.5	4.5
	36 to 70	4.5 to 7.3	4.5
	70 to 110	7.3 to 10	9
Boar or gestating sow		13.6 to 17.2	15
Lactating sow <sup>3</sup>	_	18.1 to 22.7	20

<sup>&</sup>lt;sup>1</sup> A result of the animals' environment and management.

Source: Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) fact sheet, 2015.

### ? AUDIT QUESTIONS

<b>.</b>	Audit Questions and Internactations		,	Verificatio	n	
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	NC-Critical	N/A
Q4.2.1	Is water-administered medication used on-farm? (If not, go to Section 4.3)					
Q4.2.2	Verify that medications and vaccines administered through the drinking water are recorded on the Treatment Record (R-T).  Full and Partial Validation:  R-T: Treatment Record  R-P: Medication and Vaccine Usage Plan  veterinary prescription			Plan		
	Are water-administered medications and vaccines recorded on the Treatment Record (R-T)?					
Q4.2.3	Verify that medications and vaccines that are administered through the drinking water are recorded on the Medication and Vaccine Usage Plan (R-P).	Full and Partial Validation:  R-T: Treatment Record  R-P: Medication and Vaccine Usage Plan  veterinary prescription			Plan	
	Are water-administered medications and vaccines recorded on the Medication and Vaccine Usage Plan (R-P)?					

 $<sup>^{2}</sup>$  Typical consumption over a year on a daily basis under average agricultural conditions in Ontario.

<sup>&</sup>lt;sup>3</sup> Includes unweaned piglets.

Audit Questions and Interpretations	Compliant	NC-Minor	NIC Major		
			INC-IVIAJOI	NC-Critical	N/A
rify that the Medicated Water SOP (SOP 4.2) includes required elements:  the protocol  deviation measures describing what to do if something goes wrong  the verification measures (to be completed yearly).  required elements are listed on SOP 4.2 Medicated Water.  the site have a Medicated Water SOP (SOP 4.2) that incomes					
. the protocol with all PigSAFE-required elements?					
<ul> <li>the deviation measures describing what to do if something goes wrong?</li> </ul>					
the verification measures?					
rify that the Medicated Water SOP (SOP 4.2) is adequately plemented by:  cross-referencing the Treatment Record (R-T) with the existing prescriptions  cross-referencing the Treatment Record (R-T) with the Medication and Vaccines Usage Plan (R-P).	<ul> <li>R-B:</li> <li>R-P:</li> <li>R-T:</li> <li>R-1:</li> <li>R-2:</li> <li>Veter</li> <li>obse</li> </ul>	Training Re Medication Freatment Verification ncident Re Corrective inary preservation (fu	ecord n and Vacc Record n Record eport Action Re cription	quest	Plan
as a Medicated Water SOP (SOP 4.2) been implemented equately?					
	required elements:  the protocol deviation measures describing what to do if something goes wrong the verification measures (to be completed yearly). required elements are listed on SOP 4.2 Medicated Water.  bes the site have a Medicated Water SOP (SOP 4.2) that inc. the protocol with all PigSAFE-required elements?  the deviation measures describing what to do if something goes wrong?  the verification measures?  rify that the Medicated Water SOP (SOP 4.2) is adequately plemented by: cross-referencing the Treatment Record (R-T) with the existing prescriptions cross-referencing the Treatment Record (R-T) with the Medication and Vaccines Usage Plan (R-P).	required elements: . the protocol . deviation measures describing what to do if something goes wrong . the verification measures (to be completed yearly). required elements are listed on SOP 4.2 Medicated Water.  bes the site have a Medicated Water SOP (SOP 4.2) that includes: . the protocol with all PigSAFE-required elements?  b. the deviation measures describing what to do if something goes wrong?  c. the verification measures?  Full and  Res:  Res:	required elements:  . the protocol . deviation measures describing what to do if something goes wrong . the verification measures (to be completed yearly). required elements are listed on SOP 4.2 Medicated Water.  bes the site have a Medicated Water SOP (SOP 4.2) that includes:  . the protocol with all PigSAFE-required elements?  . the deviation measures describing what to do if something goes wrong?  . the verification measures?  Full and Partial Vallation was included.  Res. Training Resembly was included.	required elements:  . the protocol  . deviation measures describing what to do if something goes wrong  . the verification measures (to be completed yearly). required elements are listed on SOP 4.2 Medicated Water.  Des the site have a Medicated Water SOP (SOP 4.2) that includes:  . the protocol with all PigSAFE-required elements?  . the deviation measures describing what to do if something goes wrong?  . the verification measures?  Full and Partial Validation:  > R-B: Training Record  > R-B: Training Record  > R-P: Medication and Vacciplemented by:  > Cross-referencing the Treatment Record (R-T) with the existing prescriptions  > Cross-referencing the Treatment Record (R-T) with the Medication and Vaccines Usage Plan (R-P).  Full and Partial Validation:  > R-B: Training Record  > R-P: Medication and Vacciplemented  > R-1: Verification Record  > R-2: Incident Report  > R-3: Corrective Action Re  > veterinary prescription  > observation (full validation)  interview	required elements:  . the protocol  . deviation measures describing what to do if something goes wrong  . the verification measures (to be completed yearly).  required elements are listed on SOP 4.2 Medicated Water.  bes the site have a Medicated Water SOP (SOP 4.2) that includes:  . the protocol with all PigSAFE-required elements?  . the deviation measures describing what to do if something goes wrong?  . the verification measures?  Full and Partial Validation:  > Res Training Record  > Res Training



### **LEVELS OF COMPLIANCE – EXAMPLES**

### COMPLIANT

- > The Medicated Water SOP (SOP 4.2) is complete and adequately implemented.
- > All records are complete and up to date.

### MINOR NON-COMPLIANCE Timeline: 60 days

> Some elements have not been written down or are missing from the Medicated Water SOP (SOP 4.2) or records.

### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Medicated Water SOP (SOP 4.2) is not available.
- The records are not available.
- There is evidence of deviations that were not corrected (e.g., the wrong group of pigs was treated and no corrective action was implemented.)
- > Some elements of the Medicated Water SOP (SOP 4.2) were not implemented (e.g. has the water medicator been calibrated?).

### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- > The slaughterhouse found drug residue in the meat without prior notice from the Site Manager.
- > The slaughterhouse notified the PigSAFE | PigCARE Provincial Coordinator regarding the presence of drug residue.



### **SOP 4.2** MEDICATED WATER



This standard operating procedure (SOP) may be used as a ten If you develop your own version, all required elements must be	•	PID#:
Site Manager:	Person in charge:	

### **PROTOCOL**

	Designated personnel must follow this protocol every time medicated water is administered.	Applied On-Farm	Importance
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		
2	Flush the water line, medication system and stock solution container before a treatment is given.		
3	Ensure the water medication system is calibrated at least once a year or in accordance with manufacturer instructions.  Identify what method is used to calibrate the water medication system so as to ensure stock solution is distributed in the correct proportion:		
4	Ensure the dosage of the stock solution (concentration) is accurate according to the veterinarian's prescription or the manufacturer's instructions, as applicable.		
5	Ensure the medicated water is delivered to the targeted pigs.  a. Ensure water lines are clearly identified.  b. Visually inspect valves prior to distributing the medicated water to ensure it goes only to the targeted pigs.  c. Other:		Mandatory
6	Ensure the targeted pigs are identified, treated, and segregated (e.g., in specific pens or rooms).		
7	Visually inspect the mixed solution to ensure the medication was adequately mixed (e.g., no visible compounds have formed).		
8	Visually inspect the volume of medicated water dispersed over the appropriate period.		
9	Write down the treatments in the Treatment Record (R-T).		
10	Other good production practices:		Highly recommended

**DEVIATION MEASURES** 

	What happens if something goes wrong?  If an error occurs, designated personnel must take the following corrective actions.	Applied On-Farm	Importance
1	If necessary, identify the pigs and keep them segregated on-site until the withdrawal period is complete.		
2	Notify concerned parties (such as marketing agencies, slaughterhouses [per their requirements], the Site Manager, other purchasers) and consult with your veterinarian.		
3	Flush and rinse the water lines with non-medicated water.		
	At least one of these actions must be taken:		Mandatory
4	a. Redirect the treated water to the right place.		
	b. Adjust the dosage according to the deviation identified.		
	c. Investigate why the dispersal of the stock solution was not as expected (if applicable).		
5	Record the deviation on an Incident Report (R-2) and record when adequate corrective actions were implemented.		
6	Other good production practices:		Highly recommended
			'
LEVE	ELS OF NON-COMPLIANCE FOR CRITICAL CONTROL POINTS		
	Minor: The corrective action must be completed within 60 days.		
	Major: (prior to shipping pigs): The corrective action must be completed within 30 c	lays.	
	Critical: The corrective action must be completed within 24 hours.		

### **VERIFICATION MEASURES**

	Designated personnel must complete the following verification measures:  Anyone who has completed PigSAFE training can be designated to complete the verification measures.	Applied On-Farm	Importance
1	Verify treatment records at least once a year to ensure the documents have been duly completed, and the dosages are correct.		
2	Verify that the water medication system is calibrated at least once a year.		
3	Update the medicated water protocols at least every year or whenever there is a change to water-handling equipment or management.		Mandatory
4	Observe the person in charge of the SOP to ensure that the methods followed comply with the written SOP.		
5	Complete, sign and date the Verification Record (R-1) once a year.		

### **RECORDS**

Name of Record		Importance
R-B	Training Record	
R-P	Medication and Vaccine Usage Plan	
R-T	Treatment Record	
R-X	Calibration Record	
R-1	Verification Record	Mandatory
R-2	Incident Report (if applicable)	
R-3	Corrective Action Request (if applicable)	
R-4	Monitoring Record	
	Veterinary prescription (if applicable)	
R-U	Emergency Contact List	Highly recommended

IOTES			

### Section 4.3

# Feed Quality and Storage

### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Mandatan
R-4	Monitoring Record	Mandatory
R-L	Farm Plan	Highly recommended
K-L	Farm Plan	recommende 

### **SECTION 4.3**

### FEED QUALITY AND STORAGE

#### **REQUIREMENTS**

- 1. Farm areas used for storing and mixing feed and feed ingredients must be:
  - a. clean and adequately maintained
  - b. kept dry
  - c. free of easily detectable bird and animal feces (organic materials)
  - d. free of chemical contaminants (e.g., pesticides, cleaning and disinfection products, oil, fertilizer).
  - e. free of foreign material (physical hazards (e.g., metal, screw, etc)).
- 2. Feed and feed-ingredient bins, distribution lines and feed-transfer systems must all be clearly identified.

### **RATIONALE**

- a. Feed and feed ingredients stored inadequately can become contaminated by animal or bird feces. These can introduce pathogenic organisms or serve as a base for the growth of mold and other fungi.
- b. Identifying distribution lines and silos helps to prevent errors during the manufacturing or distribution of feed and feed ingredients.
- c. Feed and feed ingredients can be contaminated by inadequately stored agricultural chemicals, which can be harmful to pigs and pose a risk to food safety.
- d. Birds, rodents and pets (e.g., cats and dogs) can transmit
  - i. enterobacteria (e.g., Salmonella) responsible for gastroenteritis, and
  - ii. parasites (e.g., Toxoplasma responsible for toxoplasmosis).

(see Sections on Pest Management and Domesticated Animals for further information)

### **GUIDANCE**

- a. Chemical products should be used and stored according to the manufacturer's instructions, completely separate from feed and water equipment and activities.
- b. It is crucial to keep all types of chemical contaminants away from the pigs to avoid consumption by the pigs and, consequently, the contamination of the meat.
- c. A plan indicating the location of buildings, feed bins and silos should be provided to suppliers Farm Plan Record (R-L).
- d. Inadequate storage or poor handling of feed can result in contamination or cross-contamination with drug residue, chemical products, pathogens, mycotoxins, and animal feces. It is important to cover feed bins and carts to minimize access by birds and rodents.

### ? AUDIT QUESTIONS

<b>.</b>		Verification					
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A		
Q4.3.1	Verify that the feed and feed ingredients are stored and mixed in an environment that is:  a. clean and adequately maintained b. kept dry c. free of easily detectable bird and animal feces (organic materials) d. free of chemical contaminants (e.g., pesticides, cleaning and disinfection products, oils, fertilizers) e. free of foreign materials (physical hazards (eg., metal, screw,etc))	Full Valid					
	Are the farm areas used for storing and mixing feed and/or feed ingred	dients:					
	a. clean and adequately maintained?						
	b. kept dry?						
	c. free of easily detectable bird and animal feces (organic materials)?						
	d. free of chemical contaminants (e.g., pesticides, cleaning and disinfection products, oils, fertilizers)?						
	e. free of foreign materials (physical hazards (eg., metal, screw,etc))?						
	Verify that all of the following items are clearly identified:  a. feed and feed ingredient bins  b. feed distribution and transfer lines  c. other feed transfer systems (e.g., switches, carts, pails)  Full and Partial Validation:  observation  interview						
Q4.3.2	Are all of the following items clearly identified:						
	a. feed and feed ingredient bins?						
	b. feed distribution and transfer lines?						
	c. other feed transfer systems (e.g., switches, carts, pails)						

N/A = not applicable



### LEVELS OF COMPLIANCE - EXAMPLES

#### **COMPLIANT**

> Farm storage and mixing feed areas meet requirements.

### MINOR NON-COMPLIANCE - Not applicable

### MAJOR NON-COMPLIANCE Timeline: 60 days

- Farm storage and mixing feed areas are not clean and adequately maintained.
- Farm storage and mixing feed areas are not kept dry.
- Farm storage and mixing feed areas are significantly contaminated by animal or bird feces.
- Farm storage and mixing feed areas are also used to store chemical products.
- Farm storage and mixing feed areas are not free of foreign materials.
- Feed bins, feed distribution and transfer lines, and other feed transfer systems are not all clearly identified.



### **DEVIATION MEASURES**

- If farm areas used for storing and mixing feed and feed ingredients are not kept clean and free from contaminants, the designated personnel must ensure those areas are kept clean, dry, free of significant contamination from bird or animal feces, and free of chemical contaminants and foreign materials.
- If the silos, feed bins, feed lines are not clearly identified, the designated person must ensure all feed storage and feed-transfer systems are clearly identified.

Complete record R-2 Incident Report and R-4 Monitoring Record.

### Section 4.4

## **On-Farm Feed Mill**

### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
Introduction	Vaccine and Drug Use Policy	
STANDARI	O OPERATING PROCEDURE	
4.4	Feed Sequencing, Mixing and Distribution	Mandatory
RECORDS		
R-1	Verification Record	
R-4	Monitoring Record	
R-B	Training Record	Mandaton
R-R	Ration Used On-Farm Record	Mandatory
R-S	Feed Sequencing, Mixing and Distribution Record	
R-X	Calibration Record	
R-2	Incident Report	
R-3	Corrective Action Request	Mandatory, if applicable
	Veterinary Prescription	арриосоло
R-U	Emergency Contact List	Highly recommended

### **SECTION 4.4**

### ON-FARM FEED MILL



THIS SECTION IS FOR SITES WITH ON-FARM FEED MILLS USING MEDICATED FEED ONLY, INCLUDING ON-FARM LIQUID FEEDING SYSTEMS.

#### **REQUIREMENTS**

- 1. All medicated feed that is batch-mixed (including feed for other species) and sequenced on-farm must be logged in the Feed Sequencing, Mixing and Distribution Record (R-S) and must include all of the following:
  - a. date
  - b. ration name or number
  - c. an indication whether the ration was medicated or not
  - d. an indication whether or not it was a flush ration
  - e. the quantity produced
  - f. the destination
  - g. the initials of the designated individual
  - h. dosage (Highly Recommended)
- 2. A Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) must be developed and include all of the following:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong)
  - c. the verification measure.
- 3. The Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) for rations mixed on-farm must be adequately implemented.

For your convenience, templates for the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) and records listed above have been developed for you to use.

### **RATIONALE**

- a. These measures ensure that medicated feed (with or without withdrawal periods) is mixed and distributed to only targeted pigs to prevent sending pigs to slaughter with drug residue.
- b. To ensure adequate withdrawal times and to reduce the risk of cross-contamination, feed bins containing a medicated feed that has a withdrawal period must be emptied prior to re-filling the feed bin with the non-medicated feed that will be given to pigs going to slaughter.
- c. The Feed Sequencing, Mixing and Distribution Record (R-S) as well as the Ration Used On-Farm Record (R-R) allow the producer to demonstrate that feed medications used on-farm are administered at approved dosages and respect the PigSAFE Drug Use Policy.

#### **GUIDANCE**

- a. Complete the Feed Sequencing, Mixing and Distribution Record (R-S):
  - Record any changes to feed formulations, sequencing changes or other protocol changes.
     Date and describe each change and indicate who reviewed and authorized the change.
  - ii. If you repeat the same procedure day after day, it is sufficient to mark on a calendar that you mixed the feed as outlined in your written procedure.
  - iii. When you change the formulation or the sequence, write down how the procedure was changed, even if the change was in place for only one day.

- b. It is recommended that you use a feed supplier that follows a feed-quality assurance program. A Hazard Analysis and Critical Control Points (HACCP) or ISO quality program for feed and feed ingredients reduces the potential for contamination by hazards such as drug residue, chemical products, pathogens, mycotoxins and animal feces. A feed-quality program also provides feed mill personnel and truckers with training on how to prevent cross-contamination.
- c. To prevent cross-contaminating non-medicated feed with medicated feed, it is recommended that you do the following:
  - i. empty any medicated feed remaining in the feed mill or in the auger or blower pipes.
  - ii. record when the feed bins and feed legs are emptied.
  - iii. keep a sequencing record for the on-farm feed delivery truck.
  - iv. consider that an electrostatic charge can cause medications to cling to the inside of the mill.
  - v. consider that preparing rations for other species can also be a source of cross-contamination.
- d. It is recommended that you identify why the feed medication is needed. Feed medication should be used only on a veterinarian's recommendation. Each feed medication used on-farm should be identified, as well the reason why each medication is being used. Products with zero withdrawal times are still considered medications.
- e. Finisher rations should not be mixed immediately after making a batch of medicated feed; thorough flushing is required first.
- f. Regardless whether feed is delivered or prepared at the farm, it should be visually inspected to ensure the appropriate rations are delivered to the correct production unit and bins.
- g. It is recommended that periodic feed tests be done to detect medication residue, which will ensure that proper levels of medication are being delivered. When samples are kept, the weight of the samples should be between 0.5 kg and 1 kg. These should be kept for at least six months and stored in adequately sealed containers to protect them from rodents and birds. Feed can be tested at a commercial feed mill.
- h. It is recommended that you ensure the feed bins are emptied prior to refilling them with new feed. Record when the feed bins are emptied.
- i. It is recommended that you reconcile the feed medication inventory with the expected use of the medications.
- j. It is recommended that you record on the Incident Report (R-2) when:
  - i. a premixed or complete medicated feed is delivered at the wrong dose
  - ii. the wrong product is delivered.
- k. When purchasing or producing your own feedstuffs, especially grain, consider passing it over a magnet or through a screen to remove possible foreign objects.
- I. Consult with a veterinarian or nutritionist for more details on handling mycotoxins in feed.
- m. Chlorinated hydrocarbon insecticides such as toxaphene, chlordane, aldrin and lindane persist for long periods in the environment. They can concentrate in fat deposits and can be passed on to humans. Laws now restrict chlorinated hydrocarbon usage. Producers should require that incoming feed supplies be completely free of these agents.
- n. Medicated complete feeds, medicated supplements and medicated premixes refer to products in which a feed-grade medication is included by the feed manufacturer. These products may be sold in bulk or bagged form. Premixes will contain the most concentrated amount of medication; complete feeds will have the lowest.
- o. Having two, smooth walled bins may help ensure the bin with medicated feed is completely emptied prior to refilling with non-medicated feed.
- p. Canadian Food Inspection Agency requirements should be respected when medicated feed is mixed on-farm.

### ? AUDIT QUESTIONS

	Audit Questions and Interpretations		Verification				
Q#			NC-Minor	NC-Major	NC-Critical	N/A	
Q4.4.1	Verify that all feed that is batch-mixed (including feed for other species) and sequenced on-farm is recorded on a Feed Sequencing, Mixing and Distribution Record (R-S).  Is medicated feed that is batch-mixed (including feed	Full and Partial Validation:  R-S: Feed Sequencing, Mixing and Distribution Record  R-R: Ration Used On-Farm Record  veterinary prescription(s)					
	for other species) and sequenced being recorded on a Feed Sequencing, Mixing and Distribution Record (R-S)?						
Q4.4.2	Verify that the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) includes all required elements:  a. the protocol  b. the deviation measures describing what to do if something goes wrong  c. the verification measures.  All required elements are listed on SOP 4.4 Feed Sequencing, Mixing and Distribution.  The SOP 4.4 Feed Sequencing, Mixing and Distribution is mandatory only for sites with an on-farm feed mill.  Does the site have a Feed Sequencing, Mixing and Distribution  a. the protocol with all PigSAFE-required elements?  b. the deviation measures describing what to do if something goes wrong?  c. the verification measures?	Full and Partial Validation:  SOP 4.4 Feed Sequencing, Mixing and Distribution SOP  tion SOP (SOP 4.4) that includes:					
Q4.4.3	<ul> <li>Verify that the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) for rations mixed on-farm is adequately implemented by ensuring: <ul> <li>a. the Feed Sequencing, Mixing and/or Distribution Record (R-S) is cross-referenced with the Ration Used On-Farm Record (R-R), and prescriptions</li> <li>b. the Feed Sequencing, Mixing and Distribution Record (R-S) demonstrates that medicated feed is being sequenced adequately (flush)</li> <li>c. the Ration Used On-Farm Record (R-R) is crossed-referenced with the feed delivery slips to ensure feed is delivered to the proper bin and distributed to the right pigs</li> <li>d. the Vaccine and Drug Use Policy is respected by verifying that all prescriptions (if applicable), are available.</li> </ul> </li> </ul>	Full and Partial Validation:  R-B: Training Record  R-R: Ration Used On-Farm Record  R-S: Feed Sequencing, Mixing and Distribution Record (including calibration)  R-X: Calibration Record - On-Farm Feed Mill  R-1: Verification Record  R-2: Incident Report  R-3: Corrective Action Request  feed delivery slips  veterinary prescription  feed performance test results  observation (full validation only)  interview					
	Has the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) been adequately implemented?						

N/A = not applicable; SOP = standard operating procedure



### LEVELS OF COMPLIANCE – EXAMPLES

### COMPLIANT

- > The Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) is complete and adequately implemented.
- The records are complete and up to date.

### MINOR NON-COMPLIANCE Timeline: 60 days

Some elements were not written down or are missing from the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) or the records.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) is not available.
- > The records are not available.
- There is evidence of deviations that were not corrected (e.g., the wrong group of pigs was treated and the deviation was not recorded).
- Some elements of the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) were not implemented (e.g., feed performance test not completed once every 3 years.)

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- > The slaughterhouse found drug residue in the meat without having been given prior notice of this by the Site Manager.
- The slaughterhouse notified the Provincial Coordinator for the PigSAFE | PigCARE programs about the presence of drug residue.

NOTES			



### **SOP 4.4** FEED SEQUENCING, MIXING AND DISTRIBUTION

This standard operating procedure (SOP) may be used as a ter If you develop your own version, all required elements must be		PID#:
Site Manager:	Person in charge:	

### FEED SEQUENCING AND MIXING PROTOCOL

This SOP must be implemented for on-farm feed mill using medicated feed.

	Designated personnel must follow the protocol below every time medicated feed is sequenced and mixed on-farm:	Applied On-Farm	Importance	
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.			
2	Ensure dosage is accurate according to the manufacturer's instructions, CMIB guidelines and/or the veterinarian's prescription, as applicable.  a. What methods do you use to make sure the dosage used in the ration is adequate? (See guidance in Section 4.4 for example.)			
3	Calibrate on-farm feed manufacturing equipment once a year and record your calibration on a Calibration Record (R-X):  a. Describe the method used to calibrate the feed mill:  AND  Conduct performance testing on a feed sample every three years and record the result on a Calibration Record (R-X).		Mandatory	
4	Maintain the Feed Sequencing, Mixing and Distribution Record (R-S):  a. Record each batch mixed, including feed manufactured for other species.  b. Record which batch is considered a flush.  c. Describe sequencing method(s) used: Ensure no finisher ration is mixed after a batch of medicated feed without physical clean-out, flushing or sequencing when feed is intended for animals going to slaughter			
5	Visually inspect processing equipment and processed feed on a regular basis (to ensure ration uniformity).			
6	Other good production practices:		Highly recommended	

FEED DISTRIBUTION PROTOCOL

	Designated personnel must follow this protocol each time feed is distributed on-farm:	Applied On-Farm	Importance
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		
2	Describe how you ensure feed bins containing medicated feed requiring withdrawal time are emptied prior to filling the feed bin with non-medicated feed before feeding pigs going to slaughter (the start of a slaughter withdrawal period):		Mandatory
3	Describe how you ensure feed is distributed to the targeted pigs only:  (e.g., No medicated feed is given to finisher pigs or pigs going to slaughter (respecting the rations used on-farm and the feed sequencing records)).		
4	Other good production practices:		Highly recommended

### **DEVIATION MEASURES**

	What happens if something goes wrong? If an error occurs, designated personnel must take following corrective actions.	Applied On-Farm	Importance		
1	If necessary, identify and keep the pigs segregated on-site until the withdrawal period is complete.				
2	Notify concerned individuals (such as marketing agencies, slaughterhouses [per their requirements], the Site Manager, other purchasers) and consult with your veterinarian to determine the appropriate withdrawal period.				
3	Describe how to dispose of contaminated feed:  (e.g. Apply the adequate withdrawal period to all pigs fed with medicated feed, if necessary or transfer the feed to another production stage where it does not cause risk of residues in accordance with veterinarian instructions.)		Mandatory		
4	Flush the feed system, if necessary. (If possible, use a non-medicated feed to flush the lines. Otherwise, flush the feed system with corn (or another grain according to a validated protocol and/or according to veterinarian instructions)).				
5	<ul><li>Identify the nature of the deviation, for example:</li><li>a. The medication deviated from the manufacturer's label or prescription dosage (critical limits).</li><li>b. The feed was delivered to the wrong group of pigs.</li></ul>		Mandatory		
6	Record the deviation on an Incident Report (R-2) and record when adequate corrective actions were implemented.				
7	Other good production practices:		Highly recommended		
LEVE	LS OF NON-COMPLIANCE FOR CRITICAL CONTROL POINT				
	Minor: The corrective action must be completed within 60 days.				
	Major: (prior to shipping pigs): The corrective action must be completed within 30 days.				

Critical: The corrective action must be completed within 24 hours.

### **VERIFICATION MEASURES**

Designated personnel must complete the following verification measures:  Anyone who has completed PigSAFE training can be designated to complete the verification measures.			Importance
1	Verify the Ration Used On-Farm Record (R-R) and the Feed Sequencing, Mixing and Distribution Record (R-S) at least once a year to ensure the documents have been completed.		
2	Verify the Feed Sequencing, Mixing and Distribution SOP (SOP 4.4) is reviewed annually or each time management changes occur and/or equipment is modified.		Mandatory
3	Observe the person in charge of the SOP to ensure that the methods followed comply with the written SOP.		
4	Complete, sign and date the Verification Record (R-1) once a year.		

### **RECORDS**

Name of Record		Importance
R-B	Training Record	
R-R	Rations Used On-Farm Record	
R-S	Feed Sequencing, Mixing and/or Distribution Record	
R-X	Calibration Record	
R-1	Verification Record	Mandatory
R-2	Incident Report (if applicable)	
R-3	Corrective Action Request (if applicable)	
R-4	Monitoring Record	
	Veterinary prescription (if applicable)	
R-U	Emergency Contact List	Highly recommended

### Section 4.5

# **Feed Distribution**

### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURE	
4.5	Feed Distribution	Mandatory
RECORDS		
R-1	Verification Record	
R-4	Monitoring Record	NA sa alata w
R-B	Training Record	Mandatory
R-R	Ration Used On-Farm Record	
R-2	Incident Report	
R-3	Corrective Action Request	Mandatory, if applicable
	Veterinary Prescription	.
R-U	Emergency Contact List	Highly recommended

### **SECTION 4.5**

### FEED DISTRIBUTION



### THIS SECTION IS FOR SITES WITH NO ON-FARM FEED MILL ONLY.

#### **REQUIREMENTS**

- 1. A Feed Distribution SOP (SOP 4.5) must be developed and include all of the following:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong)
  - c. the verification measure.
- 2. The Feed Distribution SOP 4.5 must be adequately implemented.

For your convenience, a template for the Feed Distribution SOP (SOP 4.5) has been developed for you to use.

### **RATIONALE**

- a. These measures ensure that medicated feed, with or without withdrawal periods, is adequately distributed only to targeted pigs to prevent sending pigs to slaughter with drug residue.
- b. These measures also ensure that feed bins containing medicated feed that requires a withdrawal time are emptied prior to filling the feed bin with the non-medicated feed that will be given to pigs going to slaughter. This ensures that adequate withdrawal times have been met and reduces the risk of cross-contamination.

#### **GUIDANCE**

- Regardless whether the feed is delivered or prepared at the farm, it should be visually inspected to ensure the right rations are delivered to the correct production unit and bins.
- b. It is recommended that feed bins be emptied prior to refilling them with new feed. Record when the feed bins are emptied.
- c. It is recommended that a sequencing record for the on-farm feed delivery truck be kept to avoid cross-contamination of non-medicated feed with medicated feed.
- d. It is recommended that you record on the Incident Report (R-2) when
  - i. a premixed or complete medicated feed is delivered with the wrong dose, or
  - ii. the wrong product is delivered.

### ? AUDIT QUESTIONS

	Audit Questions and Interpretations		Verification					
Q#			NC-Minor	NC-Major	NC-Critical	N/A		
Q4.5.1	Verify that the Feed Distribution SOP (SOP 4.5) includes all required elements:  a. the protocol  b. the deviation measures describing what to do if something goes wrong  c. the verification measures.  All required elements are listed on SOP 4.5 Feed Distribution.  The SOP 4.5 Feed Distribution is mandatory for all sites that do not have an on-farm feed mill.  Does the site have a Feed Distribution SOP (SOP 4.5) that includes:							
	a. the protocol with all PigSAFE-required elements?  b. the deviation measures describing what to do if something goes wrong?  c. The verification measures?							
Q4.5.2	Verify that the Feed Distribution SOP (SOP 4.5) has been adequately implemented by ensuring all required elements are in place:  a. cross-reference the Ration Used On-Farm Record (R-R) and the feed delivery slips to ensure feed is delivered to the proper bin and distributed to the right pigs.	<ul><li>R-2: Incident Report</li><li>R-3: Corrective Action Request</li></ul>						
	Has the Feed distribution SOP (SOP 4.5) been adequately implemented?							

N/A = not applicable; SOP = standard operating procedure



### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

- The Feed Distribution SOP (SOP 4.5) is complete and has been adequately implemented.
- The records are complete and up to date.

### MINOR NON-COMPLIANCE Timeline: 60 days

Some elements have not been written down or or missing from the Feed Distribution SOP (SOP 4.5) or records.

### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Feed Distribution SOP (SOP 4.5) is not available.
- > The records are not available.
- A deviation, such as treating of the wrong group of pigs, was not recorded.
- Some of the required elements of the Feed Distribution SOP (SOP 4.5) have not been adequately implemented.

### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- > The slaughterhouse found drug residue in the meat without being given prior notice of this by the Site Manager.
- The slaughterhouse notified the PigSAFE | PigCARE Provincial Coordinator that drug residue had been found.



### **SOP 4.5** FEED DISTRIBUTION



This standard operating procedure (SOP) can be used as a tem If you develop your own version, all required elements must be	•	PID#:
Site Manager:	Person in charge:	

### **PROTOCOL**

	Designated personnel must follow this protocol every time feed is distributed on-farm.	Applied On-Farm	Importance
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		
2	Describe how you ensure feed bins containing medicated feed requiring withdrawal time are emptied prior to filling the feed bin with non-medicated feed before feeding pigs going to slaughter (the start of a slaughter withdrawal period).		Mandatory
3	Describe how you ensure feed is distributed to the targeted pigs:  (e.g., No medicated feed is given to finisher pigs or pigs going to slaughter (respecting the rations used on-farm and the feed sequencing records)).		
4	Other good production practices:  a. Feed truck sequencing record: It is recommended that a sequencing record for the on-farm feed truck be maintained.		Highly recommended

### **DEVIATION MEASURES**

	What happens if something goes wrong? If an error occurs, designated personnel must take following corrective actions.	Applied On-Farm	Importance
1	If necessary, identify and keep the pigs segregated on-site until the withdrawal period is complete.		
2	Notify concerned parties (such as marketing agencies, slaughterhouses [per their requirements], the Site Manager, other purchasers) and consult with your veterinarian to determine the appropriate withdrawal period.		
3	Describe how to dispose of contaminated feed:  (e.g. Apply the adequate withdrawal period to all pigs fed with medicated feed, if necessary or transfer the feed to another production stage where it does not cause risk of residues in accordance with veterinarian instructions.)		Mandatory
4	Flush the feed system, if necessary. (If possible, use a non-medicated feed to flush the lines. Otherwise, flush the feed system with corn (or another grain according to a validated protocol and/or according to veterinarian instructions)).  Apply the adequate withdrawal period to all pigs fed with medicated feed.		Mandatory
5	Identify the nature of the deviation, for example:  a. The medication/dosage differed from that specified on the manufacturer's label or veterinary prescription (critical limits).  b. The feed was delivered to the wrong group of pigs.		
6	Record the deviation on an Incident Report (R-2) and record when adequate corrective actions were implemented.		
7	Other good production practices:		Highly recommended

### LEVELS OF NON-COMPLIANCE FOR CRITICAL CONTROL POINT

Minor: The corrective action must be completed within 60 days.
Major: (prior to shipping pigs): The corrective action must be completed within 30 days.
Critical: The corrective action must be completed within 24 hours.

### **VERIFICATION MEASURES**

	Designated personnel must complete the following verification measures:  Anyone who has completed PigSAFE training can be designated to complete the verification measures.	Applied On-Farm	Importance
1	Verify the Ration Used On-Farm Record (R-R) and the Feed Sequencing, Mixing and Distribution Record (R-S) at least once a year to ensure the documents have been completed.		
2	Verify that the Feed Distribution SOP (SOP 4.5) is reviewed annually or any time there are changes in management, or when there are equipment modifications that impact the SOP.		Mandatory
3	Observe the person in charge of the SOP to ensure that the methods followed comply with the written SOP.		
4	Complete, sign and date the Verification Record (R-1) once a year.		

**RECORDS** 

Name of Record		Importance
R-B	Training Record	
R-R	Rations Used On-Farm Record	
R-S	Feed Sequencing, Mixing and/or Distribution Record	
R-1	Verification Record	Mandatan
R-2	Incident Report (if applicable)	Mandatory
R-3	Corrective Action Request (if applicable)	
R-4	Monitoring Record	
	Veterinary prescription (if applicable)	
R-U	Emergency Contact List	Highly recommended

NOTES			



## **MODULE 5**





- 5.1 Medication and Vaccines
- 5.2 Needles and Injections
- 5.3 Risk Management of Broken Needles
- 5.4 Medication Withdrawal

### Section 5.1

# Medication and Vaccines

### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	
R-P	Medication and Vaccine Usage Plan	Mandatory
R-T	Treatment Record	
R-Y	Letter of Guarantee – Licensed Veterinarian	Mandatory, if applicable
FACT SHEE	ET	
F-21	Vaccine and Drug Use Policy	_

#### **SECTION 5.1**

#### MEDICATION AND VACCINES

#### **REQUIREMENTS**

- 1. A valid veterinarian-client-patient relationship (VCPR) must exist and all prescription drugs used on-farm must be prescribed by a veterinarian licensed to practice in your province or territory with whom you have a valid veterinarian-client-patient relationship.
- 2. The PigSAFE Vaccine and Drug Use Policy must be respected and implemented, and the following elements must be available during the validation:
  - a. If applicable, copies of prescriptions must be available and indicate the withdrawal periods to be respected for all veterinary drugs labelled and extra labelled.
  - b. Written directions must be available for the use of all veterinary drugs.
- 3. The Medication and Vaccine Usage Plan (R-P) must be completed, approved and signed by a licensed veterinarian and must be kept up to date. The Medication and Vaccine Usage Plan (R-P) must include:
  - a. all injectable, oral, topical and water-administered medications and vaccines used during the last 12 months
  - b. product names
  - c. identify if a drug identification numbers (DIN) is available
  - d. identify if it is a product that is prescribed
  - e. the reasons for product usage
  - f. the dosages
  - g. the methods of administration
  - h. cautions and warnings
  - the storage location(s)
  - withdrawal periods.



- The Treatment Record (R-T) must be completed and kept up to date. The Treatment Record (R-T) must include the following information:
  - a. treatment start date
  - b. treatment end date
  - c. animal, pen, room numbers (IDs)
  - d. number of animals treated
  - e. weight of animals treated
  - product name
  - g. dosage (Highly Recommended (HR))
  - h. amount given
  - i. withdrawal period (days)
  - safe shipping date
  - k. whether any broken needles are present
  - I. the initials of designated personnel.



For each individual or group treatment of animals beyond weaning, all treatments (vaccines and drugs) must be recorded on the Treatment Record (R-T). This includes all products administered in the water, by injection, topically or orally.

- 6. If treatments are recorded on the sow cards, the following elements must be noted:
  - product name
  - b. dosage
  - c. date of injection
  - d. withdrawal date
- 🚖 Requirements identified with a star are related to module 5.4 Medication Withdrawal, which is a CCP.

For you convenience, templates have been created for each of the records listed above.

#### **RATIONALE**

- a. Health Canada is responsible for protecting human and animal health and the safety of Canada's food supply. Through the Veterinary Drugs Directorate, Health Canada evaluates and monitors drug safety, quality and effectiveness; sets standards; and promotes the prudent use of veterinary drugs administered to food-producing and companion animals.
- b. Drugs manufactured and sold in Canada are required by law to include specific information on their labels. Most manufacturers also include a product insert, which provides information that does not fit on the label.
- c. The Medication and Vaccine Usage Plan (R-P) and the Treatment Record (R-T) allow the producer to demonstrate that medications and vaccines used on-farm are administered at approved dosages and respect the PigSAFE Drug Use Policy.

#### **GUIDANCE**

- a. A valid veterinarian-client-patient relationship (VCPR) exists when:
  - The licensed veterinarian assumes responsibility for making medical judgments regarding the health of a person's animal(s) and the need for treatment.
  - ii. The client agrees to follow the veterinarian's instructions.
  - iii. The veterinarian has sufficient knowledge of the person's animal(s) to start a general or preliminary diagnosis, at the very least. This may be done either by examination or by timely visits to the farm.
  - iv. The licensed veterinarian is readily available for follow-up care in case of adverse reactions or failure of the treatment regime.
  - v. Each province's legislation (acts and regulations) and the provincial veterinary association's by-laws specifically define the nature of the veterinary-client-patient relationships for that province.
- b. Definition of extra-label drug use: extra-label drug use refers to drugs administered for indications other than what are described on the label. Examples include deviations in terms of the following:
  - i. species of animal being treated
  - ii. age or stage of production
  - iii. dosage
  - iv. duration or frequency of treatment
  - v. purpose of treatment
  - vi. method of administration.
- c. The PigSAFE | PigCARE programs only permit extra-label drug use when:
  - i. a valid veterinary-client-patient relationship (VCPR) exists
  - ii. a prescription issued by a licensed veterinarian exists with written directions, including a recommended withdrawal time, and the decision for extra-label drug use has been properly documented in that veterinarian's medical records, and
  - iii. treatment records are maintained according to PigSAFE | PigCARE programs requirements.

- d. **A group treatment** is a treatment (e.g., vaccine, dewormer, hormonal treatment) given to a group of pigs or the entire herd at a specific time during any stage of production.
- e. **Contraindication**: Product contraindications and warnings should refer only to human or animal health concerns related to product usage.
- f. Shelf life and expiry dates
  - i. Medications and vaccines should be discarded if not used within the restricted time periods defined by your veterinarian.
  - ii. Transport and store medication in a manner that protects shelf life to help maintain product quality on-farm.
  - iii. Always visually inspect medications prior to use. Bacteria can colonize in a bottle of antibiotics. Any change in colour, clarity or consistency may indicate a problem with the medication, in which case it should be discarded or returned to the supplier.
- g. **Compounding** is the combining of two or more ingredients, at least one of which is a drug or active ingredient, to create a product in a form appropriate for dosing. Compounding is regulated at the provincial level and only pharmacists and other practitioners (doctors, dentists, veterinarians) are permitted to compound products.
  - i. Mixing two or more medications in a syringe for delivery to animals is a form of compounding and is not permitted.
- h. A **Drug Identification Number (DIN)** is an eight-digit number assigned by Health Canada to a drug product prior to its being marketed in Canada. It uniquely identifies any drug product sold in a dosage form in this country. It is located on the label of prescription and over-the-counter drug products that have been evaluated and authorized for sale in Canada.
- i. The Canadian edition of the Compendium of Veterinary Products can be found at https://cdmv.cvpservice.com.
- j. The Health Canada Drug Product Database can be found at <a href="https://www.canada.ca/en/health-canada/services/drug-products/drug-products/drug-product-database.html">https://www.canada.ca/en/health-canada/services/drug-products/drug-product-database.html</a>
- k. For further information, consult the PigSAFE Canada Drug Use Policy.

# ? AUDIT QUESTIONS

0.11	Audit Questions and Interpretations		Verification			
Q#			NC-Minor	NC-Major	N/A	
Q5.1.1	To ensure that a valid veterinarian-client-patient relationship (VCPR) is in place, verify whether:  a. the Medication and Vaccine Usage Plan (R-P) is complete, approved, signed and dated by the licensed veterinarian with whom a valid veterinarian-client-patient relationship is established.  OR  b. that the Letter of guarantee (R-Y) is signed by the licensed veterinarian with whom a valid veterinarian-client-patient relationship is established.	Full and Partial Validation:  R-P: Medication and Vaccine Usage Plan OR  R-Y: Letter of guarantee – Licensed veterinarian  veterinary prescription				
	a. Is a valid veterinarian-client-patient relationship (VCPR) in place?					
	b. Are all prescription drugs that are used on-farm prescribed by a veterinarian licensed to practice in your province or territory with whom you have a valid veterinarian–client–patient relationship (VCPR)?					

0.11		Verification				
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A	
Q5.1.2	Verify whether the PigSAFE Vaccine and Drug Use Policy is respected and the required elements are available during the validation.	R-P: I Vacci R-Y: Licer	ised Veteri inary preso	n and Plan uarantee – narian		
Q3.1.2	Is the PigSAFE Vaccines and Drug Use Policy respected and implemented?					
	a. If applicable, are copies of prescriptions available and do they indicate the withdrawal periods to be respected for all veterinary drugs used on label or in an extra label manner?					
	b. Are written directions available for the use of all veterinary drugs?					
Q5.1.3	Verify that the Medication and Vaccine Usage Plan (R-P) includes all required elements, is complete, has been approved and signed by a licensed veterinarian, and is being kept up to date.		Partial Val Medication e Plan inary pres	n and Vacc	ine	
	Does the Medication and Vaccine Usage Plan (R-P) include all PigSAFE-required elements?					
Q5.1.4	Verify that the Treatment Record (R-T) includes all required elements, is complete and is being kept up to date.	Full and Partial Validation:  R-P: Medication and Vaccine Usage Plan R-T: Treatment Record veterinary prescription				
	Does the Treatment Record (R-T) include all PigSAFE-required elements?					

0."	Audit Questions and Interpretations  Verify that each individual or group treatment of animals beyond weaning, including breeding stock, (vaccines and drugs) are recorded on the Treatment Record (R-T). This record must include each treatment administered in the water, by injection, topically or orally for a group of pigs or an individual pig.  Verify that the record is completed on an ongoing basis and is being kept up to date.  Cross-reference the information listed on the Treatment Record (R-T), the Medication and Vaccine Usage Plan (R-P) and on prescriptions.  If treatments are recorded on the sow cards, the following elements must be noted:  a. product name  b. dosage  c. date of injection  d. withdrawal date  a. Are individual and group treatments for all animals beyond weaping (including broading stock) recorded on the Treatment.		Verification				
Q#			NC-Minor	NC-Major	N/A		
Q5.1.5			Full and Partial Validation:  R-T: Treatment Record  R-P: Medication and Vaccine Usage Plan  sow cards  interview				
	<ul> <li>Are individual and group treatments for all animals beyond weaning (including breeding stock) recorded on the Treatment Record (R-T)?</li> </ul>						
	b. If treatments are recorded on the sow cards, are the required elements recorded?						

N/A = not applicable



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### **COMPLIANT**

- The Medication and Vaccine Usage Plan (R-P) is complete, approved and signed by a licensed veterinarian and corresponds with the given prescriptions.
- The Treatment Record (R-T) is complete and corresponds with the given prescriptions.
- MINOR NON-COMPLIANCE Timeline: 60 days
  - Some elements are missing from Medication and Vaccine Usage Plan (R-P) or Treatment Record (R-T) (i.e., not written down).
- MAJOR NON-COMPLIANCE Timeline: 30 days
  - There is evidence that no valid veterinarian-client-patient relationship (VCPR) exists, according to the definition in the program description.
  - Medication and Vaccine Usage Plan (R-P) or Treatment Record (R-T) is not available or is incomplete.
  - Extra-label drug use is occurring without prescription.



#### **DEVIATION MEASURES**

- If some medicated treatments (feed, water, injections) are not documented on the Rations Used On-Farm Record (R-R or R-R1), Medication and Vaccine Usage Plan (R-P), Treatment Record (R-T), (group treatment or sow cards) the designated personnel must complete the necessary records and ensure to include all required elements and keep it on file.
- If the valid veterinarian-client-patient relationship (VCPR) is not confirmed, the designated personnel must ensure the Medication and Vaccine Usage Plan (R-P) is complete, approved, signed and dated by the licensed veterinarian with whom a valid veterinarian-client-patient relationship (VCPR) is established OR that the Letter of guarantee (R-Y) is signed by the licensed veterinarian and kept on file.

Complete record R-2 Incident Report.

# Section 5.2

# Needles and Injections

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDAR	D OPERATING PROCEDURE	
5.2	Needles and Injections	Mandatory
RECORDS		
R-2	Incident Report	
R-4	Monitoring Record	Mandatory
R-B	Training Record	
FACT SHE	ETS	
F-5	Needle Usage and Selection of Injection Site	
F-6	Needle-Free Injector	_

#### **SECTION 5.2**

#### **NEEDLES AND INJECTIONS**

#### REQUIREMENTS



- 1. A Needles and Injections SOP (SOP 5.2) must be developed, and must include the following directives:
  - a. Personnel must be properly trained prior to being allowed to inject a pig.
  - b. If needles are used, only detectable needles must be used.
  - c. The injection of pigs of non-breeding age, whether done with a needle or needle-free injector, must be administered in the neck.
  - d. The hip is to be used as an injection site for vaccines and reproductive products only in pigs of breeding age.
  - e. All other injections must be administered according to veterinarian instructions.
  - f. Both the gauge and length of the needle must be adequate for the pigs' weight and the injection site.
  - g. Practices that reduce the risk of injection-site abscesses must be used:
    - i. Define a maximum dose per injection site, according to the product used.
    - ii. Use adequate restraints.
    - iii. Give the injection on clean skin.
    - iv. Change the needle if it becomes dull, burred or bent.
    - v. Ensure needles, needle-free injectors and medications are adequately stored.



- 2. The Needles, Injections SOP (SOP 5.2) must be adequately implemented.
- 3. Only detectable needles are used on site.



Requirements identified with a star are related to module 5.3 Risk Management of Broken Needles, which is a CCP.

For your convenience, a template for the Needles and Injections SOP (SOP 5.2) has been developed for you to use.

#### **RATIONALE**

- a. Proper use of needles, needle-free injectors and proper selection of injection sites will accomplish the following:
  - i. decrease the amount of needle breakage, thereby reducing the food-safety risk of having a broken needle fragment left in the meat
  - ii. reduce the presence of scars, tough gristle, abscesses and cysts at the injection site, which may not be detected until the consumer cuts into the meat. Micro abscesses, which can be caused by improper injection technique, can also contaminate the meat, increasing the food-safety risk.
- b. Using the hip for injecting breeding stock is allowed because it may improve worker safety.
- c. Injections are not administered into the hip of non-breeding stock because of the increased food-safety risk.

#### **GUIDANCE**

- a. The Needles and Injections SOP (SOP 5.2) outlines the appropriate needle size, injection site and technique for various sizes of pigs. Consult a licensed veterinarian for additional information.
- b. Examples of reproductive products include prostaglandin and oxytocin.
- When injecting a pig, the following techniques are recommended:
  - Use transfer needles; needles that have been used in a pig should never be returned to a medication bottle. Transfer needles reduce the risk of microorganisms from the injection site being transferred back into a bottle of medication.
  - ii. Give injections on clean skin and with clean needles to reduce the risk of infection.
  - iii. Administer intramuscular injections perpendicular (at right angles) to the skin. Injecting at an angle may place the drug in the fat under the skin rather than deep in the muscle.
  - iv. Alternate the injection sites for breeding stock receiving multiple injections.
  - v. Administer intramuscular injections with a needle or needle-free injector in the neck.
  - vi. When administering reproductive products with a needle, use the peri-vulvar injection site only in breeding-age pigs.
  - vii. Administer subcutaneous injections in the neck, flank, or in the tail fold.
  - viii. When abscesses or infections occur, it is recommended that these be recorded on the Observation Record (R-O).
- d. Develop a SOP for the cleaning and maintenance of syringes to reduce the risk of injection-site abscesses.
- e. For additional information on needle usage, injection sites, injections and needle-free injectors, Fact Sheets F-5 -Needle Usage and Selection of Injection Site and F-6 - Needle-Free Injector are available in the Fact Sheet section.

# **AUDIT QUESTIONS**

0.11	# Audit Questions and Interpretations		Verifi	cation		
Q#			NC-Minor	NC-Major	N/A	
	Verify that a Needles and Injections SOP (SOP 5.2) has been developed					
Q5.2.1	and includes all the PigSAFE-required elements.	SOP 5.2: Needles and Injections			ections	
20.2.1	Is a Needles and Injections SOP (SOP 5.2) in place that includes all the PigSAFE-required elements?					
	Verify that the Needles and Injections SOP (SOP 5.2) is being adequately implemented.	Full and Partial Validation:				
Q5.2.2	If treatments are given during the validation, the validator should observe whether personnel follow the SOP correctly.	<ul><li>observation (full validation only)</li><li>interview</li></ul>			n only)	
	Has the Needles and Injections SOP (SOP 5.2) been adequately implemented?					
		Full and	Partial Va	lidation:		
	Verify that only detectable needles are used on-farm.		observation (full validation only)			
Q5.2.3		> interview			<i>,</i>	
	Are only detectable needles being used at this site?					

N/A = not applicable; SOP = standard operating procedure

 $\triangle$ 

#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- The Needles and Injections SOP (SOP 5.2) is complete and adequately implemented.
- MINOR NON-COMPLIANCE Timeline: 60 days
  - > Some elements are not written on the Needles and Injections SOP (SOP 5.2)
- MAJOR NON-COMPLIANCE Timeline: 30 days
  - The Needles and Injections SOP (SOP 5.2) is not available.
  - > Some SOP elements have not been implemented.
  - > There is evidence that pigs of non-breeding age are being injected in sites other than the neck.
  - There is evidence that designated personnel have not been trained.
  - Non-detectable needles are found on-farm.



### **SOP 5.2** NEEDLES AND INJECTIONS

This standard operating procedure (SOP) can be used as a ten If you develop your own version, all required elements must be		PID#:
Site Manager:	Person in charge:	

#### **PROTOCOL**

	Designated personnel must	follow this protocol ever	y time an animal is injected.	Applied On-Farm	Importance
1	The Site Manager must ensare adequately trained.	sure the personnel in char	ge of this protocol		
2	Use only detectable needle	es.			
3	Injections in a non-breeding	g herd animal must only b	e administered in the neck.		Mandatory
4	The hip injection site must	only be used for breeding	stock.		
5	All other injections must be	administered according	to veterinarian instructions.		
6	Ensure the length and gaug and the chosen injection sit Size of pig  Adult pig  > 125 kg  30 to 125 kg	Needle Gauge  16  16	Needle Length (Inches)  1-1/2		Mandatory
	20 kg	16 or 18	1 or 3/4		Wandatory
	10 kg	18	3/4		
	5 kg  Piglet  * In adults, it is recommended and no more than 5 mL in the				

	Desig	nated personnel must follow this protocol every time an animal is injected.	Applied On-Farm	Importance
	To re	educe the risk of injection-site abscesses:		
	a.	Define a maximum dose per injection site according to the product used (it is recommended than no more than 10 mL per site be injected in adults and no more than 2 mL for piglets):		
		Product Name Injection Site Maximum Dosage		
7	b.	Use adequate restraints.		Mandatory
	C.	Give the injection on clean skin.		
	d.	Change the needle if it becomes dull, burred or bent.		
	e.	Ensure needles, needle-free injectors and medications are stored appropriately.		
	f.	Maintain and clean syringes and needle-free injectors according to the manufacturer's instructions.		
8	Oth	er good production practices:	П	Highly
				recommended

#### **DEVIATION MEASURES**

	something goes wrong? , designated personnel must take the ive actions.	Applied On-Farm	Importance
	If the Needles and Injections SOP (SOP 5.2):		
	a. has not been developed or is incomplete, or		
	<ul> <li>all mandatory measures have not been implemented adequately as planned,</li> </ul>		
	the Site Manager or the designated personnel must fix the deviation and record it on the record R-2 – Incident Report.		
1	Corrective Action Examples:		Mandatory
	- Develop and implement a Needles and Injections SOP (SOP 5.2),		
	- Personnel training,		
	- Ensure the appropriate needle is used (such as detectable, gauge, etc.)		
	- Ensure the injection techniques are appropriate to reduce the risk of injection site abcesses.		

#### **RECORDS**

Name of Record		Importance
R-2	Incident Report	Mandatory
R-4	Monitoring Record	Mandatory
R-B	Training Record	Mandatory

NOTES			



# Section 5.3

# Risk Management of Broken Needles

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARE	O OPERATING PROCEDURE	
5.3	Risk Management of Broken Needles	Mandatory
RECORDS		
R-1	Verification Record	
R-4	Monitoring Record	
R-B	Training Record	Mandatory
R-G	Swine Movement Document	
R-T	Treatment Record	
R-2	Incident Report	Mandatory,
R-3	Corrective Action Request	if applicable
R-U	Emergency Contact List	Highly recommended
FACT SHEE	ΞΤ	
F-5	Needle Usage and Selection of Injection Site	_

#### **SECTION 5.3**

#### RISK MANAGEMENT OF BROKEN NEEDLES

#### **REQUIREMENTS**

- 1. All broken needles must be recorded on the Treatment Record (R-T).
- 2. A Risk Management of Broken Needles SOP (SOP 5.3) must be developed and include all of the following:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong), and
  - c. the verification measures.
- 3. The Risk Management of Broken Needles SOP (SOP 5.3) must be adequately implemented.

For your convenience, templates for the Risk Management of Broken Needles SOP (SOP 5.3) and the Treatment Record (R-T) listed above have been developed for you to use.

#### **RATIONALE**

- a. A Risk Management of Broken Needles (SOP 5.3) reduces the risk of needle fragments in the meat being found by the processing plant or in the marketplace.
- b. "Detectable" needles are used because they are constructed of metal that can be detected by metal detectors at processing plants.
- c. Appropriate injection techniques reduce the risk of broken needles and abscesses at the injection site.
- d. When a needle is lost in a pen, it is crucial that it be found and removed to ensure pigs do not injure themselves on it or eat it, which could cause a food-safety issue.

#### **GUIDANCE**

- a. The appropriate use of injection and pig-restraint techniques, frequent changing of needles and the immediate identification and disposal of bent needles are all good production practices to avoid needle breakage.
- b. It is recommended that needles be changed after injecting 10 to 20 pigs.
- c. Examples of permanent identifiers are: broken needle ear tags or other colored ear tags placed in the pigs' ear on the same side where the needle was broken, or with a distinctive tattoo.
- d. If a broken needle fragment remains in a pig and that pig can be identified, it is recommended that if it is a:
  - i. nursing or nursery pig, it should be euthanized on site;
  - ii. market hog, it should **not** be sold (e.g., abattoir or assembly yard). The animal may be slaughtered and the meat retained only for personal use. The meat must not be sold.
- e. If a broken needle fragment remains in a pig and that pig **cannot be identified** as it has mixed with others in the pen, it is recommended that:
  - i. producers contact their abattoir and/or the provincial program coordinator to discuss options to manage all of the animals in the implicated pen.
  - ii. when evaluating options, it is critical that the risk to consumers of finding a needle in their pork be addressed.
- f. Many processing plants do not want to receive any pigs that have, or may have, a broken needle fragment in them. Work with your plant to determine how they want you to handle such pigs.
- g. It is recommended that a bio-medical waste container be used to dispose of all used needles. This container, when full, needs to be taken to a waste management center that accepts them for biosecure disposal. If a needle is lost and not retrieved in a pen it may be eaten by a pig and found embedded in the tongue at the slaughterhouse.

- h. It is recommended that an emergency contact list (including at least the contact information of a representative from the slaughter establishment(s) where pigs are shipped) be kept up to date and made available to all employees.
- For additional information on needles and injections, see the Needle Usage and Selection of Injection Site Fact Sheet F-5.

## AUDIT QUESTIONS

		Verification				
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	NC-Critical	N/A
Q5.3.1	Verify that pigs that have (or are suspected to have) a broken needle fragment are recorded on the Treatment Record (R-T), when applicable.	Full and Partial Validation:  R-T: Treatment Record  interview				
	Are pigs that have (or are suspected to have) broken needle fragments and have not been euthanized recorded on a Treatment Record (R-T)?					
Q5.3.2	Verify that the Risk Management of Broken Needles SOP (SOP 5.3) includes all PigSAFE required elements:  a. the protocol  b. the deviation measures describing what to do if something goes wrong, and  c. the verification measures.  All required elements are listed on SOP 5.3 Risk Management of Broken Needles.  The Risk Management of Broken Needles SOP (SOP 5.3) is not mandatory if the site does not have any needles on site.  Does the site have a Risk Management of Broken Needles SOP (SOP 5.3) that includes:  a. the protocol with all PigSAFE-required elements?  b. the deviation measures describing what to do if something goes wrong?			1anageme	nt	
	c. the verification measures?					
Q5.3.3	Verify that the Risk Management of Broken Needles SOP (SOP 5.3) has been adequately implemented by ensuring it is clearly identified on the Treatment Record (R-T).	Full and Partial Validation:  R-B: Training Record  R-G: Swine Movement Document  R-M: Mortality Record  R-T: Treatment Record  R-1: Verification Record  R-2: Incident Report  R-3: Corrective Action Request  observation (full validation only)  interview				
	Is the Risk Management of Broken Needles SOP (SOP 5.3) adequately implemented?					



#### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

- The Risk Management of Broken Needles SOP (SOP 5.3) is complete and adequately implemented.
- The records are complete and up to date.

#### MINOR NON-COMPLIANCE Timeline: 60 days

> Some elements are not written down or are missing from the Risk Management of Broken Needles SOP (SOP 5.3) or records.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Risk Management of Broken Needles SOP (SOP 5.3) is not available.
- > The records are not available.
- > Some elements of the Risk Management of Broken Needles SOP (SOP 5.3) have not been implemented.
- Pigs that have (or are suspected to have) broken needle fragments were not euthanized immediately or not permanently identified and not recorded in the Treatment Record (R-T).

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- > The slaughterhouse found a broken needle fragment in the meat without receiving prior notice of this from the Site Manager (whether the pig was or was not identified).
- > The slaughterhouse notified the PigSAFE | PigCARE Provincial Coordinator about the fragment of broken needle.



### **SOP 5.3** RISK MANAGEMENT OF BROKEN NEEDLES



This standard operating procedure (SOP) can be used as a tem If you develop your own version, all required elements must be		PID#:
Site Manager:	Person in charge:	

#### **PROTOCOL**

	Designated personnel must follow this protocol every time injections are administered.	Applied On-Farm	Importance
	Measures used on-farm to prevent and manage the risk of broken needles:		
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		
2	Use only detectable needles.		
3	Use appropriate size and gauge of needles (see SOP 5.2 Needles and Injections).		
4	Use the appropriate restraint method according to the stage of production.		Mandatory
5	Use the appropriate injection-site and method according to the given medication or vaccine. Note the method of injection used on Treatment Record (R-T).		
6	Inspect needle for damage after each injection.		
7	Immediately dispose of bent, dull or burred needles in an adequate container.		
8	Other good production practices:		Highly recommended

#### **DEVIATION MEASURES**

	What happens if something goes wrong? If an error occurs, designated personnel must take the following corrective actions.	Applied On-Farm	Importance
1	Mark and segregate the animal immediately.		
2	When possible, while respecting animal welfare, immediately remove the needle fragment and make sure you have retrieved the entire broken section of the needle.		
3	When a pig has, or is suspected to have, a broken needle fragment, identify it with a permanent mark.  a. Describe the method of identification:		
4	Alternatively, euthanize the animal using the appropriate method (see SOP 7.10 Euthanasia).		
5	Inform the Site Manager (follow slaughterhouse or marketing agency requirements).		Mandatory
6	Record all broken needle incidents on the Treatment Record (R-T).		
7	If the pig is shipped, the broken needle fragment must be recorded on the Swine Movement Document (R-G).		
8	Inform the slaughterhouse, transporter, and marketing agency about the broken needle fragment.		
9	When such incidents occur, the Site Manager must review proper injection techniques with designated personnel.		
10	Record the deviation on an Incident Report (R-2) and record when adequate corrective actions were implemented.		

I EVELS OF NON	COMPLIANCE EOD	CDITICAL CONTROL	POINT

Minor: The corrective action must be completed within 60 days.
Major: (prior to shipping pigs): The corrective action must be completed within 30 days.
Critical: The corrective action must be completed within 24 hours.

**VERIFICATION MEASURES** 

	Designated personnel must complete the following verification measures:  Anyone who has completed PigSAFE training can be designated to complete the verification measures.	Applied On-Farm	Importance
1	Annually verify that all broken needle incidents have been entered in the Treatment Record (R-T).		
2	Observe the person in charge of the SOP to ensure the methods followed comply with the written SOP.		Mandatory
3	Complete, sign and date the Verification Record (R-1) once a year.		

#### **RECORDS**

Name of Record		Importance
R-B	Training Record	
R-G	Swine Movement Document	
R-M	Mortality Record	
R-T	Treatment Record	Mandatan
R-1	Verification Record	Mandatory
R-2	Incident Report (if applicable)	
R-3	Corrective Action Request (if applicable)	
R-4	Monitoring Record	
R-U	Emergency Contact List	Highly recommended

NOTES			

# Section 5.4

# Medication Withdrawal

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance	
Introduction	Vaccine and Drug Use Policy	Mandatory	
STANDARD	OPERATING PROCEDURE		
5.4	Medication Withdrawal	Mandatory	
RECORDS			
R-1	Verification Record		
R-4	Monitoring Record		
R-B	Training Record		
R-G	Swine Movement Document	NA L	
R-P	Medication and Vaccine Usage Plan	Mandatory	
R-R	Rations Used On-Farm Record		
R-S	Feed Sequencing, Mixing and Distribution Record		
R-T	Treatment Record		
R-2	Incident Report		
R-3	Corrective Action Request	Mandatory, if applicable	
	Veterinary Prescriptions	' '	
R-U	Emergency Contact List	Highly recommende	

#### **SECTION 5.4**

#### MEDICATION WITHDRAWAL

#### **REQUIREMENTS**

- 1. A Medication Withdrawal SOP (SOP 5.4) must be developed and include:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong), and
  - c. the verification measures.
- 2. The Medication Withdrawal SOP (SOP 5.4) must be adequately implemented.

For your convenience, a template for the Medication Withdrawal SOP (SOP 5.4) has been developed for you to use.

#### **RATIONALE**

- a. Administering medications and vaccines according to the Medication Withdrawal SOP (SOP 5.4) helps minimize the risk of marketing pigs before completing the withdrawal period.
- b. A growing demand by processors for lightweight pigs has prompted some producers to sell pigs at a much earlier stage of production. This means it is crucial to ensure that medicine or vaccine withdrawal periods are respected before sending lightweight pigs to market or ensure the buyer knows about any outstanding withdrawal period.
- c. Urine and feces from pigs treated with antibiotics may contain antibiotic residue which, if ingested by non-treated pigs, can be sufficient to cause violative residue levels in those pigs.

#### **GUIDANCE**

- a. "All" pigs includes: suckling pigs, nursery pigs, barbeque pigs, lightweight pigs, growers, finishers, culled breeding stock, etc.
- b. Determine the factors that justify the use of medications and vaccines.
- c. It is important that medical treatments be administered following the veterinarian's instructions.
- d. It is important to identify treated pigs on the Treatment Record (R-T) and Swine Movement Document (R-G).
- e. If an accidentally high dose of a medication or vaccine (i.e., above the prescribed dosage or above the label rate) is administered to your pigs, contact your veterinarian and delay the shipment of these pigs.
- f. It is recommended that treated pigs be segregated from non-treated pigs.
- g. It is recommended that an emergency contact list (including at least the contact information of a representative from the slaughter establishment(s) where pigs are shipped) be kept up to date and made available to all employees.

# ? AUDIT QUESTIONS

		Verification						
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	NC- Critical	N/A		
Q5.4.1	Verify that the Medication Withdrawal SOP (SOP 5.4) includes all required elements:  a. the protocol  b. the deviation measures describing what to do if something goes wrong and,  c. the verification measures.  All required elements are listed on the Medication Withdrawal SOP (SOP 5.4).  The Medication Withdrawal SOP (SOP 5.4) is not mandatory if the site does not use any medication, and if no medication are found on site it must be indicated on SOP 7.6 Care of Sick and Injures Pigs (when sick animals are euthanized).							
	Does the site have a Medication Withdrawal SOP (SOP 5.4) th	at include	s:					
	a. the protocol with all PigSAFE-required elements?			Ш				
	b. the deviation measures describing what to do if something goes wrong?							
	c. the verification measures?							
Q5.4.2	Verify that the Medication Withdrawal SOP (SOP 5.4) is adequately implemented by cross-referencing the Treatment Record (R-T), the Medication and Vaccine Usage Plan (R-P), the Ration Used On-Farm Record (R-R) and veterinary prescriptions.  Ensure all pigs (including cull sows and treated nursing piglets) have cleared any withdrawal periods prior to being shipped for slaughter.  Full and Partial Validation:  SOP 5.4: Medication Withdra Nether Record  R-B: Training Record  R-G: Swine Movement Docuse R-P: Medication and Vaccine Record R-R-R: Ration Used On-Farm Record R-R-R: Treatment Record R-R-T: Treatment Record R-R-T: Verification Record R-R-1: Verification Record R-R-2: Incident Report R-3: Corrective Action Requirement Record R-R-3: Corrective Action Requirement Record R-R-T: Incident Report R-R-T: Incident R-R				ocument ine Usage n Record quest	e Plan		
	Has the Medication Withdrawal SOP (SOP 5.4) been adequately implemented?							

N/A = not applicable; SOP = standard operating procedure



#### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

- The Medication Withdrawal SOP (SOP 5.4) is complete and adequately implemented.
- The records are complete and up to date.

#### MINOR NON-COMPLIANCE Timeline: 60 days

Some elements are not written down or are missing from the Medication Withdrawal SOP (SOP 5.4) or records.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- The Medication Withdrawal SOP (SOP 5.4) is not available.
- The records are not available.
- There is evidence of deviations that were not corrected (e.g., pigs shipped before they had cleared withdrawal periods).
- Some SOP elements have not been implemented.

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- The slaughterhouse found drug residue in the meat without prior notice of this from the Site Manager.
- The slaughterhouse notified the PigSAFE | PigCARE Provincial Coordinator regarding the presence of drug residue.



### **SOP 5.4** MEDICATION WITHDRAWAL



This standard operating procedure (SOP) can be used as a tem If you develop your own version, all required elements must be		PID#:
Site Manager:	Person in charge:	

#### **PROTOCOL**

	Designated personnel must follow this protocol for each shipment of pigs sent to slaughter or to another production site:	Applied On-Farm	Importance
1	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		
2	Ensure dosage is accurate according to the manufacturer's instructions and/or veterinarian's prescription, as applicable.		
3	When sorting (suckling, nursery, BBQ and lightweight pigs, growers, finishers, cull breeding stock, etc.) and selecting pigs to be shipped, whether for additional production at another site or for slaughter, review all pertinent treatment records and verify the pigs' identification. Ensure that all pigs being shipped for slaughter have completed the withdrawal period.		Mandatory
4	Ensure pigs, which are being moved to another location with outstanding withdrawal periods, are identified and segregated, and that the treatments and withdrawal periods are recorded on the Swine Movement Document (R-G).		
5	Maintain the Treatment Record (R-T).		
6	Record any deviations on the Incident Report (R-2).		
7	Other good production practices:		Highly recommended

**DEVIATION MEASURES** 

	What happens if something goes wrong? If an error occurs, designated personnel must take the following corrective actions while the pigs are still on-farm:	Applied On-Farm	Importance
1	If necessary, identify the pigs and keep them segregated on-site until the withdrawal period is completed.		
2	Notify the Site Manager.		
3	Consult the veterinarian, if necessary.		Mandatory
4	Implement a corrective action.		
5	Record the deviation on an Incident Report (R-2) and record when adequate corrective actions were implemented.		
6	Other good production practices:		Highly recommended
LEVE	LS OF NON-COMPLIANCE FOR CRITICAL CONTROL POINT		
	Minor: The corrective action must be completed within 60 days.		
	<b>Major</b> (prior to shipping pigs): The corrective action must be completed within 30 de <b>Critical:</b> The corrective action must be completed within 24 hours.	ays.	

#### **VERIFICATION MEASURES**

	Designated personnel must complete the following verification measures:  Anyone who has completed PigSAFE training can be designated to complete the verification measures.	Applied On-Farm	Importance
1	Verify treatment records once a year (and more often, when possible), to ensure documents have been duly completed and the drug inclusion rates are correct.		
2	Annually or when a management change occurs, or when equipment is modified, verify that the withdrawal times on the Treatment Record (R-T) correspond to those specified on the manufacturers' labels or veterinarians' prescriptions.		Mandatory
3	Observe the person in charge of the SOP to ensure the methods followed comply with the written SOP.		
4	Complete, sign and date the Verification Record (R-1) once a year.		

**RECORDS** 

Name of Record		Importance
R-B	Training Record	
R-G	Swine Movement Document	
R-P	Medication and Vaccine Usage Plan	
R-R	Rations Used On-Farm Record	
R-S	Feed Sequencing, Mixing and Distribution Record	
R-T	Treatment Record	Mandatory
R-1	Verification Record	
R-2	Incident Report (if applicable)	
R-3	Corrective Action Request (if applicable)	
R-4	Monitoring Record	
	Veterinary Prescriptions (if applicable)	
R-U	Emergency Contact List	Highly recommended

NOTES			



# **MODULE 6**

PESTS, DOMESTICATED ANIMALS AND DEAD STOCK CONTROLS





- 6.1 Pest Management
- 6.2 Domesticated Animals
- 6.3 Dead Stock Removal

# Section 6.1

# **Pest Management**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	OPERATING PROCEDURES	
6.1.1	Pest Management – Exterminator	Mandaton
6.1.2	Pest Management – In-House	Mandatory
RECORDS		
_	Exterminator Report	Mandatory, if applicable
R-2	Incident Report	Mandatan
R-4	Monitoring Record	Mandatory
R-E	Inspection Checklist	
R-J	Traps and Bait Network Map	Highly recommended
R-K	Pest Activity Record	
FACT SHEE	T	
F-7	Rodent and Pest Control	_

#### **SECTION 6.1**

#### PEST MANAGEMENT

#### **REQUIREMENTS**

- 1. A Pest Management SOP for the control of rodents and birds, implemented either by a licensed exterminator (SOP 6.1.1) or performed in-house (SOP 6.1.2), must be developed and adequately implemented on-farm and in the on-farm feed mill. This SOP must include:
  - a. A list of all chemical products used on-farm.
    - i. All products used must be licensed and approved for use where food-producing animals are raised and housed.
  - b. The frequency of pest-activity monitoring.
  - c. The type of traps and bait stations being used.
  - d. The measures being used to prevent birds and other wild life from accessing any area of the barn(s), feed mill and feed storage areas.
- 2. If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1) it must be adequately implemented and must also include:
  - a. the exterminator's contact information; and
  - b. their recommended actions for extermination and the corrective actions to take if the situation remains unsatisfactory.

For your convenience, templates for the SOPs listed above have been developed for you to use.

#### **RATIONALE**

- a. The implementation of a Pest Management SOP helps prevent the introduction and propagation of rodents, birds, insects and other wild life (e.g. raccoons, skunks) on the farm and in the on-farm feed mill.
- b. Rodents are a major disease transmission vector for pigs. Rodents can actively shed salmonellosis, erysipelas and colibacillosis.

#### **GUIDANCE**

#### 1. Rodent Control

- a. Do not wait until you see signs of rodents to start a control program. By the time you see rodent feces, tracks, or the rodents themselves, a problem already exists.
- b. Cats and dogs are an unacceptable way of controlling rodents in and around the barns.
- c. Keep rodenticides out of reach of pigs. If accidental exposure does occur, ask a veterinarian or other qualified professional to address withdrawal times and any other potential health concerns.
- d. Maintain a one-metre perimeter of gravel or keep grass and weeds trimmed around the barn, and never allow grass to grow higher than 20 cm.
- e. Regularly sweep up any spilled feed around mills and storage bins.
- f. Regularly eliminate any trash, equipment, hay, straw or other objects that may be found around the outside of the barn or near the walls. These provide an attractive area for rodents to hide in and gain access to barns.

- g. Place traps or bait stations in several locations along the outside wall of the barn. Place these in areas where rodents or signs of rodents have been seen. Mice and rats prefer to travel along walls and edges.
- h. Check traps and bait stations regularly, refill bait and remove any dead rodents. Dispose of the rodents outside of your production facilities. The frequency of these inspections will depend on the manufacturer's recommendations for the bait you are using and the severity of the rodent infestation. Baits and traps should be positioned accordingly.
- i. While mice are very curious and will investigate new objects quickly, rats are less adventurous and it may be several days after the placement of a trap or bait station before there is evidence of activity.
- j. The Site Manager should monitor bait consumption. Increased bait consumption may indicate a growing rodent population in or around the barn.
- k. Pests (mice, rats, raccoons, skunks), birds and flies may be actively infected carriers or mechanical carriers of disease.
- I. It is recommended that the bait station be checked
  - i. at least once a month during peak season (May to November) and
  - ii. at least every two months during low season (December to April).
- m. When an in-house pest management program is implemented on-farm, the following is highly recommended:
  - Use record R-J Traps and Baits Network Map to identify where traps and baits are located inside and outside the barn(s).
  - ii. Use record R-K Pest Activity to monitor pest activity.

#### 2. Bird Control

- a. Starlings have been identified as carriers of transmissible gastroenteritis (TGE) and swine dysentery.
- b. Spilled feed should be cleaned up immediately.
- c. Screens are an option to prevent birds from accessing the production area and feed bins.
- d. Open feeders, bins and carts should be covered, when bird's access cannot be prevented.

#### 3. Insect Control

- a. Flies can travel up to 1.5 km between farms and can be carriers of viruses, bacteria and diseases.
- b. The first step in controlling flies and other insects is proper sanitation. Places that can be used for fly reproduction include wet areas, manure and old bedding, and areas where feed has been spilled and not cleaned up.
- c. If possible, set fly traps, such as fly paper. Place them in old bleach-style bottles that have hole cut in the side, or in a similar type of trap. Flies that die in this trap should be disposed of in a trash bin. Female flies may still contain viable eggs after death. If flies are swept into the manure pit, these eggs may have an opportunity to hatch. Talk to a pest control company or an entomologist at your provincial department of agriculture for more information. Always read pesticide labels carefully and use only as directed.
- d. Birds and insects, when looking for feed, can live in close contact with pigs and may release contaminated material, both in their feces and by mechanical transfer. They are involved in widespread disease transmission in pigs.

# ? AUDIT QUESTIONS AND INTERPRETATIONS

0.11	Audia Ourations and Internations	Verification				
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A	
Q6.1.1	<ul> <li>a. Verify that a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) has been developed and includes the PigSAFE-required elements.</li> <li>b. Verify that the Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) is adequately implemented on-farm and in the on-farm feed mill.</li> <li>If pigs have access to the outdoors, go to section 10.2 to complete this question.</li> </ul>	Full and Partial Validation:  SOP 6.1.1: Pest Management – With an Exterminator  SOP 6.1.2: Pest Management – In-House  observation (during full validation) interview				
	a. Has a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been developed and does it include the PigSAFE-required elements?					
	b. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented on-farm?					
	c. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented in the on-farm feed mill?					
Q6.1.2	If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1), verify that it includes the PigSAFE-required elements:  a. The exterminator's contact information.  b. Extermination recommendations to implement and the corrective actions to undertake should the situation be unsatisfactory.	Full and Partial Validation:  SOP 6.1.1: Pest Management – With an Exterminator or observation (during full validation) interview				
	If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1), does it include the PigSAFE-required elements and is it adequately implemented?					



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### **COMPLIANT**

A Pest Management SOP (SOP 6.1.1 With a licensed exterminator or SOP 6.1.2 In-house) has been developed and adequately implemented on-farm and in the on-farm feed mill.

#### MINOR NON-COMPLIANCE Timeline: 12 months

- The Pest Management SOP is not complete.
- Some elements were not written down or are missing from the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)).

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- A Pest Management SOP has not been developed.
- There is evidence that the Pest Management SOP has not been adequately implemented (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)).

NOTES			



### **SOP 6.1.1** PEST MANAGEMENT – WITH AN EXTERMINATOR

This standard operating procedure (SOP) may be used as a template. If you develop your own version, all required elements must be included.		PID#:
Site Manager:	Person in charge:	

#### **PROTOCOL**

	If the program is carried out by a licensed exterminator, the exterminator's report must include items 1 through 5:	Applied On-Farm	Importance
1	The exterminator must provide the services that were agreed upon (i.e., in the contract agreed to by the Site Manager or designated personnel).  Name of extermination company:  Telephone number of extermination company:		
2	List of chemical products used on-farm:  Confirm that the products used are licensed and approved for use in areas where food-producing animals are raised and housed.		
3	Indicate the frequency of pest-activity monitoring conducted during:  a. Peak season:  b. Low season:  Adjust the frequency of visits according to the Pest Activity Record (R-K) for traps and baits.		Mandatory
4	List the types of traps and bait stations:  (e.g., tamper-resistant bait stations are placed where pigs cannot access the bait.)		
5	If the situation remains unsatisfactory, provide recommendations on what additional corrective actions should be implemented.		

		Applied On-Farm	Importance
Pest	control prevention measures (FOR PRODUCER USE ONLY)		
6	Ensure measures are in place that prevent birds and other wild life from entering the barns(s)/housing structures, feed mill and feed storage areas.		Mandatory
7	Dispose of dead rodents in an appropriate manner.		
8	Take the necessary actions to prevent the entry and propagation of pests.		
9	Regularly remove any spilled feed from around mills and storage bins.		Highly recommended
10	Regularly remove any trash, equipment, hay, straw or other objects from around the outside of the barn and near the walls.		recommended
11	Other good production practices:		Highly recommended

**DEVIATION MEASURES** 

	something goes wrong? , designated personnel must take the following s.	Applied On-Farm	Importance
	If the Pest Management SOP:		
	<ul> <li>a. has not been developed or is incomplete, or</li> <li>b. all mandatory measures have not been implemented adequately as planned,</li> </ul>		
1	the Site Manager or the designated personnel must fix the deviation and record it on R-2 – Incident Report.		Mandatory
	Corrective Action Examples:		
	<ul> <li>Develop a Pest Management SOP - With an exterminator (6.1.1) or In-House (6.1.2).</li> </ul>		
	- Ensure the follow-up of the corrective actions issued by the exterminator.		

#### **RECORDS**

Name of Record		Importance		
R-2	Incident Report	Mandatory		
R-4	R-4 Monitoring Record			
R-E	Inspection Checklist			
R-J	Traps and Bait Network Map	Highly		
R-K	Pest Activity Record	recommended		
	Exterminator report (if applicable)			

NOTES			



### **SOP 6.1.2** PEST MANAGEMENT – IN-HOUSE

This standard operating procedure (SOP) may be used as a template.  If you develop your own version, all required elements must be included.			
Site N	Manager: Person in charge: Person in charge:		
PRO <sup>-</sup>	TOCOL		
		□ No	ot Applicable
	Follow this protocol if the pest-management program is completed in-house.	Applied On-Farm	Importance
1	Designated personnel must understand and follow safe handling practices for pesticides, according to provincial legislation.		
2	List all chemical products used indoors and outdoors:  Confirm that the products used are licensed and approved for use in areas where food-producing animals are raised and housed.		
3	Indicate the frequency of pest-activity monitoring conducted during:  a. Peak season:  b. Low season:  Adjust the frequency of visits according to the Pest Activity Record (R-K) for traps and baits.		Mandatory
4	List the types of traps and bait stations:  (e.g., tamper-resistant bait stations are placed where pigs cannot access the bait.)		
5	Ensure measures are in place that prevent birds and other wild life from entering the barns(s)/housing structures, feed mill and feed storage areas.		

Dispose of dead rodents in an appropriate manner.

	Follow this protocol if the pest-management program is completed in-house.	Applied On-Farm	Importance	
	Pest control prevention measures			
7	Take the necessary actions to prevent the entry and propagation of pests.			
8	Regularly remove any spilled feed from around mills and storage bins.		Highly recommended	
9	Regularly remove any trash, equipment, hay, straw or other objects from around the outside of the barn and near the walls.			
10	Maintain a Pest Activity Record (R-K).			

#### **DETAILS**

Type of Pest	Control Measures	
	1. Baits (specify):	
Outdoor rodents	2. Traps (specify):	
	Pesticide chemicals (name and concentration):	
Control measures:		
	1. Baits (specify):	
Indoor rodents	2. Traps (specify):	
	3. Pesticide chemicals (name and concentration):	
	1. Baits (specify):	
Insects	2. Traps (specify):	
	Pesticide chemicals (name and concentration):	

**DEVIATION MEASURES** 

	something goes wrong? , designated personnel must take the following s.	Applied On-Farm	Importance
	If the Pest Management SOP:		
	a. has not been developed or is incomplete, or		
1	<ul> <li>all mandatory measures have not been implemented adequately as planned, the Site Manager or the designated personnel must fix the deviation and record it on the record R-2 – Incident Report.</li> </ul>		Mandatory
	Corrective Action Examples:		
	- Develop a Pest Management SOP - In-House (6.1.2) or With an Exterminator (6.1.1).		

**RECORDS** 

Name of Record		Importance	
R-2	Incident Report		
R-4	R-4 Monitoring Record		
R-E	Inspection Checklist	Highly recommended	
R-J	Traps and Bait Network Map		
R-K	Pest Activity Record		
	Exterminator report (if applicable)		

NOTES			

# Section 6.2

# Domesticated Animals

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	Manalatan
R-4	Monitoring Record	Mandatory
FACT SHEE	ETS	
F-8	Toxoplasma	
F-9	Trichinella	_

#### **SECTION 6.2**

#### DOMESTICATED ANIMALS

#### **REQUIREMENTS**

- 1. Dogs must not have access or be kept in the same barn/building as pigs or an on-farm feed mill and feed storage areas.
- 2a. Cats must not have access or be kept in the same barn/building as pigs or an on-farm feed mill and feed storage areas.
- 2b. If cats are given access to the barn/building or on-farm feed mill, the requirements (related to cats) of the Section 10.3 Multiple Species Certification must be met and the farm will be identified as being a multiple species farm.
- 3. If domesticated animals (other than pigs) have access or are kept in the same barns/building and/or on-farm feed mill, additional good production practices must be implemented by completing Section 10.3 Multiple Species Certification.

#### **RATIONALE**

a. l	It is crucial that good production practices be implemented to mitigate the possible cross-contamination
(	of pathogens between different domesticated animals.

#### **GUIDANCE**

- a. A "domesticated animal" is considered to be an animal from a species other than swine. It includes, but is not limited to: cats, dogs, poultry, cattle, horse, sheep, goats, birds, etc.
- b. Dogs and cats may be actively infected carriers of many other human pathogens, such as Salmonella, and mechanical carriers of swine pathogens (e.g., transmissible gastroenteritis and porcine epidemic diarrhea (PED)).
- c. Personnel should routinely inspect the farm's facilities to ensure all buildings and barns prevent access by domesticated animals.

### ? AUDIT QUESTIONS

<b>.</b>			Verification				
Q#	Audit Questions and Interpretations  Verify that dogs do not have access and are not kept in same barn/buildings as pigs and on-farm feed mills and feed storage areas.  Does barn personnel ensure dogs do not have access and are kept out of the same barn/building as pigs and on-farm feed mill and feed storage areas?  Verify that cats do not have access and are not kept in same barn/buildings as pigs and on-farm feed mills and feed storage areas.	Compliant	NC-Minor	NC-Major	N/A		
Q6.2.1		udit Questions and Interpretations  Compliant   NC-Minor   NC-Major    Full and Partial Validation:  observation (full validation o  interview  nel ensure dogs do not have access and are kept arrn/building as pigs and on-farm feed mill and ?  Full and Partial Validation:  observation (full validation o  interview  Full and Partial Validation:  Full and Partial Validation:  Section 10.3 Multiple Specie Certification  mel ensure cats do not have access and are kept arrn/building as pigs and on-farm feed mill and	n only)				
Q0.2.1	out of the same barn/building as pigs and on-farm feed mill and						
Q6.2.2a		> Secti	on 10.3 M		ecies		
Q0.2.2d	Does barn personnel ensure cats do not have access and are kept out of the same barn/building as pigs and on-farm feed mill and feed storage areas?						

	Audit Ougstions and Internations		Verification				
Q#	If cats are given access to the barn/building and on-farm feed mill, verify the requirements related to cats of Section10.3 Multiple Species Certification are implemented.  If cats are given access to the barn/building and on-farm feed mill, are the requirements related to cats of Section10.3 Multiple Species Certification implemented?	Compliant	NC-Minor	NC-Major	N/A		
O6 2 2h	verify the requirements related to cats of Section10.3 Multiple Species	> Secti			ecies		
Q6.2.2b	are the requirements related to cats of Section10.3 Multiple Species						
0623		ments related to cats of Section 10.3 Multiple Species mplemented.  **Section 10.3 Multiple Species Certification**  **Full and Partial Validation:*  **Section 10.3 Multiple Species Certification**  **Section 10.3 Multiple Species Ce	ecies				
Q6.2.3	barn as pigs and/or on-farm feed mill, has Section 10.3 Multiple						

 $\wedge$ 

#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

> No domesticated animals are being kept in the same barns/building as pigs and on-farm feed mills.

MINOR NON-COMPLIANCE - Not applicable.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

> Other species are being kept on-farm and in on-farm feed mill and the requirements of Section 10.3 are not being met.



#### **DEVIATION MEASURES**

If a domesticated animal is seen in the same barn/building as pigs and an on-farm-feed mill, the designated personnel must ensure all buildings and barns prevent access to domesticated animals OR must implement Section 10.3 Multiple Species Certification if domesticated animals are kept in barn and feed-mill.

Complete record R-2 Incident Report.

NOTES			

# Section 6.3

# **Dead Stock Removal**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	
R-4	Monitoring Record	Mandatory
R-M	Mortality Record	

#### SECTION 6.3 DEAD STOCK REMOVAL

#### **REQUIREMENTS**

- 1. Dead pigs must be removed from the pen as soon as reasonably possible, at least daily.
- 2. Mortalities must be recorded on the Mortality Record (R-M) and kept on file for a minimum of 12 months or since the last validation.

The mortality record must include

- a. date of pig's death
- b. type of death (found dead or euthanized), and
- c. number of dead pigs.

For your convenience, a template for the Mortality Record (R-M) has been developed for you to use.

#### **RATIONALE**

- a. Removing dead stock from pens prevents the spread of pathogens that cause disease and cannibalism.
- b. Sick pigs are one of the main sources of pathogens that can spread to healthy pigs.

#### **GUIDANCE**

The following are recommended:

- a. Develop a Dead Stock and Waste Removal SOP (see SOP 8.10) that includes the following:
  - i. when the dead stock is taken out of the pen and when the waste is disposed of
  - ii. where the dead stock and waste is to be disposed of
  - iii. the type of equipment used to dispose of the dead stock and waste
  - iv. how the equipment used to dispose of the dead stock and waste is cleaned
- b. Have a freezer in the barn to store dead pigs. Dedicate specific storage containers inside and outside of the building (choose separate colours or identify the containers).
- c. Have watertight containers (e.g., garbage bins) so that the surrounding land and nearby sources of water cannot be contaminated by any leaking fluids. This also provides secure protection from rodents, insects and scavengers.
- d. Clean the dead stock waste containers regularly.
- e. Dedicate a particular vehicle to move dead stock to the storage location for rendering pick-up.
- f. Assign a pick-up schedule that will not cross paths with the movement or planned movement of other vehicles on-farm.
- g. Keep computer records (such as PigChamp) or sow cards to document mortality.

### **AUDIT QUESTIONS**

	Audit Ourstings and later materials		Verification				
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A		
Q6.3.1	Verify whether dead pigs or remains are removed from the pen as soon as reasonably possible, and at least daily.  The following elements must be included in the Dead Stock and Waste Removal SOP (SOP 8.10):  a. when the dead stock is taken out of the pen and the waste is disposed of?  b. where the deadstock and waste is disposed of?  c. what type of equipment is used to dispose of the deadstock and waste?  d. how is the equipment used to dispose of the deadstock and waste cleaned?  Are dead pigs removed from the pen as soon as reasonably possible, and at least daily?		Full and Partial Validation:  > observation > interview > SOP 8.10: Dead Stock and Waste Removal (highly recommended)				
Q6.3.2	Verify that mortalities are recorded.  Mortalities can be recorded on a record other than the Mortality Record (R-M) as long as all required elements are included  a. date of pig's death  b. type of death (natural or euthanized)  c. number of dead pigs  Are mortalities recorded?	Full and Partial Validation:  R-M: Mortality Record					

N/A = not applicable; SOP = standard operating procedure



#### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

> Mortalities are recorded.

MINOR NON-COMPLIANCE - Not applicable.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- Mortalities are not recorded.
- There is an unacceptable level of decomposition in the general population or in a pen.



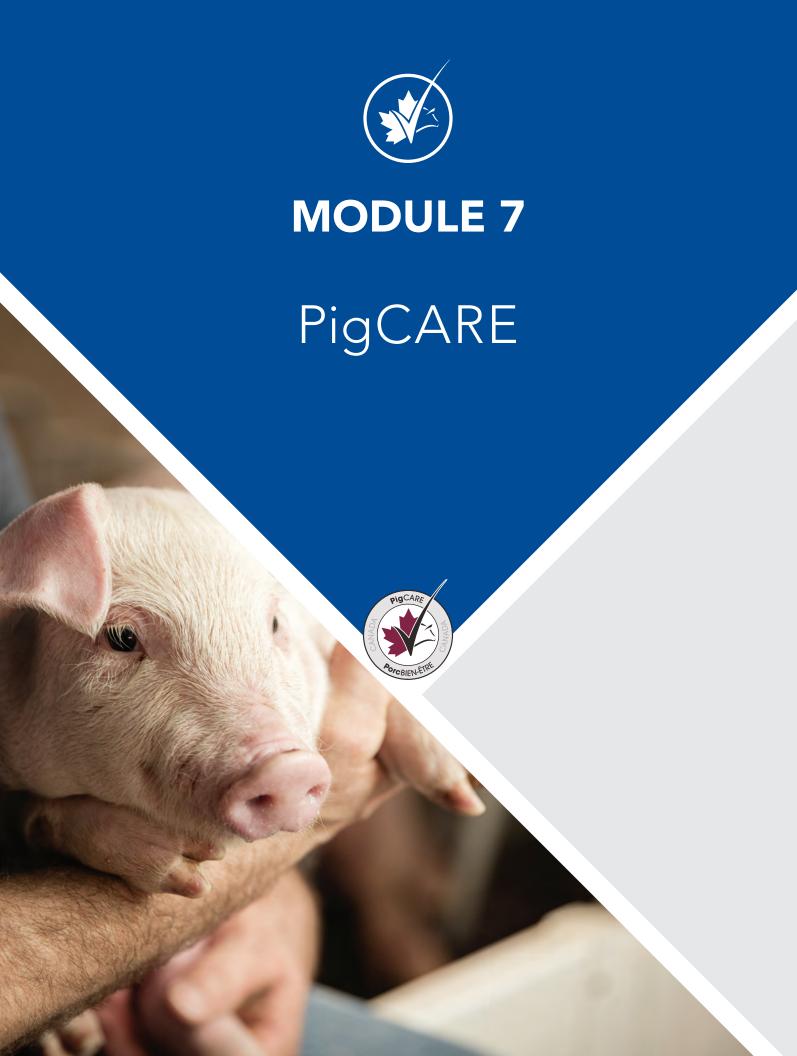
#### **DEVIATION MEASURES**

- If dead pigs are seen in the pen, the designated personnel must remove them as soon as reasonably possible, at least daily.
- If mortalities are not systematically recorded on the Mortality Record (R-M), the designated person must ensure the R-M is completed, includes all required elements and is kept on file.

Complete record R-2 Incident Report.

NOTES			







# IN THIS MODULE

- 7.1 Animal Condition (Animal-Based Measures)
- 7.2 Feed- and Water-Management Systems
- 7.3 Housing System
- 7.4 Environmental Comfort and Lighting
- 7.5 Enrichment
- 7.6 Care of Sick and Injured Pigs
- 7.7 Farrowing and Weaning
- 7.8 Elective Husbandry Procedures
- 7.9 Handling Practices
- 7.10 Euthanasia
- 7.11 Emergency Plan

# Section 7.1

# **Animal Condition**

# (Animal-Based Measures)

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORD		
R-N	Animal-Based Measures Record	Mandatory, if applicable
FACT SHEE	ETS	
F-11	Selecting the Sample for the Animal Based Measures (ABM)	_
F-12	Body Condition Scoring	

#### **SECTION 7.1**

#### ANIMAL CONDITION (ANIMAL-BASED MEASURES)

#### REQUIREMENTS

1. Pigs must be housed, fed, handled and cared for in a manner that maintains an acceptable body condition, prevents them from becoming lame, and protects them from injuries.

#### **RATIONALE**

a. Poor body condition, lameness and injuries can cause pigs to suffer and are often indicative of an underlying issue that is either intrinsic to the pig's health, or related to nutrition, management, housing, or other root causes.

#### **GUIDANCE**

- 1. Criteria for Animal-Based Measures
  - a. **Body condition scoring (BCS)** is often conducted using a five-point system in which the lowest score of 1 (or a body score condition of less than 2) refers to a pig that is emaciated, as demonstrated by its ribs, vertebrae, hip and pin bones being easily identifiable through the skin.
    - i. Assessing pigs for body condition at each phase of production (weaning, breeding, mid-gestation and farrowing) will help to identify animals requiring an adjustment of feed levels.
    - ii. A body score condition of less than 2 suggests an animal welfare issue.
    - iii. A body score condition of more than 4 in sows can lead to potential leg problems and difficulties at farrowing.
    - iv. Breeding gilts too early, before they achieve adequate body weight and condition, may predispose them to lameness, poor body condition at weaning, and other problems at subsequent parities.
  - b. A pig with severe lameness is:
    - i. Non-ambulatory, or
    - ii. Unable to rise or stand without assistance, or
    - iii. Not bearing any weight on an affected limb when either standing or walking, or
    - iv. Lame in one or more limbs to the extent that it exhibits signs of pain or suffering, and halted movements or a reluctance to walk."
  - c. **Injuries** come in a variety of forms; for the PigCARE program, the following injuries will be assessed using these definitions:
    - i. abscesses, swollen ears and swollen joints: multiple abscesses of any size, a single abscess that is the size of a tennis ball or larger, or a swollen ear or joint.
    - ii. prolapses: any vaginal, rectal or uterine prolapse.
    - iii. moderate to severe hernias.
    - » A moderate hernia is larger than 15 cm in diameter and pendulous (it swings while the animal walks).
    - » A pig with a moderate hernia is considered compromised for transport.
    - » A severe hernia meets at least one of the following criteria:
      - » Impedes movement (includes conditions where the hind legs touch the hernia when the animal is walking)
      - » Touches the ground when the pig is standing in its natural position
      - » Presents as an open skin wound, ulceration or obvious infection.
      - » A pig with a severe hernia is considered unfit for transport.
    - iv. Shoulder sores: wounds or ulcerations on the shoulders that are unhealed.
    - v. Lacerations/open wounds: unhealed wounds or injuries that have completely penetrated through the skin (i.e., more severe than a scratch), including injuries to the vulva or tail, or any other open wounds or lacerations. A wound that has completely scabbed over is not considered open.

#### 2. Objectively Measuring Animal-Based Measures

- a. A randomized animal-based measures sample group needs to be selected from the herd using Fact Sheet F-11 Selecting the Sample for the Animal Based Measures. Alternatively, the entire herd can be observed and measured.
- b. Pigs that have been moved into a dedicated sick pen should not be included in the sample. Refer to the Fact Sheet F-11 Selecting the Sample for the Animal Based Measures for directions on which other pigs should be excluded from the animal-based measures sample.
- c. To properly observe the pigs, an attempt to get every pig standing needs to be made, with the exception of sows in farrowing crates.
- d. Each condition that a pig is observed to have must be recorded. For example, if a pig is severely lame and has a poor body condition, each condition should be recorded, i.e., once for severe lameness and once again for poor body condition.
- e. When a pig in a group pen has been observed, it can be sprayed/marked to prevent recounting.
- f. To get an accurate measure of prevalence in the herd, the actual number of pigs that were observed should be tracked and recorded. However, the total number of suckling pigs can be approximated by multiplying the number of litters that were observed by 11, or by the herd's average litter size.
- g. Once the animal-based measures sample has been completed, the total number of observations made for each condition should be tabulated and compared against the total number of pigs observed. This will determine the percentage/prevalence of that condition within a category of pigs.

#### 3. Investigating Potential Causes

- a. A pig's poor body condition can indicate an issue with feed or water supply, nutrition, feeding strategies, feed competition (bullying), amount of space provided, or pig health.
- b. Lameness in pigs can indicate an issue with flooring; equipment; amount of space provided; pig aggression; handling, restraint, breeding or mixing practices; or pig health.
- c. Depending on the type, an injury can indicate an issue with flooring; equipment; amount of space provided; husbandry practices; pig aggression; handling, restraint, breeding or mixing practices; or pig health.

## ? AUDIT QUESTIONS

			Verifi	cation	
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A
Breedin	ng stock (sows, mature gilts, mature boars)				
Q7.1.1	Verify that no more than 1% of sampled breeding stock are emaciated (BCS = 1) as demonstrated by their ribs, vertebrae, hip and pin bones being easily identifiable through the skin.	Full Valid Com Meas	plete Anin	nal-Based	
	Do 1% or less of the sampled breeding stock have a body condition score (BCS) of less than 2?				
Q7.1.2	Verify that no more than 1% of sampled breeding stock are severely lame. A pig with severe lameness is:  Non-ambulatory, or  Unable to rise or stand without assistance, or  Not bearing any weight on an affected limb when either standing or walking, or  Lame in one or more limbs to the extent that it exhibits signs of pain or suffering and halted movements or a reluctance to walk.		<b>dation:</b> plete Anir sures	nal-Based	
	Are 1% or less of the sampled breeding stock severely lame?				
Q7.1.3	Verify that no more than 5% of sampled breeding stock have injuries, including abscesses, swollen ears or joints, prolapses, moderate to severe hernias, shoulder sores, or lacerations/open wounds.	Full Valid Com Meas	plete Anin	nal-Based	
	Do 5% or less of the sampled breeding stock have injuries?				
Suckling	g pigs				
Q7.1.4	Verify that no more than 1% of sampled suckling pigs are emaciated (BCS = 1) as demonstrated by their ribs, vertebrae, hip and pin bones being easily identifiable through the skin.	Full Valid Com Meas	plete Anin	nal-Based	
	Do 1% or less of the sampled suckling pigs have a body condition score (BCS) of less than 2?				
Q7.1.5	Verify that no more than 1% of sampled suckling pigs are severely lame.  A pig with severe lameness is:  Non-ambulatory, or  Unable to rise or stand without assistance, or  Not bearing any weight on an affected limb when either standing or walking, or  Lame in one or more limbs to the extent that it exhibits signs of pain or suffering and halted movements or a reluctance to walk.		dation: plete Anir sures	nal-Based	
	Are 1% or less of the sampled suckling pigs severely lame?				

Q#		Verification				
	Audit Questions and Interpretations	Compliant NC-Minor NC-Major N/A				
Q7.1.6	Verify that no more than 5% of sampled suckling pigs have injuries, including abscesses, swollen ears or joints, prolapses, moderate to severe hernias, shoulder sores, or lacerations/open wounds.	Full Validation:  Complete Animal-Based Measures				
	Do 5% or less of the sampled suckling pigs have injuries?					
Non-br	eeding pigs (nursery, grow/finish, immature boars and gilts, barrows)					
Q7.1.7	Verify that no more than 1% of sampled non-breeding pigs are emaciated (BCS = 1) as demonstrated by its ribs, vertebrae, hip and pin bones being easily identifiable through the skin.	Full Validation:  Complete Animal-Based Measures				
	Do 1% or less of the sampled non-breeding pigs have a body condition score (BCS) of less than 2?					
	Verify that no more than 1% of sampled non-breeding pigs are severely lame. A pig with severe lameness is:					
	» Non-ambulatory, or	Full Validation:				
	» Unable to rise or stand without assistance, or					
Q7.1.8	» Not bearing any weight on an affected limb when either standing or walking, or	Complete Animal-Based Measures				
	» Lame in one or more limbs to the extent that it exhibits signs of pain or suffering and halted movements or a reluctance to walk.					
	Are 1% or less of the sampled non-breeding pigs severely lame?					
Q7.1.9	Verify that no more than 5% of sampled non-breeding pigs have injuries, including abscesses and swollen ears or joints, prolapses, moderate to severe hernias, shoulder sores, or lacerations/open wounds.	Full Validation:  Complete Animal-Based Measures				
	Do 5% or less of the sampled non-breeding pigs have injuries?					

N/A = not applicable



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- 1% or less of sampled pigs in any major category have a body condition score (BCS) below 2.
- 1% or less of sampled pigs in any major category are severely lame.
- 5% or less of sampled pigs in any major category have injuries.

#### ${\bf MINOR\ NON\text{-}COMPLIANCE-Not\ applicable}.$

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- More than 1% of sampled pigs in any major category have a body condition score (BCS) below 2.
- More than 1% of sampled pigs in any major category are severely lame.
- More than 5% of sampled pigs in any major category have injuries.

NOTES			



# Section 7.2

# Feed- and Water-Management Systems

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORD		
R-B	Training Record	Mandatory
	Water Test Result	iviandatory
FACT SHEE	ΕΤ	
F-12	Body Condition Scoring	-

#### **SECTION 7.2**

#### FEED- AND WATER-MANAGEMENT SYSTEMS

#### **REQUIREMENTS**

- 1. Pigs must have daily access to feed.
- 2. Pigs must have access to suitable water in sufficient quantity to meet their needs.
- 3. If a liquid-feeding system is being used, supplemental water must be provided as needed.
- 4. Measures must be taken when breeding stock become overweight.

#### **RATIONALE**

- a. Appropriate feed-management strategies are crucial to ensure pigs' varying nutritional needs are met throughout the production process (i.e., reproduction, lactation, maintenance, growth).
- b. Clean, palatable water is essential for good animal health and production.

#### **GUIDANCE**

#### a. Feed

- i. Nutritionists can provide specific information on the appropriate types of feed ingredients to include in diets based on availability, price and nutritional value. Measures to satisfy appetite as well as nutritional needs are important for pig welfare.
- ii. If animals are not consuming feed, there is likely an underlying cause, either related to animal health or feed quality, which will impact animal welfare and production.
- iii. Newly weaned pigs have very little body reserves and must get established on nursery feed as quickly as possible. Following weaning, it is important to observe pigs frequently to ensure that all are eating. Piglets that fail to adapt can be provided with alternative feeds (e.g., gruel) in a way that encourages feed consumption (e.g., feed trays).
- iv. An animal is considered overweight when its body condition score is 4 or higher.

#### b. Water

- i. Testing the water supply twice a year helps ensure that water quality is acceptable.
- ii. A "separate source of water" can be a cycle of fresh water through the liquid-feeding system.
- iii. Water drinkers (equipment) should also be tested regularly to ensure adequate flow rates and to check for leaks to minimize waste.

### ? AUDIT QUESTIONS

	Audit Questions and Interpretation	Verification				
Q#		Compliant NC-Minor NC-Major NC-Critical N/A				
Q7.2.1	Verify that all pigs have daily access to feed.	Full and partial validation:  > observation (full validation only) > interview				
	Do all pigs have daily access to feed?					
Q7.2.2	Verify that all pigs have access to suitable water in sufficient quantity to meet their needs (i.e. there are no signs of dehydration or excessive competition) and the drinkers are accessible to all pigs (e.g. set as the right height).	Full and partial validation:  > observation (full validation only) > interview				
	Do pigs have access to suitable water in sufficient quantity to meet their needs?					
Q7.2.3	Verify that supplemental water is provided as needed if a liquid-feeding system is used.	Full and partial validation:  interview				
Q7.2.3	If a liquid-feeding system is being used, is supplemental water provided as needed?					
0724	Verify that measures are taken when breeding stock become overweight.	Full and partial validation:  interview				
Q7.2.4	Are measures taken when breeding stock become overweight?					

N/A = not applicable



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- > All pigs have daily access to feed.
- Water is being provided in sufficient quantity to meet the animals' requirements.
- If a liquid-feeding system is being used, supplemental water is provided, as needed.

#### MINOR NON-COMPLIANCE Timeline: 60 days

For liquid-feeding systems, there is no evidence of water being provided separately from the feed (e.g., absence of separate water-delivery system or absence of strategies to provide supplemental water, if needed).

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- > Pigs do not have daily access to feed.
- > There are signs of dehydration due to inadequate water provision (poor quality or not enough) and drinkers are not accessible to all pigs.

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

> Failure to provide adequate food and water resulting in significant harm or death to the animals.

# Section 7.3

# **Housing System**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-Z	Space Allowance Record	Mandatory
R-N	Animal-Based Measures Record	Mandatory, if applicable
R-L	Farm Plan	Highly recommended
FACT SHEE	Т	
F-13	Space Allowance for Nursery and Grow/Finish Pigs	_
	RECORDS  R-Z  R-N  R-L  FACT SHEE	RECORDS  R-Z Space Allowance Record  R-N Animal-Based Measures Record  R-L Farm Plan  FACT SHEET  Space Allowance for Nursery

#### **SECTION 7.3**

#### HOUSING SYSTEM

#### **REQUIREMENTS**

#### All Production Stages

- 1. The flooring and equipment in the pig housing areas must be in a condition that does not pose an immediate risk of injury to the pigs.
- 2. Pigs must be housed in a system that does not routinely use tethers to house them.

#### Sow Barn

- 3. Farrowing crates must be adequately sized so that sows do not:
  - a. touch both sides of the crate (not including anti-crush rails) simultaneously
  - b. touch both ends of the crate simultaneously
  - c. touch the top bars of the crate, or
  - d. be obstructed by a raised trough or rear gate when lying down.
- 4. Mated gilts and sows stalls must be adequately sized so that sows do not have to
  - a. touch both sides of stall simultaneously
  - b. touch both ends of stall simultaneously, or
  - c. touch the top bars of the stall.
- 5. Boar stalls must be adequately sized so that boars are able to stand, lie down, and adopt normal resting postures without undue interference.
- 6. Boars that are housed in stalls must be provided with opportunities to exercise at least four times a week.
- 7. If the holdings for bred gilts or sows is newly built or rebuilt, or was brought into use for the first time after July 1, 2014
  - a. the Group Sow Housing Certification requirements must be met.
- 8. If the holdings for boars is newly built or brought into use for the first time after July 1, 2014
  - a. boars must be provided with sufficient space so they can turn around.

#### Nursery or Grow/Finish Barn

- 9. A Space Allowance Record (R-Z) must be completed for all nursery and grow/finish pens that demonstrates that at least the minimum required space allowance is provided (see Space Allowance for Nursery and Grow/Finish Pigs Fact Sheet F-13).
  - a. The Space Allowance Record (R-Z) must include the following:
    - i. identification of the pen(s)
    - ii. the floor area in the pen(s)
    - iii. the average body weight of the pigs in the pen(s) at first pull/exit
    - iv. the space allowance per pig, and
    - v. the maximum number of pigs per pen.
  - b. If the space allowance for the nursery or grow/finish pigs falls in the orange category (see Space Allowance for Nursery and Grow/Finish Pigs Fact Sheet F-13), an Animal-Based Measures Record (R-N) must have been completed at least three times in the past 12 months, within one week of the first pull/exit, to demonstrate that the pigs' welfare is not compromised by the amount of space.

For your convenience, a template for the Space Allowance Record (R-Z) has been developed for you to use.

#### **RATIONALE**

- a. Adequately designed, built and maintained housing systems are crucial to provide appropriate care and comfort to pigs.
- b. It is possible to achieve equivalent productivity and health in group-housing systems compared with individual gestation stalls, provided they are well designed and managed.
- c. Boars not actively involved in heat detection or breeding need exercise to meet their physical needs.
- d. Tethered sows show lower productivity and higher levels of stress compared with sows housed in gestation stalls or in groups.

\_\_\_\_\_\_

#### **GUIDANCE**

- a. For sows that are housed in groups, the group size, feeding system, space allowance, and mixing practices (i.e., a stable group versus a dynamic group) all influence sow welfare.
- b. In all group-housing systems, the space allowance provided to pigs affects animal welfare, health and productivity.
- c. As of July 1, 2029, mated gilts and sows have to be housed:
  - i. in groups\* or
  - ii. individual pens
  - \* If housed in groups, individual stalls may be used for up to 28 days after the date of last breeding, and an additional period of up to 7 days is permitted to manage grouping. Time in stalls can only be extended to protect the welfare of individual sows on the advice of a competent stockperson.
- d. As of July 1, 2029, boars will have to be housed:
  - i. in individual pens with sufficient space to turn around.

Through science and innovation, Canadian pork producers are committed to full adoption of group housing designs/ systems that offer more freedom of movement for sows.

The industry will continue to investigate feasible housing systems that allow sows greater freedom of movement through all stages, and that reduce the need for stalls during gestation.

### ? AUDIT QUESTIONS

0.11		Verification				
Q#	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A	
All Produ	uction Stages		1			
Q7.3.1	Verify that the flooring and equipment in the pig housing areas observed during the validation does not pose an immediate risk of injury to pigs.  Examples of immediate risks include, but are not limited to:  a. broken slats or holes in the flooring of group pens that pigs can fit their legs through  b. sharp protrusions from equipment and rebar sticking out of concrete.	Full and Partial Validation:  > observation > interview				
	Is the flooring and equipment in the pig housing areas in a condition that does not pose an immediate risk of injuring the pigs?					
Q7.3.2	Verify that pigs are not tethered routinely as part of their normal housing system.	Full and partial validation:  • observation (full validation only)				
	Are pigs housed in a system that does not use tethers routinely to house them?					
Sow Barr	ו					
Q7.3.3	Verify that 90% or more of the farrowing crates containing sampled bred gilts and sows are sized according to the Pig Code of Practice requirements by assessing the following criteria when the sows are standing:  a. The length of a farrowing crate must allow the sow enough room to move forward and backward, and to lie down unhindered by a raised trough or rear gate.  b. Sows must not touch both sides of crate (excluding anti-crush rails) simultaneously.  c. Sows must not touch the feeder and back of the crate simultaneously.  d. Sows must not touch the top bars of the crate.	Full validation:  > observation of the sample of bred gilts and sows in crates > R-N: Animal-Based Measures Record				
	Are farrowing crates sized according to Pig Code of Practice requirements?					
Q7.3.4	Verify that 90% or more of individual stalls containing sampled mated gilts and sows are sized according to the Pig Code of Practice requirements by assessing the following criteria when the sows are standing. Sows must not touch  a. both sides of the stall simultaneously  b. both ends of the stall simultaneously, or  c. the top bars of the stall.	<ul> <li>Full validation:</li> <li>Doservation of the sample of mated gilts and sows in stalls.</li> <li>R-N: Animal-Based Measures Record</li> </ul>				
	Are mated gilt and sow stalls sized according to Pig Code of Practice requirements?					

Q#		Verification				
	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A	
Q7.3.5	Verify that 90% or more of stalls containing sampled boars are sized to the Pig Code of Practice requirements by assessing the following criteria on the boars when they are standing:  a. Boars must be able to stand, lie down, and adopt normal resting postures without undue interference.	Full validation:  > observation of the sample of mature boars in stalls  > R-N: Animal-Based Measures Record				
	Are individual boar stalls sized according to Pig Code of Practice requirements?					
Q7.3.6	Verify that all boars, which are housed in stalls, are provided with opportunities to exercise at least four times a week (i.e., every second day).	Full and partial validation:  interview				
	Are boars housed in stalls provided with opportunities to exercise at least four times a week?					
Q7.3.7	Verify the most recent date when an entire sow barn was built, rebuilt or brought into use for the first time based on a building permit. If it was built, rebuilt or brought into use for the first time after July 1, 2014, verify that bred gilts and sows are housed in groups as defined by the Group Sow Housing Certification.	Full and partial validation:  > verify the Group Sow Housing Certification				
	For holdings of bred gilts and sows newly built or rebuilt or brought into use for the first time after July 1, 2014, are the Group Sow Housing Certification requirements met?					
Q7.3.8	Verify the most recent date when an entire sow barn was built or brought into use for the first time based on a building permit. If it was built or brought into use for first time after July 1, 2014, all sampled mature boars can turn around.	Full validation:  > observation of the sample of mature boars				
	For holdings newly built or brought into use for the first time after July 1, 2014, are boars provided with sufficient space so that they can turn around?					
Q7.3.9 HR	Verify whether the Group Sow Housing Certification requirements are being met voluntarily.	Full and partial validation:  > verify the Group Sow Housing Certification				
	Are the Group Sow Housing Certification requirements being met voluntarily?					

			Verific	cation	
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A
Nursery					
	Verify that a Space Allowance Record (R-Z) has been completed for all nursery pens. This record must include all of the following information:				
	a. identification of the pen(s)	Full and	partial va	idation:	
	b. floor area of the pen(s)		•	wance Rec	ord
Q7.3.10	c. average body weight of the pigs in the pen(s) at exit	# IX Z	Space And	wance nee	.ora
	d. space allowance per pig				
	e. maximum number of pigs per pen				
	Has a Space Allowance Record (R-Z) been completed for all nursery pens?				
	Verify if the space provided complies with the Code of Practice requirements for every nursery pen.				
Q7.3.11	If the space allowance requires supporting records (i.e., the space provided falls in the orange category as per the Space Allowance for Nursery and Grow/Finish Pigs Fact Sheet (F-13)), an Animal-Based Measures Record (R-N) that has been completed at least three times in the past 12 months (subject to the farm being in operation that long) within one week of pigs exiting the pen is required to demonstrate the pigs' welfare has not been compromised by the amount of space.	> R-Z: 5	rvation, if Animal-Ba	lidation: owance Rec applicable ased Measu	
	Are all nursery pigs provided with sufficient space according to the Code of Practice requirements?				
Grow/Fin	ish Barns				
	Verify that a Space Allowance Record (R-Z) has been completed for all grow/finish pens. This record must include all of the following information:				
	a. identification of the pen(s)	Full and	partial va	idation:	
	b. floor area in the pen(s)		•	wance Rec	ord
Q7.3.12	c. average body weight of the pigs in the pen(s) at first pull		-		
	d. space allowance per pig				
	e. maximum number of pigs per pen.				
	Has a Space Allowance Record (R-Z) been completed for all grow/finish pens?				
	Verify if the space provided complies with the Code of Practice requirements for every grow/finish pen.				
Q7.3.13	If the space allowance requires supporting records (i.e., the space provided falls in the orange category as per the Space Allowance for Nursery and Grow/Finish Pigs Fact Sheet (F-13)), an Animal-Based Measures Record (R-N) that has been completed at least three times in the past 12 months (subject to the farm being in operation that long) within one week of pigs exiting the pen is required to demonstrate the pigs' welfare has not been compromised by the amount of space.	<b>&gt;</b> R-Z: :	rvation, if Animal-Ba	lidation: wance Rec applicable ased Measu	
	Are all grow/finish pigs provided with sufficient space according to the Code of Practice requirements?				



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### **COMPLIANT**

- > Flooring and equipment in pigs' housing do not pose an immediate risk of injuring the pig(s).
- Housing meets Code of Practice requirements.
- Space allowance has been calculated, recorded, and meets Code of Practice requirements, including supporting ABM records (R-N), if applicable.
- **>** Boars housed in stalls are provided with opportunities to exercise at least 4 times a week.

#### MINOR NON-COMPLIANCE Timeline: 12 months

- Housing does not meet Code of Practice requirements or pen stocked heavier than recorded on the Space Allowance Record (R-Z).
- > Space allowance has not been calculated or recorded.
- Animal-Based Measures records (R-N) have not been completed at least 3 times in the past 12 months when space allowance falls in the orange category or below the absolute minimum required by the Code of Practice (see Fact Sheet F-13 Space Allowance for Nursery and Grow/Finish Pigs).
- > Space allowance provided is below the absolute minimum required by the Code of Practice.
- Doars that are housed in stalls are not provided with opportunities to exercise at least 4 times a week.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

> Flooring or equipment in pigs' housing poses an immediate risk of injuring the pig(s).

NOTES			

# Section 7.4

# **Environmental Comfort and Lighting**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORD		
R-O	Observation Record	Highly recommended

#### **SECTION 7.4**

#### ENVIRONMENTAL COMFORT AND LIGHTING

#### **REQUIREMENTS**

- 1. All pigs must be provided with a comfortable environment that includes
  - a. a temperature that is suitably controlled at all stages of production
  - b. ventilation that is adequately controlled at all stages of production, and
  - c. an adequate amount of lighting at all stages of production.

#### **RATIONALE**

- a. Suitable temperature, adequate ventilation and lighting are all critical for pigs' health, welfare and comfort.
- b. Continuous lighting, particularly very bright lighting, as well as continuously dark conditions, have a negative effect on pig welfare.

#### **GUIDANCE**

- a. It is recommended that you record any observation that would indicate an issue with the temperature, ventilation or lighting in Observation Record (R-O), especially if the issue could impact the pigs' welfare.
- b. It is recommended that you develop an action plan for the control of temperature and ventilation in extreme weather conditions.

#### c. Temperature:

- i. The effective temperature, i.e., the temperature that the pigs feel, depends on many factors such as air temperature, air flow, humidity, flooring material, bedding, dryness of the floor, size of the pigs, group size, feed type and intake, and health status.
- ii. The temperature at pig level may differ by several degrees from the temperature measured at higher levels.

#### d. Ventilation:

- Adequate ventilation will help minimize unpleasant and harmful gases, minimize dust, and control barn humidity.
- ii. Gases of concern in swine facilities are ammonia, hydrogen sulfide, carbon monoxide and methane.
- iii. It is recommended that the ammonia level be measured and a target level set at below 25 ppm. Causes for high ammonia levels include insufficient ventilation, dirty floors, and practices that release ammonia from the pit.

#### e. Lighting:

- i. When awake, pigs prefer a lit environment, but prefer to sleep in the dark.
- ii. Piglets and weanling pigs may benefit from additional hours of light in order to find their food.

## ? AUDIT QUESTIONS

0#	Audit Questions and Interpretations		Verification					
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A			
	Verify that the temperature is suitable and ventilation is being adequately controlled for the pigs at all stages of production.  If pigs have access to the outdoors, go to section 10.2 to complete this question.		partial valida vation (full v	ation: validation or	nly)			
	<ul> <li>a. Is the temperature suitably controlled at all stages of production?</li> </ul>							
	<ul><li>b. Is the ventilation adequately controlled at all stages of production?</li></ul>							
07.44	Verify that an adequate amount of lighting is being provided to the pigs at all stages of production.							
Q7.4.1	Code of Practice requirements:							
	Lighting that is bright enough for someone to inspect the pigs and read documents must be provided to the pigs for a minimum of eight hours per day.	Full validation:  • observation						
	Darkness, or access to a darkened area, must be provided to the pigs for at least six consecutive hours per day (with the exception of heating devices in farrowing areas, and the first 48 hours for newly weaned pigs, and natural lighting in geographic areas where darkness lasts less than six hours).	<b>&gt;</b> interview						
	c. Is an adequate amount of lighting provided at all stages of production?							

N/A = not applicable.



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- Interview questions were answered sufficiently to indicate compliance with the requirements.
- Pigs appear to be relatively comfortable with the ventilation and temperature.
- > Lighting at all stages of production, when on, is bright enough to inspect the pigs and read written documents.

#### MINOR NON-COMPLIANCE Timeline: 12 months

- Interview questions were not answered sufficiently enough to indicate compliance with the requirements.
- > Pigs are not provided with adequate lighting for at least eight hours per day and with dark conditions for at least six hours per day.
- Lighting, when on, is not bright enough to inspect pigs or read written documents.

MAJOR NON-COMPLIANCE - Not applicable

# Section 7.5

# **Enrichment**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURE	
7.5	Enrichment	Highly recommended
FACT SHEE	≣T	
F-14	Environmental Enrichment Examples	

#### SECTION 7.5 **ENRICHMENT**

#### **REQUIREMENTS**

1. Two or more enrichment options must be provided to pigs at all stages of production.

#### **RATIONALE**

- a. Pigs are highly motivated to root and explore their environment. Providing environmental enrichment improves animal welfare by enhancing the animals' physical or social environment.
- b. Enrichment strategies, such as providing objects suitable for chewing and rooting, can deter pigs from harmful social behaviour such as ear- and tail-biting, thereby reducing the impact of these problems.
- c. Enrichment can increase the number and range of normal behaviours and prevent the development of abnormal behaviours or reduce their frequency or severity. It can also increase the positive utilization of pen space and the animals' ability to cope with change.
- d. The presence of enrichment can reduce aggression when pigs are mixed in together and reduce handling stress.

#### **GUIDANCE**

- a. It is recommended that an Enrichment SOP (SOP 7.5) be developed that clearly identifies the enrichment tools used at each stage of production.
- b. Suitable forms of enrichment vary with each stage of production and with housing system being used. See the Environmental Enrichment Examples Fact Sheet F-14 for enrichment suggestions.
- c. All forms of enrichment should be carefully selected to ensure they are safe for pigs (i.e., they are unlikely to cause strangulation, choking, poisoning or obstruction of the digestive tract) and do not pose a risk to food safety or biosecurity. The potential for affecting liquid manure systems should also be considered.
- d. Do not use steel-belted radial tires as an enrichment. The steel in these tires may become exposed, break off in small pieces, and become embedded in the animals.
- e. In addition to enrichment objects, interaction with other pigs and altering the sensory environment (e.g., leaving a radio on, or providing separate areas for feeding, resting and dunging) can be considered enrichment.
- Periodic activities, such as pen walking by personnel, top dressing with alternative feeds or providing multiple feeding events per day, are also considered to provide enrichment.
- Pigs prefer enrichment objects that are malleable, consumable and chewable. See Environmental Enrichment Fact Sheet F-14 for examples.
- h. Objects can quickly lose their novelty value, so rotation of a variety of objects will have greater value to the pigs.
- Enrichment objects should be either suspended or cleaned regularly, as soiled objects have little enrichment value to pigs.
- Straw is recognized as a premium source of enrichment. However, the source of the straw should be evaluated as a potential biosecurity risk. Straw may also pose a challenge to manure-management systems. Small amounts provided in a rack or on solid floor areas will generally be consumed before entering pits.

## ? AUDIT QUESTIONS

Q#		Verification				
	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A	
Q7.5.1	Verify that two or more enrichment options are provided to pigs at all stages of production.  See the Environmental Enrichment Examples Fact Sheet F-14 for examples.	Full and partial validation:  observation (full validation only) interview			n only)	
	Are two or more enrichment options provided to pigs at all stages of production?					

N/A = not applicable



# LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

At least two enrichment options are provided to pigs at all stages of production.

#### MINOR NON-COMPLIANCE Timeline: 12 months

> Less than two enrichment options are provided to pigs at all stages of production.

MAJOR NON-COMPLIANCE – Not applicable

NOTES			



	PID#:
Site Manager:	Person in charge:

#### **PROTOCOL**

- 1. At least two types of enrichments are to be made available to all animals.
- 2. For each stage of production, indicate the enrichments that are provided and their availability using the table below.

Stage of Production	Enrichments Provided	Availability: Continuous (C), Multiple Times Per Day (M), Daily (D) or Weekly (W)
Gestating sows, in stalls		
Gestating sows, in groups		
Farrowing sows		
Piglets		
Nursery/weaned pigs		
Grow/finish pigs		
Boars		

<sup>\*</sup> Note: Periodic maintenance of enrichment objects, including regular inspection and cleaning, is required. Enrichment objects have to be cleaned at the same time as the facility.

NOTES			



# Section 7.6

# Care of Sick and Injured Pigs

#### REFERENCED IN THIS SECTION:

1andatory
Non datam,
1andatory
lighly ecommended
1

#### **SECTION 7.6**

#### CARE OF SICK AND INJURED PIGS

#### **REQUIREMENTS**

- 1. A SOP for the Care of Sick and Injured Pigs (SOP 7.6) must be developed in consultation with a licensed veterinarian and adequately implemented. The SOP must include the following:
  - a. The observation of all pigs at least daily for detection of sickness, injuries and behavioural vices (e.g., tail-biting).
  - b. The investigation of causes and management of behavioural vices.
  - c. Measures for segregating, treating and monitoring pigs, according to their condition.
  - d. Factors for deciding when to euthanize pigs.
  - e. Factors for deciding when to contact the herd veterinarian, including for suspicion of reportable diseases.

For your convenience, a template for the Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed for you to use.

#### **RATIONALE**

- a. Animals need to be assessed on an ongoing basis for illness and injuries to ensure they are treated promptly, effectively and humanely in order to avoid suffering and prevent the spread of infectious disease to other animals.
- b. The presence of behavioural vices and/or aggression usually indicates that the well-being of the pigs has been compromised.
- c. Vices may result in self-injury or the injury of other animals. Early identification and resolution of these issues can reduce the occurrence of health problems.
- d. Certain conditions require pigs to be segregated from other pigs to prevent their condition from worsening and to allow them to recover. Segregation in a separate area also reduces the likelihood of communicable diseases spreading from sick pigs to healthy ones.

#### **GUIDANCE**

- a. Sick or injured pigs often benefit from being segregated in an area where they can recover without having to compete with healthy pen mates for food, water and comfortable lying areas.
- b. Promptly euthanize pigs not responding to treatment, pigs with untreatable conditions that compromise welfare and pigs that cannot be transported humanely.
- c. Behavioural vices are often multi-factorial and can indicate problems with the environment, feed or other factors.
- d. The most common behavioural vices include ear-biting, tail-biting, belly-nosing and aggression.
- e. While completing your daily observations, it is recommended that you use a temperature record, or any type of daily record, and a camera to demonstrate that the monitoring of the animals was completed.

# ? AUDIT QUESTIONS

	Verification						
Audit Questions and Interpretation	Compliant	NC-Minor	NC-Major	NC-Critical	N/A		
Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed with a licensed veterinarian and includes all required elements.  Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?		Full and partial validation:  SOP 7.6: Care of Sick and Injured Pigs					
Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) is adequately implemented on-farm.  a. Pigs are observed daily.  b. Barn personnel are capable of detecting injuries, sick animals and behavioural vices.  c. Sick or injured pigs are treated, segregated and monitored according to the SOP or appropriately for their condition.  d. Pigs are euthanized in a timely manner according to the SOP or appropriately for their condition.		riew vation (full 7.6: Care o Medication reatment F Mortality R	validation f Sick and I and Vaccir Record lecord	njured Pigs			
Verify that the site has the ability to segregate sick or injured pigs in a separate area.  Does the site have the ability to segregate sick		riew		only)			
	has been developed with a licensed veterinarian and includes all required elements.  Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) is adequately implemented on-farm.  a. Pigs are observed daily.  b. Barn personnel are capable of detecting injuries, sick animals and behavioural vices.  c. Sick or injured pigs are treated, segregated and monitored according to the SOP or appropriately for their condition.  d. Pigs are euthanized in a timely manner according to the SOP or appropriately for their condition.  Is the Care of Sick and Injured Pigs SOP (SOP 7.6) adequately implemented on-farm?  Verify that the site has the ability to segregate sick or injured pigs in a separate area.	Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed with a licensed veterinarian and includes all required elements.  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Full and  intervious compliant  Full and  intervious compliant  Full and  intervious compliant  intervious compliant  includes all required elements.  Full and  intervious compliant  intervious compliant  includes all required elements.  Full and  intervious compliant  intervious	Audit Questions and Interpretation  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed with a licensed veterinarian and includes all required elements.  Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) is adequately implemented on-farm.  a. Pigs are observed daily. b. Barn personnel are capable of detecting injuries, sick animals and behavioural vices. c. Sick or injured pigs are treated, segregated and monitored according to the SOP or appropriately for their condition.  d. Pigs are euthanized in a timely manner according to the SOP or appropriately for their condition.  Is the Care of Sick and Injured Pigs SOP (SOP 7.6) adequately implemented on-farm?  Verify that the site has the ability to segregate sick or injured pigs in a separate area.  Full and partial validation interview  > R-B: Training Re  Full and partial validation interview  > R-B: Training Re	Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed with a licensed veterinarian and includes all required elements.  Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) is adequately implemented on-farm.  a. Pigs are observed daily. b. Barn personnel are capable of detecting injuries, sick animals and behavioural vices. c. Sick or injured pigs are treated, segregated and monitored according to the SOP or appropriately for their condition.  d. Pigs are euthanized in a timely manner according to the SOP or appropriately for their condition.  Is the Care of Sick and Injured Pigs SOP (SOP 7.6) adequately implemented on-farm?  Verify that the site has the ability to segregate sick or injured pigs in a separate area.  Compliant NC-Minor NC-Major  Full and partial validation:  SOP 7.6: Care of Sick and Injured Pigs SOP (SOP 7.6)  R-P: Medication and Vaccion R-P: Medication and Vaccion R-P: Treatment Record R-P: Medication and Vaccion R-P: Treatment Record R-P: Treatment Record R-P: Treatment Record R-P: Medication and Vaccion R-P: Treatment Record R-P: Medication R-P: Medi	Audit Questions and Interpretation  Compliant NC-Minor NC-Major NC-Critical  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) has been developed with a licensed veterinarian and includes all required elements.  Has a Care of Sick and Injured Pigs SOP (SOP 7.6) been developed in consultation with a licensed veterinarian that includes all PigCARE-required elements?  Verify that a Care of Sick and Injured Pigs SOP (SOP 7.6) is adequately implemented on-farm.  a. Pigs are observed daily. b. Barn personnel are capable of detecting injuries, sick animals and behavioural vices. c. Sick or injured pigs are treated, segregated and monitored according to the SOP or appropriately for their condition.  d. Pigs are euthanized in a timely manner according to the SOP or appropriately for their condition.  Is the Care of Sick and Injured Pigs SOP (SOP 7.6) adequately implemented on-farm?  Verify that the site has the ability to segregate sick or injured pigs in a separate area.  Compliant NC-Minor NC-Maior NC-M		



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### COMPLIANT

- A Care of Sick and Injured Pigs SOP (SOP 7.6) is available with all required elements included.
- > There is evidence that a Care of Sick and Injured Pigs SOP (SOP 7.6) is being adequately implemented.
- There are no pigs on-farm that currently need to be euthanized.

#### MINOR NON-COMPLIANCE Timeline: 60 days

- The Care of Sick and Injured Pigs SOP (SOP 7.6) is incomplete or unavailable.
- The site does not have the ability to segregate sick or injured pigs in a separate area.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- A Care of Sick and Injured Pigs SOP (SOP 7.6) is not adequately implemented:
  - » Pigs are not being observed daily.
  - » Sick and injured pigs are not being treated, segregated or monitored according to the plan or appropriately for their condition.
  - » Barn personnel are not capable of detecting injuries, sick animals or behavioural vices.

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

- > There is a pig on-farm, which was observed by barn personnel in its current condition, that should have already been euthanized following SOP 7.10 Euthanasia:
  - i. the pig was in severe pain/suffering that was not immediately treatable or
  - ii. the pig was sick, injured, in pain or suffering and was
    - » unlikely to recover
    - » untreatable
    - » treated but its condition was worsening
    - » not responding to treatment, or
    - » unfit for immediate transport.



# SOP 7.6 CARE OF SICK AND INJURED PIGS



This standard operating procedure (SOP) can be used as a temp If you develop your own version, all required elements must be i		PID#:
Site Manager: I	Person in charge:	
IDENTIFICATION OF VETERINARIAN		
This plan for the care of sick and injured pigs was develop with whom a veterinarian–client–patient relationship has b		d veterinarian
Name of veterinarian:		

#### **PROTOCOL**

De	signated personnel must follow this protocol every time pigs are observed.	Applied On-Farm	Importance
1.	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		Mandatory
2.	Daily observation  a. Monitor all pigs at least daily for signs of sickness, injuries and behavioural vices.		
3.	Management of behavioural problems (vices)      If behavioural vices (such as tail biting, belly nosing, sucking, aggression and fighting) are detected, promptly investigate the potential causes of the problem.		Mandatory
	<ul> <li>b. Some of the factors to look into in the event of a behavioural vice include:</li> <li>i. Environmental:</li> <li>» temperature</li> <li>» ventilation</li> </ul>		
	<ul><li>ii. Feed/water-related:</li><li>» nutrient deficiency</li><li>» other:</li></ul>		Highly recommended
	<ul><li>iii. Management-related:</li><li>» mixing practices</li><li>» other:</li></ul>		
	<ul><li>iv. Health-related:</li><li>» disease outbreak</li><li>» other:</li></ul>		
	c. Take action to deal with the specific issue, especially for those pigs directly affected.		

De	sign	nated personnel must follow this protocol every time pigs are observed.	Applied On-Farm	Importance
4.	Tre	eatment and monitoring		
	a.	Treat sick or injured pigs according to their condition.		
	b.	If necessary, segregate sick or injured pigs to prevent worsening their condition.		Mandatory
		i. Segregation method:		
		<ul> <li>ii. Some conditions that may require pigs to be segregated include:</li> <li>» moderate to severe lameness</li> <li>» other:</li> <li>» other:</li> </ul>		Highly recommended
	c. d.	Increase feed ration for thin animals.  Perform medication treatments according to your Medication and Vaccine Usage Plan (R-P).		
	e.	Record medication treatments in the Treatment Record (R-T).		
	f.	Monitor sick or injured pigs at least daily or more frequently, if appropriate for their condition.		
	i.	Frequency of monitoring sick pens:		
	g.	Record mortalities on the Mortality Record (R-M).		
5.	Tin	nely euthanasia		
	a.	Identify when it is time to euthanize a pig (refer to Euthanasia Decision Tree Fact Sheet F-17):		Mandatory
		i. A pig must be euthanized when it is in severe pain/suffering that is not immediately treatable, or is sick, injured, in pain or suffering and any of the following are true:		
		» it is unlikely to recover		
		» its condition is untreatable		
		» it has been treated and its condition is worsening		
		» it has not responded to treatment within days		
		» it is unfit for immediate transport (i.e., transport within days)		
	b.	When the decision has been made to euthanize a pig, euthanize it immediately (within minutes) according to your Euthanasia SOP (SOP 7.10).		

Designated personnel must follow this protocol every time pigs are observed.	Applied On-Farm	Importance
<ul> <li>6. Consultation with herd veterinarian</li> <li>a. Contact your herd veterinarian if you have concerns about the number of sick or injured pigs, or when pigs are not responding to treatment protocols.</li> <li>b. Advise the herd veterinarian if a reportable disease is suspected.</li> </ul>		Mandatory
Other good production practices:		

#### **DEVIATION MEASURES**

What happens if	something goes wrong?		
If an error occurs, designated personnel must take the following corrective actions.		Applied On-Farm	Importance
	If the Care of Sick and Injured Pigs SOP (SOP 7.6) is unavailable or incomplete, the personnel in charge must ensure the SOP is developed, implemented and monitored.		
1	If barn personnel are not capable of detecting injuries, sick animals or behavioral vices, the Site Manager must ensure all personnel are trained on recognizing those conditions. Complete R-2 Incident Report		Mandatory

#### **RECORDS**

Name of Record		Importance
R-2	Incident Report	
R-4	Monitoring Record	
R-P	Medication and Vaccine Usage Plan	Mandatory
R-T	Treatment Record	
R-M	Mortality Record	
R-O	Observation Record	Highly recommended

NOTES			

# Section 7.7

# Farrowing and Weaning

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURES	
7.7.1	Farrowing Room	Mandatani
7.7.2	Newly Weaned Pigs	Mandatory
RECORD		
R-M	Mortality Record	Mandatory

#### **SECTION 7.7**

#### FARROWING AND WEANING

#### **REQUIREMENTS**

- 1. A Farrowing Room SOP (SOP 7.7.1) must be developed, adequately implemented and include the following:
  - a. training for personnel in charge of this protocol
  - b. checks to ensure that creep areas are available to piglets
  - c. frequent observations of sows around their expected farrowing times, when possible
  - d. assistance when necessary for sows having farrowing difficulties
  - e. checks that newborn piglets are able to reach and maintain normal body temperatures
  - f. measures to maximize piglets' chance of receiving colostrum as soon as possible and within 12 hours of farrowing
  - g. practices such as cross-fostering that prevent piglets from dying of inadequate nutrition
  - h. administration of supplemental iron to all piglets
  - i. provision of creep feed at no later than 28 days of age
  - j. a provision to limit the amount of time a sow can spend in a farrowing crate to no more than six weeks, except in exceptional circumstances.
- 2. A Newly Weaned Pigs SOP (SOP 7.7.2) must be developed, adequately implemented and include measures to minimize negative impact on the health and welfare of the newly weaned pigs.

For your convenience, templates for the SOPs listed above have been developed for you to use.

#### **RATIONALE**

- a. Observing sows frequently before, during and after farrowing is crucial to prevent health problems that occur more commonly around this time period. This will ensure the welfare of sows and piglets is not compromised.
- b. Post-farrowing care for piglets, such as access to colostrum, adding an extra heat source, cross-fostering and nutritional supplementation, can help prevent nutritional deficiency and future issues.
- c. Providing creep feed to nursing piglets can help the transition at weaning, reduce lactation requirements and maintain sow body condition.
- d. Weaning procedures that reduce stress are crucial to minimize negative impacts on the health and welfare of the piglets.

#### **GUIDANCE**

- a. Farrowing gilts or sows can sometimes be aggressive towards their piglets; they may attempt to bite or injure piglets that approach their head during and after farrowing, so it is important to also monitor piglets closely during this period.
- b. Newly weaned pigs are susceptible to disease challenges, so adherence to high-level hygiene protocols is important.
- c. Regardless of age, low-weight piglets require additional care and can benefit from being kept in specialized pens until they are able to be moved to the common nursery area.
- d. Signs of impending farrowing include: milk (colostrum) that can be squeezed from teats; increased respiration rate; expulsion of blood-stained fluids from the vulva; increased restlessness of the sow; nest building; a firm, swollen udder; and twitching of the tail.

## ? AUDIT QUESTIONS

Ω#	Audit Question and Interpretation	Verification		
Qπ	Addit Question and interpretation	Compliant NC-Minor NC-Major N/A		
Q7.7.1	Verify that a Farrowing Room SOP (SOP 7.7.1) has been developed and includes all required elements.	Full and partial validation:  SOP 7.7.1: Farrowing Room		
Q7.7.1	Has a Farrowing Room SOP (SOP 7.7.1) been developed that includes all required elements?			
Q7.7.2	Verify that a Farrowing Room SOP (SOP 7.7.1) has been adequately implemented. Ensure the measures listed in the SOP are followed.	Full and partial validation:  > SOP 7.7.1: Farrowing Room  > observation (full validation only)  > interview		
	Has a Farrowing Room SOP (SOP 7.7.1) been adequately implemented?			
Q7.7.3	Verify that a Newly Weaned Pigs SOP (SOP 7.7.2) has been developed and includes measures to minimize negative stressors and impact on the health and welfare of the newly weaned pigs.	Full and partial validation:  SOP 7.7.2: Newly Weaned Pig observation (full validation only) interview		
	Has a Newly Weaned Pigs SOP (SOP 7.7.2) been developed that includes all required elements?			
Q7.7.4	Verify that a Newly Weaned Pigs SOP (SOP 7.7.2) has been adequately implemented. Ensure the measures listed in the SOP are followed.	Full and partial validation:  > SOP 7.7.2: Newly Weaned Pigs > observation (full validation only) > interview		
	Has the Newly Weaned Pigs SOP (SOP 7.7.2) been adequately implemented?			

N/A = not applicable; SOP = standard operating procedure



#### LEVELS OF COMPLIANCE – EXAMPLES

#### **COMPLIANT**

- The Farrowing Room SOP (SOP 7.7.1) and/or Newly Weaned Pigs SOP (SOP 7.7.2) are available with all required elements addressed.
- There is evidence the Farrowing Room SOP (SOP 7.7.1) and/or Newly Weaned Pigs SOP (SOP 7.7.2) are being adequately implemented.

#### MINOR NON-COMPLIANCE Timeline: 12 months

- The Farrowing Room SOP (SOP 7.7.1) and/or Newly Weaned Pigs SOP (SOP 7.7.2) are incomplete or not available.
- There is evidence the Farrowing Room SOP (SOP 7.7.1) and/or Newly Weaned Pigs SOP (SOP 7.7.2) are not being adequately implemented.

MAJOR NON-COMPLIANCE - Not applicable



This standard operating procedure (SOP) can be used as a tem If you develop your own version, all required elements must be	,	PID#:
Site Manager:	Person in charge:	

#### **PROTOCOL**

Site Manager must ensure the personnel in charge of this protocol adequately trained.  Description of farrowing room  Before placing sows, clean and disinfect the farrowing rooms thoroughly, including floors, crates, feeders, walls, fans, and lights.		Mandatory
Before placing sows, clean and disinfect the farrowing rooms thoroughly,		
Ideally, the room should be allowed to dry completely before sows enter.		
Check for sharp edges in the crates that may cause injuries to the sows or piglets.		Highly recommended
Check to see that waterers and heaters are functioning properly.		
Adjust the size of the crates to accommodate the sows that will be housed in them.		
Ensure the farrowing crate provides a creep area to which the piglets can retreat when the sow moves.		Mandatory
Beginning 24 hours before expected farrowing, turn on and check heating devices (heat lamps, heat pads, radiant heaters) to ensure proper functioning.		
Other good production practices:		Highly recommended
E	Beginning 24 hours before expected farrowing, turn on and check heating devices (heat lamps, heat pads, radiant heaters) to ensure proper functioning.	Beginning 24 hours before expected farrowing, turn on and check heating devices (heat lamps, heat pads, radiant heaters) to ensure proper functioning.

		nated personnel must follow this protocol during farrowing, throughout on and at weaning.	Applied On-Farm	Importance			
3.	3. Frequent observation during farrowing						
	a.	When possible, frequently observe the sows around their expected farrowing.		Mandatan			
	b.	If farrowing is not progressing smoothly, determine if the sow has finished farrowing and promptly assist her, if necessary.		Mandatory			
	C.	Other good production practices:		Highly recommended			
4.	Ca	re of suckling piglets					
	a.	Ensure newborn piglets are housed at temperatures that will help them reach and maintain normal body temperature.		Mandata			
	b.	Attempt to ensure that all piglets suckle as soon as possible (within 12 hours of farrowing) to receive colostrum.		Mandatory			
	C.	Help piglets that have not received colostrum to access it. If performing split-suckling, make sure all piglets being separated from the sow have already received colostrum, if possible.		Highly			
	d.	Wait to perform elective husbandry procedures on piglets until after they have received colostrum (see SOP 7.7 Elective Husbandry Procedures).		recommended			
	e.	Cross-foster, split-suckle, hand-rear or euthanize in a timely manner any piglets at risk of dying from inadequate nourishment.					
	f.	Administer supplemental iron to all piglets.		Mandatory			
	g.	Provide creep feed to piglets at no later than 28 days of age.					
	h.	Continually monitor piglets and euthanize, when necessary (refer to sections 7.6 and 7.10).		Highly recommended			
	i.	Other good production practices:		Highly recommended			

Mandatory
Highly recommended
•

#### **RECORD**

Name of Record			
R-M	Mortality Record	Mandatory	

NOTES			



This standard operating procedure (SOP) can be used as a tem If you develop your own version, all required elements must be		PID#:
Site Manager:	Person in charge:	

The following good production practices are designed to minimize negative impact on the health and welfare of newly weaned pigs. Identify which of these practices are applied on your farm.

#### **PROTOCOL**

	en receiving and taking care of newly weaned pigs, designated personnel st follow this protocol for the first three to five days after weaning.	Applied On-Farm	Importance
1.	The Site Manager must ensure the personnel in charge of this protocol are adequately trained.		Mandatory
2.	Preparation of the nursery rooms		
	a. Clean the nursery rooms according to SOP 2.2.1 Sanitation between batches.		
	b. Ensure the nursery pens are dry prior to placing pigs in them.		
	c. Before placing pigs in a room, ensure it has been warmed to an adequate temperature.		Highly recommended
	d. Other good production practices:		
3.	Pig placement		
	a. Place like-sized pigs of the same age together in the same pen.		
	b. Leave adequate space open to house sick or fallback pigs.		
	c. After initial aggression has decreased (usually within two to three days), do not introduce any new pigs to a pen.		Highly
	d. Do not move pigs between pens (except to a sick pen, if necessary).		recommended
	e. Use low-stress handling techniques when moving or handling pigs.		
	f. Other good production practices:		

		receiving and taking care of newly weaned pigs, designated personnel ollow this protocol for the first three to five days after weaning.	Applied On-Farm	Importance
4.	Fee	ed and water management		
	a.	Ensure waterers are functioning and at the proper height.		
	b.	Adjust the feeders until at least 60% of the bottom of the pan is covered with feed.		
	C.	Provide feed on clean feed trays or mats.		
	d.	Deliver fresh feed at least two to three times daily.		Highly recommended
	e.	Consider leaving the lights on for the first 24 to 48 hours to facilitate feed discovery.		recommended
	f.	Identify and mark pigs that have not eaten for further observation.		
	g.	Other good production practices:		
5.	Da	ily husbandry		
	a.	Walk through the rooms multiple times per day in the first 72 hours after weaning.		
	b.	Monitor air quality.		
	C.	Record the room temperature and adjust as necessary.		
	d.	Observe pigs for signs of chilling.		
	e.	If signs of chilling are present, increase the room temperature or add supplemental heating devices, such as heat pads.		Highly recommended
	f.	Observe pigs for other signs of problems, such as sickness or injuries.		
	g.	Segregate fallback pigs and sick pigs for treatment, special care and further monitoring.		
	h.	Other good production practices:		

# Section 7.8

# **Elective Husbandry Procedures**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARI	O OPERATING PROCEDURE	
7.8	Elective Husbandry Procedures	Mandatory
RECORDS		
R-2	Incident Report	
R-4	Monitoring Record	
R-B	Training Record	Mandatory
FACT SHE	ĒΤ	
F-15	Castration and Tail Docking	-

#### **SECTION 7.8**

#### **ELECTIVE HUSBANDRY PROCEDURES**

#### **REQUIREMENTS**

- 1. An Elective Husbandry Procedures SOP (SOP 7.8) must be developed and adequately implemented for castration, tail docking, ear notching, teeth clipping, tusk trimming, and minor on-farm surgeries, if applicable, and must include the following:
  - a. proof that the designated personnel have been trained
  - b. measures to ensure instruments are hygienic, kept sharp and well maintained
  - c. measures to ensure piglets are handled with care
  - d. a description of how each procedure performed on-farm is implemented
  - e. details of the equipment used to perform the procedure
  - f. additional requirements for specific procedures:
    - i. analgesics (pain control) must be used to control post-procedure pain from castration and tail docking
    - ii. anesthetic (loss of sensation) and analgesics must be used if piglets are castrated after 10 days of age
    - iii. if ear notching is being done, this procedure must be deemed necessary and performed before 14 days of age
    - iv. teeth clipping must be performed only when deemed necessary
    - v. if tusk trimming is performed, the pulp cavity must be avoided
    - vi. minor on-farm surgeries must be performed in consultation with a licensed veterinarian and using appropriate anesthesia and analgesics.

For your convenience, a template for the Elective Husbandry Procedure SOP (SOP 7.8) has been developed for you to use.

#### **RATIONALE**

- a. Failure to keep instruments clean and sharp can lead to infections (examples: Salmonella, circovirus, Streptococcus suis and porcine epidemic diarrhea (PED)) spreading among pigs, and to tissue deterioration.
- b. Failure to keep instruments clean and sharp can lead to swollen joints or the formation of abscesses and arthritis requiring medical care or carcass losses (excessive trimming) at the processing plant.
- c. It is crucial to use only tattoo ink that is approved for use in food animals to avoid chemical contamination of the carcass.
- d. A SOP or a set of SOPs for elective husbandry procedures is critical for proper training of employees to ensure that animals experience minimal stress, discomfort and pain during these procedures and are able to recover quickly to normal health and productivity.
- e. Male piglets are castrated to control "boar taint" and to reduce aggression and handling challenges associated with intact males. This may, in turn, decrease the risk of injuries to personnel and other pigs.
- f. The administration of analgesics during castration and tail docking helps to control post-procedure pain.
- q. Routine teeth clipping is less common than castration and tail docking. However, teeth clipping can help to reduce injury to littermates or the sow from "needle" teeth.

#### **GUIDANCE**

#### a. Definitions

- i. Analgesics (painkillers) reduce or eliminate pain.
- ii. Anaesthetics cause the loss of sensation or consciousness.

#### b. Elective Husbandry Procedures

- i. Instruments used for elective husbandry procedures can be disinfected using alcohol or iodine.
- ii. Inspect instruments regularly to ensure they are sharp and clean.
- iii. Elective husbandry procedures such as castration, tail docking and tusk trimming can be painful for pigs.
- iv. Minimizing stress, discomfort, and pain requires attention to protocols and equipment that enable personnel to perform such procedures with skill and care for the pigs' welfare.

#### c. Castration

- i. Immunization against boar taint, also known as immuno-castration, is an effective alternative to surgical castration. Check with your processing plant prior to adopting this practice to see if they accept immuno-castrated animals (vaccinated against boar taint).
- ii. Production of intact males at lighter weights reduces boar taint, but does not guarantee its absence.
- iii. See the Castration and Tail Docking Fact Sheet (F-15) for further details.

#### d. Tail Docking

- i. Tail-biting can be triggered by a wide range or combination of factors, including overstocking, feed deficiencies, incorrect temperature levels, inadequate ventilation, drafts, high levels of dust and noxious gases such as ammonia, and lack of enrichment.
- ii. Docking tails too short may lead to infections or prolapses. Docking tails too long is not effective at reducing tail-biting. Make sure your staff is trained.
- iii. Tail-biting can result in serious wounds and bleeding as well as more severe consequences such as infection, spinal abscess, paralysis and, in extreme cases, death.
- iv. Studies indicate that environmental enrichment (e.g., provision of straw) reduces the chance of tail-biting.
- v. Tail docking is known to cause acute stress, as indicated by physiological and behavioural responses. Some pigs with docked tails may develop increased sensitivity and/or chronic pain in the region.
- vi. The tail wound should be healed before weaning.

#### e. Ear Identification

- i. Identification methods include ear tags (with or without electronic transponders), ear tattoos, and ear notches.
- ii. These identification methods cause stress in pigs, which may be reduced through refinement of equipment and techniques.

#### f. Teeth Clipping

- i. Typically, piglets start to use their teeth to compete with each other within the first 24 hours of birth. This is when the decision whether to clip the teeth of aggressive piglets needs to be made.
- ii. If improperly performed, clipping teeth may cause discomfort to the piglet or an infection.
- iii. The teeth-clipping technique should prevent teeth shattering
- iv. Teeth should be clipped parallel to the gum line.

#### q. Tattooing

i. Ensure that tattoo hammers are kept clean. After each use, they should be cleaned with soap and water to remove both ink and dirt, and they should be dried as thoroughly as possible.

#### h. Tusk Trimming

- i. Tusk trimming is rarely done on-farm. When deemed necessary, it is used to prevent boars from injuring other pigs or personnel. The procedure should remove the tip of the tusk only and should not affect the pulp cavity inside the tusk, which contains nerves and blood vessels.
- ii. Boars do not need to be de-tusked as long as they are individually segregated in transport.

#### i. On-Farm Surgery

- i. In the event that a minor on-farm surgery (e.g., hernia or ridgeline repair) is required, guidance from a licensed veterinarian is critical.
- ii. Major surgical procedures such as non-terminal caesarian section can be performed only by a licensed veterinarian.

### ? AUDIT QUESTIONS

O#	Audit Questions and Interpretation		Verification			
Φ.,			NC-Minor	NC-Major	N/A	
Q7.8.1	Verify that an Elective Husbandry Procedures SOP (SOP 7.8) has been developed for each procedure used on-farm and includes all required elements.	Full and partial validation:  SOP 7.8: Elective Husbandry Procedures				
27.0.1	Have SOPs been developed for all elective husbandry procedures (SOP 7.8) that are performed on-farm and do they include all required elements?					
	Verify that the Elective Husbandry Procedures SOP (SOP 7.8) are adequately implemented on-farm. Ensure the measures listed in the SOP are followed.		Full and partial validation:  SOP 7.8: Elective Husbandry			
	<ul> <li>Verify that analgesics and anesthetics are found on-farm, when applicable.</li> </ul>	Proce	edures	l validatior	•	
Q7.8.2	b. Verify the equipment used is well maintained.	if app	olicable)		,	
	<ul> <li>If a procedure is observed, verify whether it complies with the SOP.</li> </ul>	) inter	view			
	Are the SOPs for elective husbandry procedures (SOP 7.8) adequately implemented?					

N/A = not applicable; SOP = standard operating procedure



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- The Elective Husbandry Procedures SOPs (SOP 7.8) are available. The SOPs address all required elements.
- There is evidence that the Elective Husbandry Procedures SOPs (SOP 7.8) are being adequately implemented. .

#### MINOR NON-COMPLIANCE Timeline: 12 months

The Elective Husbandry Procedures SOPs (SOP 7.8) are incomplete or not available.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

There is evidence that elective husbandry procedures are being conducted using unacceptable practices and pigs are being negatively impacted.



3. Piglet handling

a. Do not handle piglets aggressively.

d. Other good production practices:

c. Pick up and hold piglets gently but securely.

b. Do not throw or drop piglets.

### **SOP 7.8** ELECTIVE HUSBANDRY PROCEDURES

		dard operating procedure (SOP) can be used as a template. velop your own version, all required elements must be included.	PID#:	
Site	Mar	nager: Person in charge:		
PRO	ото	COL		
De hu	esign sbar	nated personnel must follow this protocol every time elective odry procedures are performed.	Applied On-Farm	Importance
1.		e Site Manager must ensure the personnel in charge of this protocol adequately trained.		Mandatory
2.	lns	trument maintenance		
	a.	Use hygienic and well-maintained instruments (e.g., scalpel, clippers, tattoo hammer).		Manufatan
	b.	Replace or repair dull equipment when identified (e.g., sharpen scalpel and clippers and clean cauterizer as necessary).		Mandatory
	C.	Other good production practices:		

■ Not Applicable

Mandatory

recommended

Highly

De hu	sigr sbar	nated personnel must follow this protocol every time elective ndry procedures are performed.	Applied On-Farm	Importance
4.	Ca	stration	☐ Not A	Applicable
	a.	Castrate piglets between and days after birth.		
		<ul> <li>Use analgesics to help control post-procedure pain when castrating piglets.</li> </ul>		
		ii. Name(s) of drugs/products used:		Mandatory
	b.	When castration is performed on piglets more than 10 days old, use an anesthetic and analgesic.		
		i. Name(s) of drugs/products used:		
	c.	Other good production practices:		
5.	Tai	l docking	☐ Not A	Applicable
	a.	Perform tail docking between and days after birth.		
		i. Use analgesics to help control post-procedure pain.		Mandatory
		ii. Name(s) of drugs/products used:		
	b.	Other good production practices:		
6.	Ea	r notching (if deemed necessary)	☐ Not A	Applicable
	a.	Only perform ear notching on piglets when deemed necessary and when piglets are less than 14 days old.		Mandatory
	b.	Other good production practices:		
7.	Те	eth clipping (if deemed necessary)	☐ Not A	Applicable
	a.	Perform teeth clipping, when deemed necessary, between and days after birth.		
	b.	The teeth-clipping technique must:		Highly recommended
		i. prevent teeth shattering		
		ii. clip the teeth parallel to the gum line.		

De hus	sign sbar	ated personnel must follow this protocol every time elective adry procedures are performed.	Applied On-Farm	Importance
	C.	Other good production practices:		
8.	Tus	sk trimming	☐ Not	Applicable
	a.	Avoid the pulp cavity during tusk trimming.		Mandatory
b. Other good production practices:				
9.	Mi	nor on-farm surgeries	☐ Not /	Applicable
	a.	Type of on-farm surgeries performed (e.g., hernia or ridgeline repair):		
		* The use of surgical staples is prohibited.		
	b.	Date of consultation with licensed veterinarian:		Mandatory
	C.	Anesthetic(s) and analgesic(s) administered prior to surgery:  i. Names of drugs/products used:		
	d.	Other good production practices:		

#### **DEVIATION MEASURES**

What happens if	something goes wrong?		
If an error occurs corrective action	, designated personnel must take the following s.	Applied On-Farm	Importance
	If the Elective Husbandry Procedure SOP (SOP 7.8) is unavailable or incomplete, the personnel in charge must ensure the SOP is developed, implemented and monitored.		
1	> If barn personnel are not capable of conducting elective husbandry procedures without having a negative impact on pigs, the Site Manager must ensure all personnel are trained on implementing those procedures.		Mandatory
	Complete R-2 Incident Report		

**RECORDS** 

Name of Record	Name of Record		
R-2	Incident Report	Mandatory	
R-4	Monitoring Record	Mandatory	
R-B	Training Record	Mandatory	



# Section 7.9

# **Handling Practices**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORDS		
R-2	Incident Report	
R-4	Monitoring Record	Mandatory
R-B	Training Record	
FACT SHEE	ET	
F-16	Handling Practices	_

#### **SECTION 7.9**

#### HANDLING PRACTICES

#### **REQUIREMENTS**

- 1. The personnel responsible for handling, moving and restraining animals must be trained in low-stress pig-handling techniques.
- 2. If electrics prods are used on-farm, they must only be used according with Pig Code of Practice requirements:
  - a. Electric prods must only be used as a last resort and never as the primary driving device.
  - b. When necessary, use of prods must be restricted to the back and hind quarters on lead pigs, but never used in the anal and genital areas and only when there is a clear path for them to move forward.
  - c. Electric prods must not be used in the finishing pen.
  - d. Electric prods must not be used on piglets or nursery pigs, or on pigs that are distressed, sick or injured.

#### **RATIONALE**

- a. Using low-stress pig-handling and restraint techniques will reduce stress on the pigs and provide a safer environment for personnel.
- b. Positive human contact is an important factor in animal well-being and productivity.
- Pigs with previous positive handling and moving experiences are easier to move.

#### **GUIDANCE**

- a. Producers may wish to develop a SOP for pig handling and to have staff review this SOP and sign that they understand the principles of low-stress handling and restraint.
- b. All personnel responsible for handling, moving or restraining pigs should be competent in low-stress pig-handling methods. They should at least be knowledgeable about the following:
  - i. how to position themselves to encourage calm movement in the pigs
  - ii. when to apply pressure and when to stop applying pressure (pressure and release principle) during handling
  - iii. how to pick up and handle young pigs
  - iv. when and how to use restraint devices
  - v. which handling tools are appropriate to use for the size of pigs they are moving
  - vi. the signs of stress and what to do when a pig becomes distressed during handling
  - vii. it is unproductive to handle pigs aggressively.
- c. See the Handling Practices Fact Sheet (F-16) for further details.
- d. The presence of behavioural vices and/or aggression usually indicates the well-being of the pigs has been compromised.

## ? AUDIT QUESTIONS

		Verification			
Q#	Audit Questions and Interpretation	Compliant NC-Minor NC-Major NC-Critical N/A			
Q7.9.1	Verify that personnel responsible for handling, moving and restraining animals are trained in low-stress pig-handling techniques.	<ul> <li>Full and partial validation:</li> <li>R-B: Training Record</li> <li>observation, if applicable</li> <li>interview</li> </ul>			
	Are personnel responsible for handling, moving and restraining animals trained in low-stress pig-handling techniques?				
	Verify that personnel who have access to electric prods know how and when to use them according to the requirements under the Pig Code of Practice.				
	<ul> <li>Electric prods must only be used as a last resort and never as the primary driving device.</li> </ul>	Full and partial validation:			
Q7.9.2	b. When necessary, use of prods must be restricted to the back and hind quarters on lead pigs, but never used in the anal and genital areas, and only when there is a clear path for them to move forward.	<ul> <li>R-B: Training Record</li> <li>observation (full validation only)</li> <li>interview</li> </ul>			
	<ul> <li>Electric prods must not be used in the finishing pen.</li> </ul>				
	<ul> <li>d. Electric prods must not be used on piglets or nursery pigs, or on distressed, sick or injured pigs.</li> </ul>				
	If electric prods are used, are they used according to Pig Code of Practice requirements?				

N/A = not applicable



#### **LEVELS OF COMPLIANCE – EXAMPLES**

#### COMPLIANT

- Training Records (R-B) are complete and up to date.
- There is no evidence that handling, restraint, breeding or mixing practices are causing stress.

#### MINOR NON-COMPLIANCE Timeline: 60 days

> Training Records (R-B) are incomplete or unavailable.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

> There is evidence of inappropriate use of electric prods.

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

> There is evidence that there has been a willful act of abuse as described in the Animal Welfare Policy.

## **DEVIATION MEASURES**

If the barn personnel do not used low stress pig handling techniques, the Site Manager must ensure all personnel are trained on implementing those techniques.

Complete record R-2 Incident Report.



# Section 7.10

# **Euthanasia**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	OPERATING PROCEDURE	
7.10	Euthanasia	Mandatory
RECORD		
R-M	Mortality Record	Mandatory
FACT SHEE	ET	
F-18	Methods of Euthanasia	-

#### SECTION 7.10 **EUTHANASIA**

#### **REQUIREMENTS**

- 1. A Euthanasia SOP (SOP 7.10) must be developed in consultation with a licensed veterinarian. It must be adequately implemented and must include the following requirements:
  - a. ensuring designated personnel are trained to perform euthanasia on pigs.
  - b. assurance that pigs will not be forced to move prior to euthanasia when pain and suffering will occur.
  - c. primary and backup methods of euthanasia appropriate for each weight class of pig on-farm that comply with provincial legislation.
  - d. confirmation of insensibility immediately following the application of the euthanasia method.
  - e. the immediate reapplication of the primary euthanasia method or the application of the backup method if the pig shows signs of returning to sensibility.
  - f. confirmation of death prior to moving or leaving the pig.

For your convenience, a template for the Euthanasia SOP (SOP 7.10) has been developed for you to use.

#### **RATIONALE**

a. A Euthanasia SOP (SOP 7.10) is important to ensure that all pigs are euthanized using the best method and to ensure that it is done as soon as possible.

#### **GUIDANCE**

- a. For additional information, see the Methods of Euthanasia Fact Sheet F-18.
- b. People performing euthanasia need to understand how to assess whether pigs are insensible as well as how to confirm that pigs are dead.
- c. A Euthanasia SOP (SOP 7.10) should also include a description of
  - how euthanasia equipment is to be cleaned and maintained after each use, and stored in working condition for its next use, and
  - ii. how the operator is to use the equipment safely.
- d. Appropriate restraint methods should be used, such as plastic boxes, sedation, chase boards and snares.

## ? AUDIT QUESTIONS

	Audit Questions and Interpretation		Verification					
Q#			NC-Minor	NC-Major	NC-Critical	N/A		
	Verify that an Euthanasia SOP (SOP 7.10) has been developed and includes all required elements.		Full and partial validation:  SOP 7.10: Euthanasia					
Q7.10.1	Has an on-farm Euthanasia SOP (SOP 7.10) been developed in consultation with a licensed veterinarian, and includes all required elements?							
	Verify that the Euthanasia SOP (SOP 7.10) is being adequately implemented on-farm.							
a. Trained barn personnel are capable of applying euthanasia methods, confirming insensibility and death, responding to something going wrong with the application of the primary euthanasia method and immediate reapplication of the primary euthanasia method or backup method.  Description of the primary euthanasia method or backup method.  Description of the primary euthanasia solution of euthanasia as outlined in the Euthanasia SOP (SOP 7.10) is available on-farm.  During validation, if euthanasia is observed,				asia	nly, if applic	able)		
	the pig is handled and euthanized humanely, and insensibility and death are confirmed by personnel.							
	Is the Euthanasia SOP (SOP 7.10) adequately implemented on-farm?							

N/A = not applicable; SOP = standard operating procedure



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- The Euthanasia SOP (SOP 7.10) is available and all required elements are addressed.
- There is evidence that the Euthanasia SOP (SOP 7.10) is being adequately implemented.

#### MINOR NON-COMPLIANCE Timeline: 60 days

The Euthanasia SOP (SOP 7.10) does not meet all requirements or is not available.

#### MAJOR NON-COMPLIANCE Timeline: 30 days

- There is evidence that the Euthanasia SOP (SOP 7.10) is not being adequately implemented and evidence that pig welfare has been compromised.
- The primary method of euthanasia is not available or not in functional condition.
- An acceptable euthanasia method is implemented, but used ineffectively.

#### CRITICAL NON-COMPLIANCE Timeline: 24 hours

An unacceptable method of euthanasia, as identified by the Code of Practice, is used, resulting in a wilful act of abuse as described in the Animal Welfare Policy.





			PID#:	
Site	Manager:	Person in charge:		
IDEI	NTIFICATION OF VETERIN	IARIAN		
	Euthanasia SOP was develope ionship has been established:	d in consultation with a licensed veterinarian with wh	nom a veterinarian	-client-patient
Nam	ne of veterinarian:			
PRC	DTOCOL			
			Applied	
Designated personnel must follow this protocol every time pigs are euthanized.				Importance
1.	The Site Manager must ensuare adequately trained.			
	LIST OF PERSONNEL TRAIN	LIST OF PERSONNEL TRAINED TO EUTHANIZE PIGS		
	Name	Stage of Production		Mandatory
2.	Maintenance of euthanasia e	quipment		
	a. Euthanasia equipment is and stored in working cor			
	b. Other good production practices:		П	Highly recommended

De	sign	ated personnel must follo	ne pigs are euthanized.	Applied On-Farm	Importance		
3.	Preparation for euthanasia						
	a.	Restrain the pig for euthanasia, when required.				Highly recommended	
	b.	<ul> <li>If pigs cannot be moved from their current position without causing them pain and suffering, euthanize them where they are.</li> <li>i. Pigs must not be dragged, prodded, forced to move on broken limbs, or made to move when pain and suffering will occur.</li> </ul>				Mandatory	
	C.	Other good production p	ractices:			Highly recommended	
4.	Me	thods of euthanasia					
	a.	Euthanize the identified p	ig immediately accordin	g to the methods below:			
		Weight Ranges	Primary Method <sup>1</sup>	Back-Up Method <sup>2</sup>			
		Example: sows and boars	Captive bolt gun	Gun shot			
		Suckling pigs (under 2.3 kgs)					
		Suckling/nursery pigs (2.3 to 9 kgs)					
		Nursery pigs/weaners (9 to 32 kgs)					
		Pre-growers/growers (32 to 68 kgs)				Mandatory	
		Growers/finishers (68 to 120 kgs)					
		Gilts/sows/boars³ (120 to 200 kgs)					
		Sows/boars³ (more than 200 kgs)					
		<sup>1</sup> Refer to the Methods of Eu	uthanasia Fact Sheet F-18 to	identify the			
		<sup>2</sup> The same method can be	used for both the primary a	nd backup method.			
			, pigs >/=120 kg in weight r captive bolt, pithing, bleedi insensible.				

De	sign	ated personnel must follow this protocol every time pigs are euthanized.	Applied On-Farm	Importance
	b.	Other good production practices:		Highly recommended
5.	Со	nfirmation of insensibility		
	a.	Evaluate pigs for insensibility immediately after applying the selected euthanasia method.		
		i. Methods used to evaluate insensibility:		
		(Examples: corneal nerve reflex [touching the eye], nose prick, observation of muscle contraction followed by paddling, no rhythmic breathing, no attempt to get upright.)		Mandatory
	b.	If the pig shows signs of returning to sensibility, immediately reapply the primary euthanasia method or backup method and confirm insensibility.		ivialidatory
		If the pig is not dead but is still insensible, either wait until death occurs or apply secondary step (e.g., bleeding, pithing) to ensure death before moving or leaving the pig.		
		i. Other methods to confirm death:		
	C.	Other good production practices:		Highly recommended
6.	Со	nfirmation of death		
	a.	Confirm death within five minutes after confirming insensibility and before moving or leaving the pig.		
		All of the following signs must be present to confirm death:		
		i. fixed and dilated pupil		Mandatory
		ii. not sensible (see methods to confirm insensibility)		
		iii. no movement		
		iv. not breathing		
	b.	Record euthanized pigs on the Mortality Record (R-M).		Mandatory
	C.	Other good production practices:		Highly recommended

#### **RECORD**

Name of Record		Importance
R-M	Mortality Record	Mandatory

# Section 7.11

# **Emergency Plan**

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	OPERATING PROCEDURE	
7.11	Emergency Plan	Mandatory
RECORD		
R-U	Emergency Contact List	Highly recommended

#### SECTION 7.11 **EMERGENCY PLAN**

#### **REQUIREMENTS**

- 1. An Emergency Plan (SOP 7.11) must be developed for use in the event of power failure, mechanical breakdown, water interruption or contamination and other emergency situations. The Emergency Plan must include alternative means for the following:
  - a. temperature regulation
  - b. ventilation, and
  - c. feed and water delivery.

For your convenience, a template for the Emergency Plan (SOP 7.11) has been developed for you to use.

#### **RATIONALE**

- a. Emergency plans are critical to ensure that all personnel know what do when something goes wrong.
- b. Emergency plans help to provide for the welfare of pigs in the event of an emergency.

#### **GUIDANCE**

- a. Plans should be developed to prepare for emergencies such as:
  - i. fire
  - ii. flooding
  - iii. extreme weather
  - iv. emerging disease.
- b. An emergency contact list should be readily available to all personnel.

## ? AUDIT QUESTIONS

Q#	Audit Questions and Interpretation		Verification			
			NC-Minor	NC-Major	N/A	
Q7.11.1	Verify that an Emergency Plan SOP (SOP 7.11) has been developed and addresses power failure, mechanical breakdown, water interruption or contamination, and other emergencies relevant to the location and includes all required elements.  Verify that a contingency plan has been developed to provide water to the pigs in the event of water interruption or contamination, i.e., an alternative source of water.	Full and partial validation:  SOP 7.11: Emergency Plan interview				
	Has an Emergency Plan SOP (SOP 7.11) been developed in case of a power failure, mechanical breakdown, water interruption or contamination and other emergencies relevant to the farm's location that includes all required elements?					

N/A = not applicable; SOP = standard operating procedure

### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

An Emergency Plan SOP (SOP 7.11) is available that addresses all required elements.

#### MINOR NON-COMPLIANCE Timeline: 12 months

The Emergency Plan SOP (SOP 7.11) is incomplete or not available.

MAJOR NON-COMPLIANCE – Not applicable

NOTES			



This standard operating procedure (SOP) can be used as a template. If you develop your own version, all required elements must be included.	
Site Manager:	PID#:

#### **PROTOCOL**

Designated personnel must follow the protocol when an emergency situation occur.	Applied On-Farm	Importance
<ol> <li>The Site Manager must ensure the personnel in charge of this protocol are adequately trained.</li> </ol>		Mandatory
2. In the event of a power failure, mechanical breakdown, water interruption or coor or any other emergency situation, the following alternative measures must be in		
a. Temperature: How will you control the temperature of the barn?		
b. Ventilation: How will you control the ventilation in the barn?	_	
<ul><li>c. Feeding and watering (water interruption and contamination):</li><li>i. How will you feed and give water to the pigs?</li></ul>		Mandatory
ii. What is your alternative source of water?		
iii. How will you deliver it to the pigs?		
d. Evacuation plan: i. How will you evacuate the pigs?		Highly
ii. Where will the pigs go?		recommended

NOTES			



# MODULE 8





# IN THIS MODULE

8.1	Barn Access Zones and Signage
8.2	Personnel and Visitors
8.3	Water, Feed and Bedding
8.4	Live Pigs, Semen and Embryos
8.5	Pig Health Management and Vaccination
8.6	Pests, Wild Animals and Other Species
8.7	Fomites (Pharmaceuticals and Medical Equipment; Tools and Other Farm Supplies)
8.8	Aerosol Mitigation

Manure Management

Dead Stock and Waste

8.9

8.10

# Section 8.1

# Barn Access Zones and Signage

#### **REFERENCED IN THIS SECTION:**

8.1

Number/ Identifier	Name	Importance



#### STANDARD OPERATING PROCEDURE

Restricted Access Zone (to be developed by producer)

Highly recommended

#### **SECTION 8.1**

#### BARN ACCESS ZONES AND SIGNAGE

#### RECOMMENDATIONS

- 1. Each controlled access zone (CAZ) and restricted access zone (RAZ) should be clearly defined and identified (e.g., with gates, posters or signs).
- 2. A standard operating procedure (SOP) for access to the restricted access zone should be developed.
- 3. Roads should be properly maintained and drained.
- 4. Signage identifying the controlled access zone and restricted access zone should be adequately positioned to guide and control movements.
- 5. A gate preventing unauthorized access and identifying the entrance for delivery of material and pigs should be placed at the entry to the controlled access zone.
- 6. Barn doors should be locked at all times.

#### **RATIONALE**

The following good production practices prevent the contamination and propagation of pathogens by people (including family members, farm personnel, essential service providers and domestic and international visitors) and by vehicles, equipment and animals moving onto or within the farm's controlled access zone and restricted access zone:

- a. Have an SOP in place for accessing a restricted access zone.
- b. Maintain access roads for movement around the barn.
- c. Restrict, control and clearly identify access zones.

#### **GUIDANCE**

It is recommended that the preventive measures below be followed.

#### 1. For Barn Access Zones

- a. Establish a controlled access zone (CAZ) around your building by installing visual indicators at the access points of the recognized zones.
- b. Properly define and identify the CAZ access routes and boundaries (gates, posters, signs, etc.).
- c. Clearly mark restricted access zone (RAZ) and restrict access to it with at least a Danish entry.
- d. Place visitor parking outside the CAZ and place personnel parking in an area that will reduce contamination within buildings.
- e. Have measures in place that include stricter biosecurity precautions and rules in the RAZ than in the CAZ.
- f. Dedicate separate clothing and footwear for use in the RAZ.
- g. Maintain log books for personnel and visitors that include the date and place of the person's last contact with pigs and other animals.
- h. Lock building entrances at all times.
- i. Regularly maintain and drain the roads that access the site.

#### 2. Signage

- Provide signage enabling visitors to see where they can park and include a phone number to obtain permission for entry.
- b. Use signage to indicate the building entrance and to provide instructions on how to enter.
- Identify areas where pigs and materials are to be delivered, as well as areas for documents such as (e.g., a mailbox). Signage should also identify the location of the barn's restricted access.
- d. Signage should guide visitors or transporters within the zones (e.g., indicating the location of the barn and the delivery entrance). The access road to the farm and barn should be well maintained and drained to prevent water from pooling.

### **BIOSECURITY QUESTIONS**

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
Q8.1.1		Are the access zones and boundaries to the controlled access zone and restricted access zone properly defined and identified (gates, posters, signs, etc.)?				
Q8.1.2		Has an SOP been developed for access to the restricted access zone?				
Q8.1.3		Are the roads properly maintained and drained?				
Q8.1.4	Highly recommended	Is signage identifying the controlled access zone and restricted access zone adequately positioned to guide and control movements on the farm site?				
Q8.1.5		Are the presence of a gate and signage at the entry to the controlled access zone preventing unauthorized access and identifying the entrance for the delivery of materials and pigs?				
Q8.1.6		Are barn doors locked at all time?				

N/A = not applicable; SOP = standard operating procedure

NOTES			

# Section 8.2

# Personnel and Visitors

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURE	
8.2	Personnel and Visitor Entry (to be developed by producer)	Highly recommended
RECORD		
R-I	Visitor Log	Highly recommended

#### **SECTION 8.2**

#### PERSONNEL AND VISITORS

#### RECOMMENDATIONS

- 1. A Personnel and Visitor Entry SOP should be developed and include details about the following:
  - a. parking areas
  - b. Danish entry or any other entry protocols for personnel and visitors
  - c. locked doors
  - d. recommended downtime for farm personnel and visitors (i.e., after visiting other farms or due to illness)
  - e. control of meat products (dried, cured, raw) at the entrance to the restricted access zone (RAZ)
  - f. movement of farm personnel and visitors from other sites to the controlled access zone (CAZ) and restricted access zone
  - g. quarantine room or barn.
- 2. All personnel and visitors should follow the Personnel and Visitor Entry SOP.
- 3. A visitor log book (R-I) should be kept on-site.

#### **RATIONALE**

- a. Personnel and visitors can carry or transmit pathogens (e.g., porcine reproductive and respiratory syndrome (PRRS) virus, porcine epidemic diarrhea (PED)) when entering or exiting the farm site (through themselves and through their boots, clothing and vehicles).
- b. Dried, cured and fresh (raw) meat products represent a high risk of introducing pathogens to the farm since they may contain pathogenic agents (Salmonella, parasites, etc.) of animal origin if the product has not been processed properly.
- c. Foreign-sourced meat products are a risk for the introduction of exotic animal diseases into Canada (e.g., foot and mouth disease (FMD).
- d. A visitor's log book (name, phone number) could, in some instances, enable the retracing of the source of entry of a contamination and avoid the propagation to other herds visited by the same person.

#### **GUIDANCE**

#### It is recommended that the preventive measures below be followed:

- a. Establish a downtime (a minimum required period of time without coming into contact with other pigs) with your licensed veterinarian.
- b. Restrict access to foreign visitors to ensure proper biosecurity.
- c. Make sure that anyone entering the farm (farm personnel and all visitors) have access at all times to the written procedures for entering the controlled access zone (CAZ) and restricted access zone (RAZ).
- d. Develop a procedure to control the movement of farm personnel and visitors on-site (e.g., leaving the RAZ to go to the CAZ, checking feed bins, movement between sites). Personnel who have exited the RAZ should only re-enter through a Danish entry.
- e. Establish a Danish entry to clearly separate clean and dirty areas.

- f. To protect against possible disease transmission by uninvited visitors, have only one entrance to the main barn that is equipped with a locked door and a doorbell.
- g. Before stepping into the barn, have personnel wash/disinfect their hands (and, ideally, wear gloves) and put on clean clothes and boots.
- h. Have a forward uni-directional flow for personnel entering the barn.
- i. Have clothing and boots reserved for exclusive use in the RAZ (i.e. in the building).
- j. Keep a visitor log with the following details: name, telephone number, reason for the visit, place of last contact with pigs, and date and time of entry and exit.
- k. Deny the introduction of any fresh, raw, cured or uncooked meat products in the RAZ.

## ? BIOSECURITY QUESTIONS

Q#	Importance	Biosecurity Questions		No	N/A	Comments
		Is there a <b>Personnel and Visitor Entry SOP</b> includes the following:				
		a. parking areas				
		b. Danish entry or any other entry protocols for personnel and visitors				
		c. locked doors				
Q8.2.1	Highly recommended	<ul> <li>d. recommended downtime for farm personnel and visitors (i.e., after visiting other farms or due to illness)</li> </ul>				
		e. control of meat products (dried, cured, raw) at the entrance to the restricted access zone				
		f. control of movement of farm personnel and visitors from other sites to the controlled access zone and restricted access zone				
		g. quarantine room or barn				
Q8.2.2		Do you ensure that all farm personnel and visitors follow a proper Personnel and Visitor Entry SOP?				
Q8.2.3		Do you keep a detailed visitor's log book?				

N/A = not applicable; SOP = standard operating procedure

NOTES			

# Section 8.3

# Water, Feed and Bedding

#### **SECTION 8.3**

#### WATER, FEED AND BEDDING

#### **RECOMMENDATIONS**

- 1. A water test for fecal coliform should be completed at least once a year.
  - a. The fecal coliform levels should be at or below < 1 colony forming units (CFU)/100 mL.
- 2. A total dissolved solids test of the water should be completed.
- 3. Water lines should be cleaned and flushed between every batch of pigs, or at least twice a year in continuous flow barns.
- 4. Feed and bedding suppliers should be used only if they follow:
  - a. a quality assurance program and
  - b. a biosecurity program that includes a truck-washing procedure.
- 5. Delivery into a controlled access zone (CAZ) should be done in a way that prevents cross-contamination.
- 6. Periodic feed testing should be completed at the on-farm feed mill to check pathogens and toxins (e.g., porcine epidemic diarrhea (PED), vomitoxins).
- 7. The use of animal by-products should be avoided.

#### **RATIONALE**

- a. Water, feed and bedding are major sources of pathogenic agents (e.g., E.coli). Surface water sources (e.g., puddles, reservoirs, ponds, lakes and rivers) and rainwater-collection systems are the most susceptible to contamination.
- b. Water lines accumulate mineral deposits and organic material between cleaning cycles, which can gather and protect pathogens. These pathogens are then carried through the water to the next batch of pigs if the water lines are not adequately cleaned between batches.
- c. Proper sourcing and storage of bedding are two important factors to be considered to protect health.
- d. Animal feed can easily be contaminated by insects, rodents or wild birds at any stage of distribution or storage.
- e. Animal by-products, totes, containers and transport trucks can be a significant source of pathogens.

#### **GUIDANCE**

#### It is recommended that the preventive measures below be followed:

- a. Have a water-treatment system (chlorination or other) for any surface-water supply on-farm.
- b. Keep a record of all water tests (dates, results, etc.).
- c. Water lines should be cleaned with descalers to break down mineral deposits and detergents to break down organic material accumulation. The lines should then be flushed to ensure all the cleaning products are removed before the next batch of pigs are placed. Colour in the products provide a visual cue as to when they have been completely flushed from the water lines.
- d. Install a fence around surface sources of drinking water to block access to wild and domestic animals.
- e. Adequately drain areas where pigs are housed to prevent them from drinking any accumulation of liquids.

- f. Have a delivery sequence within the production system where sites with the best health status are the first to receive deliveries. Keep suppliers well informed of any important health-status changes on the farm so they can adjust their delivery sequence as required.
- g. Store feed and bedding in enclosed areas (feed bins, closed rooms) to avoid contamination by rodents, birds and insects.
- h. Buy all medicated feeds, supplements and premixes in their original, labelled and unopened packaging.

### ? BIOSECURITY QUESTIONS

Q#	Importance	Biosecurity Questions		No	N/A	Comments
	Highly recommended	Is the water tested for fecal coliforms at least once a year?				
Q8.3.1		<ul> <li>a. Is the fecal coliform level at or below &lt; 1 colony forming unit (CFU)/100 mL?</li> <li>b. If not, is there a water-treatment plan in place to minimize or eliminate contamination?</li> </ul>				
Q8.3.2		Has a total dissolved solids test of the water been completed?				
Q8.3.3		Are water lines cleaned and flushed between every batch of pigs, or at least twice a year in continuous flow barns?				
		Do your feed and bedding suppliers follow:				
Q8.3.4		<ul><li>a. a quality assurance program?</li><li>b. a biosecurity program that includes a truck-washing procedure?</li></ul>				
Q8.3.5		Are deliveries into the controlled access zone done in a way that prevents crosscontamination?				
Q8.3.6		Is periodic feed testing completed at the on-farm feed mill to check for pathogens and toxins in the ration?				
Q8.3.7		Are animal by-products used on-farm?				

N/A = not applicable

NOTES			

# Live Pigs, Semen and Embryos

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORD		
R-G	Swine Movement Document	Mandatory
	ldentifier RECORD	RECORD Name

#### LIVE PIGS, SEMEN AND EMBRYOS

#### **RECOMMENDATIONS**

#### Live Pigs

- 1. The following measures should be implemented before introducing live pigs to the herd:
  - a. the health status of all incoming pigs should be verified and recorded with your licensed veterinarian
  - b. all incoming pigs should complete a quarantine and acclimatization periods
  - c. incoming animals should ideally come from a single source
    - i. If the source changes, your licensed veterinarian should be informed prior to the first animal movement.

#### Semen and Embryos

- 2. The following measures should be implemented before introducing semen and embryos to the herd:
  - a. ask the semen and embryos supplier to inform you immediately of any health status changes
  - b. reduce the number of sources to the minimum needed
  - c. verify that biosecurity measures are in place for delivery vehicles and drivers.

#### **RATIONALE**

- a. Live pigs can carry a significant number of pathogens which can be transmitted to the herd.
- b. Several pathogens, such as porcine reproductive and respiratory syndrome (PRRS) virus, can be transmitted through semen.
- c. In addition to CFIA's legal requirements for import, and to prevent contamination via direct transmission from either domestic or out-of-country sources, it is important to investigate the endemic disease status of the supply herd and its status regarding potentially new emerging diseases that could be introduced to Canada.

#### **GUIDANCE**

#### **Entry of Live Pigs**

- a. Purchase from as few suppliers as possible, making sure their health status meets your operation standards.
- b. Limit the frequency of new animal introductions.
- c. Record all introductions, placements and removals of pigs so that, if an infectious disease is suspected, the pigs or group of pigs can be quickly traced and isolated.

- d. Have approval from a licensed veterinarian for the purchase of live pigs from foreign countries.
- e. Use all-in/all-out placement of pigs within a barn or site to minimize risk.
- f. Have an isolation or quarantine procedure for new pigs before introduction to the farm herd.
- g. Observe isolated or quarantine pigs each day for clinical signs.
- h. Report any unusual disease observations to the licensed veterinarian responsible for the health status of the production system. This will allow for a timely intervention to prevent spread through contaminated pigs.
- i. Clean, wash, disinfect and dry the quarantine or isolation section between each batch, including the shipping area.
- j. A quarantine and acclimatization period for incoming pigs should include the following measures
  - i. define your quarantine period duration with your licensed veterinarian
  - ii. testing and doing clinical assessments of the quarantine pigs prior to moving them into the RAZ
  - iii. appropriately cleaning (see Sanitation SOP (SOP2.2.2)) the quarantine area between batches to eradicate pathogens.

#### Entry of Embryos and Semen From Domestic Sources

It is recommended that the preventive measures below be followed:

- a. set up a semen and embryos delivery off site or identify a specific area of the sow barn for delivery
- b. use barriers and packaging measures to avoid cross-contamination on delivery of semen
- c. define a health status or put in place biosecurity semen purchasing measures for the farm or the whole production system.

#### Entry of Embryos and Semen From Out of Country

- a. Limit breeding activities with foreign-purchased semen to quarantined pigs only.
- b. Wash, disinfect and dry the quarantine facility between batches.
- c. Ensure the licensed veterinarian for the production system approves the purchase of pigs and/or embryos from outside Canada.
- d. Maintain a report of the information provided by the licensed veterinarian in charge of the foreign-source supplier.

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments				
Live pig	Live pigs									
		Are the following measures implemented before introducing live pigs to the herd:								
		a. the health status of all incoming pigs is verified and recorded with your licensed veterinarian								
Q8.4.1	Highly recommended	b. all incoming pigs complete a quarantine and acclimatization period								
		c. incoming animals come from a single source i. if the source changes, your licensed veterinarian should be informed prior to the first animal movement.								
Semen a	and Embryos									
		Are the following measures implemented before introducing semen and embryos to the herd:								
Q8.4.2	Highly recommended	ask the semen and embryos supplier to inform you immediately of any health status changes								
		b. reduce the number of sources to the minimum needed								
		c. verify that biosecurity measures are in place for delivery vehicles and drivers								

# Pig Health Management and Vaccination

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURE	
8.5	Pig Health Management SOP (to be developed by producer)	Highly recommended
RECORD		
R-M	Mortality Record	Mandatory

#### PIG HEALTH MANAGEMENT AND VACCINATION

#### **RECOMMENDATIONS**

- 1. A Pig Health Management SOP should be developed in consultation with your licensed veterinarian and include details about the following:
  - a. measures to control endemic disease transmission to healthy pigs on the farm
  - b. measures to prevent the impact of disease within the farm
  - c. all movement of pigs based on health status (within and between sites)
  - d. measures for segregating, treating and monitoring pigs, according to their condition (requirement of section 7.6)
  - e. vaccination programs aimed at making pigs more resistant to infection
  - f. the Mortality Record (requirement of section 6.3)
- 2. Medications should be stored in a manner that prevents contamination and maintains integrity.

#### **RATIONALE**

- a. Sick pigs are a main source of pathogenic agents. These can spread disease between pigs, from one site to another and from one region to another.
- b. The proper movement of pigs within the farm is important to prevent disease transmission from sick pigs to healthy ones.
- c. Placing sick pigs in hospital pens is important for proper animal care and monitoring.
- d. Swine immunization strategies are important for reducing the outbreak and spread of disease.
- e. The Mortality Record is important to keep track of herd mortality and for reporting to a licensed veterinarian if mortality becomes unusual.

#### **GUIDANCE**

- a. Control exposure of new incoming pigs to local resident pigs and microflora.
- b. Clean, wash and disinfect pig pens or facilities before pigs are introduced onto the site.
- c. Develop a written plan with a licensed veterinarian to quickly handle a disease outbreak. This plan should also include controlled exposure and acclimatization after the quarantine period.
- d. Transfer sick pigs to a hospital pen. This pen must be laid out and equipped so that it ensures the pigs' comfort and makes it possible to verify the condition of the pigs.
- e. Work with healthy pigs first and then proceed to work with sicker pigs. When a pig is taken to a hospital pen, do not bring it back to its original room.
- f. Record the treatments given to the pigs according to PigSAFE | PigCare program requirements and recommendations.
- g. Have an appropriate immunization strategy within each site that includes exposing incoming pigs to the local resident pigs.
- h. Keep immunizations records.
- Follow the vaccination program established with your licensed veterinarian and follow the recommendations on the use and handling of vaccines.

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
		Is there a Pig Health Management SOP in	place th	at inclu	des:	
	Highly recommended	a. measures to control endemic disease transmission to healthy pigs on the farm				
		b. measures to prevent the impact of disease within the farm				
Q8.5.1		c. all movement of pigs based on health status (within and between sites)				
		<ul> <li>d. measures for segregating,</li> <li>treating and monitoring pigs,</li> <li>according to their condition</li> </ul>				
		e. vaccination programs aimed at making pigs more resistant to infection				
		f. the Mortality Record				
Q8.5.2		Are medications stored in a manner that prevents contamination and maintains integrity?				

NOTES			

# Pests, Wild Animals and Other Species

#### REFERENCED IN THIS SECTION:

	Number/ Identifier	Name	Importance
)	STANDARI	O OPERATING PROCEDURE	
	8.6	Pests and Wildlife Management (to be developed by producer)	Highly recommended
)	FACT SHEE	ĒΤ	
	F-7	Rodent and Pest Control	_

#### PESTS, WILD ANIMALS AND OTHER SPECIES

#### **RECOMMENDATIONS**

- 1. To control pest and wild animal activity, the following measures should be implemented
  - a. grass and weeds should be trimmed around the barn perimeter and never allowed to grow higher than 20 cm
  - b. trash, equipment, hay, straw and other objects should be regularly removed from around the outside of the barn and near the walls.
  - c. The barn should be designed to prevent pests, birds, wild or feral pigs entering the restricted access zone (RAZ).
- 2. If any species other than pigs are kept in the same barn, Section 10.3 must be completed.

#### **RATIONALE**

- a. Dogs and cats can be actively infected carriers of many microbes harmful to humans, such as *Salmonella*, and mechanical carriers of swine pathogens (such as transmissible gastroenteritis and porcine epidemic diarrhea (PED)).
- b. Some wild animals (e.g., poultry, wild boars, waterfowl) can be a source of exotic animal diseases.
- c. Having other livestock species (e.g., cattle, sheep, goats, horses) on-site may be a potential source of disease.
- d. Rodents are a major disease-transmission vector for pigs. Rodents can actively shed salmonellosis, erysipelas and colibacillosis.
- e. Birds and insects can spread disease through their excretions (saliva, excrement, etc.) and by simple mechanical transfer. A good example of contamination through bird feces is lymphadenitis, which is caused by *Mycobacterium*, which leads to losses at the slaughterhouse.

#### **GUIDANCE**

- a. Implement a control program for rodents, insects and birds.
- b. Use screens, nets or traps if insects, birds or rodents are a problem.
- c. To avoid attracting flies, clean waste and the accumulations of food and manure; quickly dispose of carcasses and other organic material, such as afterbirth.
- d. To keep birds and rodents away, avoid any accumulation of feed beneath the feed bins.
- e. Lay down gravel around the building or make sure the grass is kept mowed and weeds controlled to avoid providing a refuge for rodents and insects.
- f. The buildings should be maintained so that undesirable animals cannot gain access.
- g. Cats should be kept outside the restricted access zone (RAZ), i.e., outside the building.

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
		To control pest and wild animal activity, the	followir	ng meas	ures sho	ould be implemented:
	Highly recommended	grass and weeds are trimmed     around the barn perimeter and never     allowed to grow higher than 20 cm				
Q8.6.1		<ul> <li>trash, equipment, hay, straw and other objects are regularly removed from around the outside of the barn and near the walls</li> </ul>				
		<ul> <li>the barn is designed to prevent pests, birds, wild or feral pigs from entering the restricted access zone.</li> </ul>				
Q8.6.2		Are there any species other than pigs in the barn?  If yes, Section 10.3 must be completed.				

N/A = not applicable

NOTES			

# **Fomites**

(Pharmaceuticals and Medical Equipment; Tools and Other Farm Supplies)

#### FOMITES (PHARMACEUTICALS AND MEDICAL EQUIPMENT; TOOLS AND OTHER FARM SUPPLIES)

Definition of fomites: objects or material that could carry pathogens

#### **RECOMMENDATIONS**

- 1. The following measures should be implemented before introducing fomites to the barn:
  - a. Cleaning of incoming fomites prior to entry into the restricted access zone (RAZ)
    - i. The Sanitation SOP (SOP2.2.1) should be used
  - b. Regular cleaning and disinfection of fomites already in the restricted access zone (RAZ).
- 2. If service providers are used for on-farm services, appropriate equipment should be provided to them, or all equipment being brought into the RAZ should be cleaned and disinfected prior to entering the restricted access zone (RAZ).
- 3. Moving and/or exchanging object and equipment (e.g., pharmaceuticals packaging, medical equipment, other farm inputs, tools) between two barns/sites (RAZ) should be avoided or cleaned prior to introduction.
- 4. Equipment for storage, mixing and distribution of feed should be regularly cleaned.

#### **RATIONALE**

- a. One gram of contaminated feces can be enough to infect thousands of pigs with diseases like porcine reproductive and respiratory syndrome (PRRS), porcine epidemic diarrhea (PED) and swine dysentery.
- b. Tools can introduce pathogens into your barn that may be of concern from a food-safety perspective. They may also transfer other disease-causing organisms that could have a negative impact on your herd.
- c. Pathogens can be spread to the herd by carriers entering the farm through clothes, boots, tools and farm equipment.
- d. Medical supplies (antibiotics, vaccines, etc.) and medical equipment (syringes, needles, etc.) are of particular concern, since they are often introduced to the farm on a regular and routine basis. Failure to properly disinfect, store or use incoming pharmaceutical products or medical equipment can lead to potential contamination of products and further transmit disease to the herd.
- e. Equipment used for the storage, mixing and distribution of feed ingredients that is properly cleaned and maintained minimizes the risk of cross-contamination with pathogenic micro-organisms, molds and fungi.

#### **GUIDANCE**

#### Fomites include but are not limited to the following:

- a. pharmaceuticals packaging (e.g., antimicrobials bottle, antibiotics bottle, vaccines bottle, vitamins bottle)
- b. medical equipment (e.g., syringes, needles and equipment used for castration, tail docking and teeth clipping)
- c. other farm inputs (e.g., cellphone, footwear, clothing, lunch kit, identification devices, disinfectants, detergents, tattoo inks, tattoo hammers, bedding, baits, enrichment devices and artificial insemination equipment.
- d. tools (e.g., shovels, scrappers, hammers, hoses, pails, buckets).

- a. Only use dedicated materials and equipment for the barn restricted access zone restricted access zone (RAZ).
- b. For farms without a fumigation room, implement a sanitation protocol (cleaning/washing, disinfection and drying) for everything introduced into the building. If a fumigation room is available, make sure that all materials and surfaces are exposed to the disinfectant. Having an adequate quarantine period for incoming equipment (kept in a warm, dry area), can also be an effective method for alternative sanitation.
- c. Establish a sequence for introducing equipment or material into the RAZ based on the health status of the herd at different sites.
- d. Do not introduce open bottles of medication to a site from another building or another farm. For the same reason, never use needles that have been used in another room/area of the barn or used at another site.
- e. Medical supplies and pharmaceuticals should be purchased from a recognized manufacturer or an authorized retailer.
- f. New supplies should be inspected to ensure they are received in their original, intact and sealed packaging.
- g. When transporting pharmaceuticals, protect them from extreme temperatures and follow the label directions.
- h. Limit sharing equipment between farms, because it is difficult to adequately clean.
- i. Barn clothing should always remain within the barn. Used clothing should be laundered within the barn and not moved to other barns or places to be laundered. Barns should be equipped with laundry equipment to handle barn clothing. Laundry machines should be set to a high temperature to help kill pathogens on the clothing; "Eco" modes on dryers often do not reach temperatures high enough to kill some pathogens, such as porcine epidemic diarrhea (PED).
- j. Incoming equipment should be cleaned and disinfected when coming from another agricultural operation.
- k. The vehicles of farm personnel and visitors that travel from farm to farm should stay outside the controlled access zone. Use signs, perimeter fences and barriers to redirect them.
- I. Store chemical according to provincial regulations, if applicable.
- m. Proper cleaning and disinfection of equipment, boots, clothes and tools which were in contact with manure.

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
		Are the following measures implemented be	efore int	roducin	g fomit	es to the barn:
Q8.7.1		a. Cleaning of incoming fomites     prior to entry into the restricted     access zone				
		<ul> <li>Regular cleaning and disinfection of fomites already in the restricted access zone.</li> </ul>				
Q8.7.2	Highly recommended	If service providers are used for on-farm services, do you provide them with your own equipment or verify that all equipment brought on-farm is cleaned and disinfected prior to entry?				
Q8.7.3		Do you avoid moving or exchanging objects or equipment between two barns or sites?				
Q8.7.4		Do you regularly clean the equipment used for the storage, mixing and distribution of feed?				

# **Aerosol Mitigation**

#### **AEROSOL MITIGATION**

#### **RECOMMENDATIONS**

1. If you are in an area of elevated risk due to high pig density, you should consider implementing preventive measures (e.g., wind break, an air filtration system).

#### **RATIONALE**

- a. Aerosol transmission of some organisms has been documented. It is a significant transmission mode that should be considered in densely farmed areas for some key diseases like porcine reproductive and respiratory syndrome (PRRS), pneumonia and meningitis.
- b. The secure distance between farms varies depending on farm size, pathogen load, different climatic conditions, local geography and pathogenic survival in the air.

#### **GUIDANCE**

It is recommended that the preventive measures below be followed:

- a. Consult government or swine industry websites to stay informed of new pig health problems.
- b. Design transportation routes to avoid regions with high pig densities.
- c. Establish a vaccination protocol to prevent diseases that are spread through aerosols.
- d. Implement all-in/all-out housing in the nurseries and finishing units to limit the impact of aerosol disease contamination within the farm.
- e. Install an air filtration system, especially if you are in a region with a high pig density or located within 1 km of a neighbouring farm. Air filtration systems have proven effective in preventing aerosol contamination when used in conjunction with conventional biosecurity protocols.
- f. Determine if your farm is in location with a high pig density (e.g., using Google Earth or GPS technology). The distance to neighbouring farms should be taken into account when developing the SOP to help reduce the risk of aerosol contamination.
- g. Prior to building or establishing a new facility, determine the pig density in surrounding areas, particularly the density of boar studs and nucleus and multiplier farms, to plan according to wind direction, health status of the surrounding herds, etc.

### **BIOSECURITY QUESTIONS**

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
Q8.8.1	Highly recommended	If you are in an area of elevated risk due to high pig density, have you implementing preventive measures (e.g., wind break, an air filtration system)?				

# Manure Management

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance					
STANDARD	STANDARD OPERATING PROCEDURE						
8.9	Manure Removal (to be developed by producer)	Highly recommended					

#### MANURE MANAGEMENT

#### **RECOMMENDATIONS**

- 1. A Manure Removal SOP should be developed and includes:
  - a. measures for removal and handling of manure
  - b. measures for transportation (if applicable) and application of manure.
- 2. Service providers or personnel removing manure from storage should work in a separate zone to prevent contamination in the controlled access zone (CAZ).
- 3. Manure application equipment should be specifically assigned to your farm site or production system.
- 4. If service providers are removing manure they should clean (wash, disinfect and dry) their equipment prior to entering the controlled access zone (CAZ).
- 5. The manure storage should be accessed by a dedicated access road different from the main entrance.
- Machinery used to spread manure should use a separate entrance to access the manure storage.

#### **RATIONALE**

- a. Manure represents a high risk of transmitting pathogenic agents.
- b. Proper removal and handling of manure will minimize the risk of pathogen transmission.
- c. Pathogens found in manure (porcine reproductive and respiratory syndrome virus (PRRS), porcine epidemic diarrhea (PED), Salmonella, etc.) can spread through direct contact or through the air and can further contaminate the herd.

#### **GUIDANCE**

- a. Follow municipal and provincial regulations for proper management of manure.
- b. Make sure the trap door on the tank is properly closed during transport.
- c. If equipment is shared among sites, move from higher to lower health status sites. The equipment must be cleaned between sites.
- d. Avoid spreading manure from another pig site on your own farm or near your barn.
- e. Personnel spreading manure should not access the restricted access zone (RAZ).
- Limit the contact between the personnel spreading manure and other farm personnel.
- Immediately clean any manure spilled on the access road to the farm and follow municipal and provincial regulations.
- h. Promote spreading methods that limit the aerial dispersion of droplets.

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
		Is there a Manure Removal SOP in place that includes:				
Q8.9.1		a. measures for removal and handling of manure.				
		<ul> <li>measures for transportation (if applicable) and application of manure.</li> </ul>				
Q8.9.2	Highly recommended	When service providers or personnel are removing manure from storage, do they work in a separate zone to prevent contamination in the controlled access zone?				
Q8.9.3		Does your farm site or production system own dedicated manure-handling equipment?				
Q8.9.4		Do you require service providers who remove manure to clean (wash, disinfect and dry) their equipment prior to entering the controlled access zone?				
Q8.9.5		Is there a dedicated access road, different from the main entrance, to access the manure storage?				
Q8.9.6		Does machinery, used to spread manure, have a separate entrance to access the manure storage?				

NOTES			

# Dead Stock and Waste

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARI	O OPERATING PROCEDURE	

8.10 Dead Stock and Waste Removal

Highly recommended

#### DEAD STOCK AND WASTE

#### RECOMMENDATIONS

- 1. A Dead Stock and Waste Removal SOP (SOP 8.10) should be developed and include:
  - a. When the dead stock is taken out of the pen and when the waste is disposed of.
  - b. Where the dead stock and waste is to be disposed.
  - c. What type of equipment is used to dispose of the dead stock and waste.
  - d. How the equipment used to dispose of the dead stock and waste cleaned.
- 2. Dead stock should be disposed:
  - a. Through a different access point from the main entrance.
  - b. In a way that does not attract and allow scavengers to access the carcasses.
- 3. Dead stock and waste pick-up location should be done outside the controlled access zone (CAZ).
- 4. Vehicles used to pick up dead stock and take it to storage should be dedicated to your farm or production system.

For your convenience, a template for the Dead Stock and Waste Removal SOP (SOP8.10) has been developed for you to use.

#### **RATIONALE**

- a. Dead animals represent a source of pathogenic agents which can contaminate live animals and other farms.
- b. During carcass handling, storage and disposal (burying, composting, incineration, rendering, etc.) contamination and propagation of pathogenic agents coming from dead animals can occur.
- c. Improper storage and disposal of household and farm waste can attract rodents and scavengers which can move the waste around and thereby spread pathogens.
- d. Rapid detection of dead animals, proper handling, storage and disposal can prevent any possible contamination of feed, water, other animals, facilities and the environment.

#### **GUIDANCE**

- a. Ensure that trucks transporting dead animals never enter the controlled access zone (CAZ). These vehicles must have their own access roadway to the storage area that is different from the one used for regular access to the farm.
- b. Designate an exit door exclusively for the removal of dead animals.
- c. Establish a protocol for the removal of dead animals and their transportation to the temporary storage area. This protocol must take into account the use of boots and outerwear designated solely for this task and washing hands after handling dead pigs.
- d. Sanitize equipment used to dispose of the dead stock.
- e. Remove dead animals from the building as soon as possible.

- f. Have a freezer to store the dead piglets and afterbirth in sow units. Dedicate specific containers for inside and outside the building (choose separate colors and/or identify the containers).
- g. Have watertight containers (bins, garbage, etc.) so that the surrounding land and nearby sources of water cannot be contaminated by the fluids that might come out of them. This also provide secure protection from rodents and scavengers.
- h. Clean the waste containers regularly.
- i. Prohibit waste from returning to the farm.
- j. Assign a particular vehicle to move dead stock off of the farm to the storage location.
- k. Assign a pick up schedule which will not disturb the traffic or movement of other vehicles planned for production.

Q#	Importance	Biosecurity Questions	No	N/A	Comments	
		Is there a <b>Dead Stock and Waste Removal SOP</b> in place that includes				
Q8.10.1		a. when dead stock is to be taken out of the pen and when waste is to be disposed of?				
		<ul><li>b. where the dead stock and waste are to be disposed of?</li></ul>				
		c. what type of equipment is to be used to dispose of dead stock and waste?				
		d. how the equipment used to dispose of dead stock and waste is to be cleaned?				
	Highly	Are all dead stock disposed of				
Q8.10.2	recommended	a. through a different access point from the main entrance?				
		<ul> <li>b. in a way that does not attract scavengers or allow them to access the carcasses?</li> </ul>				
Q8.10.3		If it is a third-party pickup, is the pickup location outside the controlled access zone?				
Q8.10.4		Is the dead stock and waste picked-up location outside the controlled access zone?				
Q8.10.5		Are the vehicles that are used to pick up dead stock and move it to storage dedicated to your farm or production system?				

NOTES			



## **SOP 8.10** DEAD STOCK AND WASTE REMOVAL

This standard operating procedure (SOP) can be used as a template. If you develop your own version, all required elements must be included.					
Site r	nanager:	Person in charge:			
PRO	TOCOL				
				ot Applicable	
	Follow this protocol w	hen dead stock and waste are disposed of.	Applied On-Farm	Importance	
1	Dead Stock and Wast	e Removal			
	a. When the dead is to be dispose		Highly		
	b. Where the dead		recommended		
	a. How the equipn	nent used to dispose of dead stock and waste is cleaned.			
2	Record mortality on t	he Mortality Record (R-M).		Mandatory	
3	Other good production practices:				
	1				
REC	ORDS				
Nar	ne of Record			Importance	
	R-M Mortali	ty Record		Mandatory	

NOTES			





# **MODULE 9**

# TRANSPORTATION



- 9.1 Preparation for Transport
- 9.2 Humane Transportation
- 9.3 Transport Biosecurity

# Section 9.1

# **Preparation for Transport**

#### **SECTION 9.1**

#### PREPARATION FOR TRANSPORT

#### **RECOMMENDATIONS**

#### 1. Fasting Period

- a. It is recommended that a fasting period for pigs be implemented prior to slaughter.
  - i. The optimal fasting period is 15 to 20 hours prior to slaughter.

#### 2. Transport Trailers

- a. The transport trailer should be used to move pigs only and should be cleaned prior to use.
- b. It is recommended that you avoid using the same transport trailer to move pigs and other commodities.
- c. A written assurance should be provided by transporters who use wood-based bedding during transportation of pigs certifying that their bedding is free of pentachlorophenols (PCPs), chromated copper arsenate and other wood-preserving agents.

#### **RATIONALE**

- a. Fasting prior to slaughter reduces the risk of carcasses being contaminated with intestinal contents during processing. If the fasting period is too long (over 24 hours) there is a higher risk of Salmonella contamination.
- b. Contaminated transport vehicles represent a source of pathogens for both the pigs' shipping site and receiving site.
- Using the same transport trailer for pigs and other materials (such as fertilizers, pesticides, medicated feeds or other chemicals) can increase the risk of the pigs' carcasses being condemned due to unacceptable residue.
- d. Every time animals are moved to a site, there is a risk of introducing and spreading pathogens from contaminated vehicles.
- e. If wood shavings are contaminated with PCP, chromated copper arsenate and other wood preservatives and consumed by pigs, it can accumulate in tissue and be passed along to people.
- Urine and feces from pigs treated with antibiotics may contain antibiotic residue which, if ingested by untreated pigs, can be sufficient to cause violative levels of residues in those pigs.
- The handling, mixing and transporting of pigs causes stress that may cause the animals to shed bacteria, including Salmonella. Non-contaminated animals may become contaminated through exposure to other animals and their feces, or by coming into contact with contaminated vehicles.

#### **GUIDANCE**

- a. Implement a sanitation protocol including cleaning, washing, disinfecting and drying for all incoming and outgoing vehicles.
- b. Dedicate trucks and plan the traffic flow within and between farms and production system, units and zones (controlled access and restricted access) to minimize the introduction of pathogens.
- c. Apply an appropriate downtime for all vehicles.

### AUDIT QUESTIONS

Q#	Importance	Question	Yes	No	N/A	Comments
Q9.1.1		Has a fasting period been implemented?				
Highly		<ul> <li>Are the transport trailers used only to transport livestock and cleaned prior to transportation?</li> </ul>				
	Highly recommended	b. Are different transport trailers used to transport pigs and other commodities?				
Q9.1.2		c. Is the transporter providing a written assurance or certifying that the wood-based bedding being used when transporting pigs is free of PCPs, chromated copper arsenate and other wood- preserving agents?				

N/A = not applicable; PCP = pentachlorophenol

NOTES			

# Section 9.2

# Humane Transportation

#### **REFERENCED IN THIS SECTION:**

Number/ Identifier	Name	Importance
STANDARI	O OPERATING PROCEDURE	
9.2	Humane Transportation	Mandatory
FACT SHE	ĒΤ	
F-19	Fitness for Transport	_

#### **SECTION 9.2**

#### **HUMANE TRANSPORTATION**

#### **REQUIREMENTS**

- 1. A Humane Transportation SOP (SOP 9.2) must be developed and include measures for:
  - a. personnel involved in the transportation of pigs or who arrange for pigs to be transported must follow the most current national and provincial animal transport regulations.
  - b. ensuring the loading and unloading of pigs is carried out by trained and competent personnel only
  - c. assessing fitness for transport
  - d. mixing together only compatible animals
  - e. providing appropriate bedding for transport.
- 2. Loading and unloading facilities must be constructed and maintained to facilitate ease of movement and to prevent pigs from falling off, escaping or becoming injured.

For your convenience, a template for the Humane Transportation (SOP 9.2) has been developed for you to use.

#### **RATIONALE**

- a. Advance planning is a key factor affecting the welfare of animals during transport. Planning includes selecting and preparing the animals, ensuring appropriate loading facilities are in place, and making arrangements with a qualified transporter. The nature and duration of the journey also need to be taken into consideration to ensure that animals are fit for the intended journey.
- b. A calm handling and loading process reduces discounts due to condemnations, bruises, carcass losses, and poor meat quality.
- c. A vehicle or container bedded with clean straw, shavings or other bedding material provides effective insulation and comfort and prevents the newly weaned pigs from developing hypothermia or frostbite.
- d. Training is essential to ensure that all personnel know their responsibilities. Personnel involved in transporting pigs or arranging their transport have a responsibility to ensure that no part of the transportation process (including loading, transit and unloading) causes injury or undue suffering in the animals.
- e. The federal requirements for animal transport are covered under the Health of Animals Regulations, Part XII (Transportation of Animals).

#### **GUIDANCE**

- a. Several factors affect the welfare of pigs during loading and transportation. These include: group size, feeding programs and methods (including some feed additives and nutritional deficiencies); lighting conditions at loading; drafts in the loading/handling facilities; extreme heat, humidity, or cold; aggressive handling during production; lack of regular moving and handling during the finishing period; and the attitudes of handlers during the production phase and during loading.
- b. Compromised animals, due to injury, fatigue, infirmity, poor health, distress, age (very young or very old), impending birth and other causes, have a reduced capacity to withstand the stress of transportation.

- c. Compromised animals are fit for transport with special provisions such as separation from other animals, extra bedding, and/or transporting to local slaughter only. Animals affected with conditions associated with a high risk of undue suffering resulting from transport are unfit for transport (e.g., non-ambulatory animals that are unable to stand without assistance or move without being dragged or carried, regardless of their size or age; referred to as non-ambulatory animals).
- d. Some pigs are more likely to suffer adverse effects caused by hot, humid weather. A pig that is fit for a short trip direct to processing may not be fit for marketing through an auction if it involves many stops.
- e. Animals that cannot bear weight on all four legs will likely become non-ambulatory during transport.
- f. Those responsible for arranging transportation services need to know
  - i. the expected length of the trip, including intermediate stops (e.g., rest stops, assembly yards, auctions)
  - ii. whether the transporter needs to provide additional services (e.g., feed, water, rest) during transit
  - iii. loading densities, which may change based on factors such as weather, the weight of individual pigs, and the expected duration of the trip.
- g. The Site Manager should ask feedback from the slaughterhouse and/or assembly yard about the condition of the pigs upon arrival.
- h. The scope of the Code of Practice for the Care and Handling of Pigs ends at the farm gate, but includes requirements and considerations that affect the transportation process. A separate Code of Practice for transportation is available on the National Farm Animal Care Council's website.

### ? AUDIT QUESTIONS

Q#	Audit Question and Interpretation		Verification  Compliant NC-Minor NC-Major N/A			
Q9.2.1	<ul> <li>Verify that a Humane Transportation SOP (SOP 9.2) has been developed and includes provisions for: <ul> <li>a. ensuring personnel involved in the transport process for livestock including planning, loading, transportation and unloading follow the Health of Animals Regulations.</li> <li>b. ensuring the loading and unloading of pigs is carried out by competent personnel only</li> <li>c. assessing fitness for transport <ul> <li>i. ensuring unfit pigs are not loaded</li> <li>ii. identifying when compromised pigs can be shipped</li> </ul> </li> <li>d. mixing together only compatible animals</li> <li>e. providing appropriate bedding for transport according to weather conditions and the age of the pigs (especially newly weaned pigs).</li> </ul> </li> <li>Has a Humane Transportation SOP (SOP 9.2) been developed</li> </ul>			lidation: ne Transpo	rtation	
	that includes all PigCARE-required elements?					

Q#	Audit Question and Interpretation		Verification			
			NC-Minor	NC-Major	N/A	
09.2.2	Verify that loading and unloading facilities are constructed with safe and secure footholds and maintained to facilitate ease of movement and to prevent pigs from falling off, escaping or becoming injured.	Full Valid  obse  inter	rvation			
Q7.2.2	Are loading and unloading facilities constructed and maintained to facilitate ease of movement and to prevent pigs from falling off, escaping or becoming injured?					
Q9.2.3	Verify whether the Site Manager asks for feedback from the slaughterhouses and/or assembly yards regarding the condition of the pigs upon arrival.	Full and inter	Partial Va	lidation:		
HR	Is the Site Manager asking for feedback from the slaughterhouses and/or assembly yards about the condition of the pigs upon arrival?					

HR = highly recommended; N/A = not applicable; SOP = standard operating procedure.

#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

A Humane Transportation SOP (SOP 9.2) is available that addresses all required elements.

#### MINOR NON-COMPLIANCE Timeline: 12 months

- The Humane Transportation SOP (SOP 9.2) is incomplete or not available.
- Loading or unloading facilities are not constructed or maintained to facilitate ease of movement or to prevent pigs from falling off, escaping or becoming injured.

#### MAJOR NON-COMPLIANCE

Not applicable.



#### **SOP 9.2** HUMANE TRANSPORTATION

Site Manager: Person in charge:	This standard operating procedure (SOP) may be used as a tem If you develop your own version, all required elements must be		PID#:
	Site Manager:	Person in charge:	

#### **PROTOCOL**

This SOP must include the following requirements.

Designated personnel must be trained in and follow this protocol every time animals are transported.	Applied On-Farm	Importance			
. Assessing fitness for transport					
(Refer to Fact Sheet F-19 - Fitness for Transport).					
<ul> <li>Personnel involved in the transportation process for livestock, including planning, loading, transportation and unloading, must follow the Health of Animals Regulations.</li> </ul>					
<ul> <li>Ensuring the loading and unloading of pigs is carried out by competent personnel only</li> </ul>		Mandatory			
c. Assessing fitness for transport					
<ul><li>i. ensuring unfit pigs are not loaded</li><li>ii. identifying when and how compromised pigs can be shipped</li></ul>					
2. Mixing of compatible animals					
Pigs that are incompatible are not mixed in together.		Mandatory			
3. Providing appropriate bedding for transport					
The vehicle or container is adequately bedded according to the weather conditions and the age of the pigs (especially important for newly weaned pigs).		Mandatory			
Other good production practices:					

NOTES			

# Section 9.3

# **Transport Biosecurity**

#### REFERENCED IN THIS SECTION:

Number/ Identifier Name Importance



#### STANDARD OPERATING PROCEDURE

9.3 Biosecurity Transportation (to be developed by producer)

Highly recommended

#### **SECTION 9.3**

#### TRANSPORT BIOSECURITY

#### **RECOMMENDATIONS**

- 1. A transport company that participates in a transporter biosecurity program or certification program should be hired to transport pigs.
- 2. A Biosecurity Transport SOP (SOP 9.3) should be developed and include recommendations regarding the movement of:
  - a. vehicles, drivers, producers and employees within the controlled access zone (CAZ) and restricted access zone (RAZ) and between different barns and sites, and
  - b. animals entering and leaving the site.
- 3. The cleanliness of all transport vehicles should systematically be verified upon their arrival at the farm.

#### **RATIONALE**

a. Animals arriving or leaving a site represent a high risk of introducing and spreading pathogens due to possible vehicle contamination. Vehicles used for animal transport may be contaminated and can represent a significant source of pathogens for your herd.

#### **GUIDANCE**

#### It is recommended that the preventive measures below be followed:

- a. Designate a vehicle for specific animal movements and a vehicle to move other materials to sites. If the same vehicle must be used, clean and disinfect the vehicle before transporting pigs to avoid contamination of the pigs.
- b. Organize the movement of trucks or vehicles within each facility and between sites in order to avoid the transmission of pathogens.
- c. Test your trucks and/or trailers for different diseases (e.g., porcine epidemic diarrhea).
- d. Have a sanitation procedure (clean, wash, disinfect and dry) for vehicles entering the site.
- Implement a sanitary protocol for the driver (boot and outerwear change, washing of hands, etc.). Drivers should be trained on the protocols to be followed when loading or unloading at the farm.
- Establish an appropriate downtime (cleaning) period for trucks and vehicles.
- Ensure that delivery or hauling trucks do not visit other premises before entering your site.
- h. Ensure that delivery or hauling trucks do not contain any other sources of pigs on board the same trailer.
- Ensure that the truck receiving pigs is empty and clean upon arrival at the site.
- Design loading-unloading docks so that the trucks at risk do not come in direct contact with the building. There are other options, such as truck-to-truck transfer.
- k. Have a procedure for the producer and employees to avoid contact with the livestock trailer.
- Clean vehicles between the transportation of pigs to avoid cross-contamination from manure left on trucks.

## ? BIOSECURITY QUESTIONS

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments
Q9.3.1		Is the company that is being used to transport pigs participating in a transporter biosecurity or certification program?				
		Is a Biosecurity Transport SOP (SOP 9.3) in place to pre- introducing or transmitting pathogens to the site receiv animals? Does it include requirements regarding the:		e		
Q9.3.2	Highly	5 ,				
	b. movement of ar the site?  c. downtime perio  d. truck sanitation	<ul> <li>b. movement of animals entering and leaving the site?</li> </ul>				
		c. downtime period for truck cleaning?				
		d. truck sanitation program (washing, cleaning, disinfecting and drying)?				
Q9.3.3		Is the cleanliness of all transport vehicles systematically verified upon their arrival at the farm?				

N/A = not applicable; SOP = standard operating procedure

NOTES			



# **MODULE 10**





- 10.1 Canadian Ractopamine-Free Pork Certification Program
- 10.2 Outdoor Access Certification
- 10.3 Multiple Species Certification
- 10.4 Group Sow Housing Certification

# Section 10.1

# Canadian Ractopamine-Free Pork Certification Program

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
RECORD		
R-2	Incident Report	Mandatory

#### **SECTION 10.1**

#### CANADIAN RACTOPAMINE-FREE PORK CERTIFICATION PROGRAM

#### WHAT IS THE CANADIAN RACTOPAMINE-FREE PORK CERTIFICATION PROGRAM (CRFPCP)?

The Canadian Ractopamine-Free Pork Certification Program provides assurance to international markets that pigs raised according to the program standards have never come in contact with Ractopamine and the pork produced is free of Ractopamine residues. This assurance is provided through thorough record keeping and routine audits at the farm and on-farm feed mill, commercial feed mill, and federally inspected slaughterhouse. All parties share the responsibility in establishing and maintaining this assurance.

#### WHAT IS RACTOPAMINE?

Ractopamine is not a food safety hazard. It is a feed additive that increases protein synthesis. It is the active ingredient in products known as Paylean for swine and Optaflexx for cattle. Ractopamine should not be fed to male or female swine intended for reproduction, including pregnant or lactating swine or swine intended to be retained for breeding.

#### WHY SHOULD I STOP USING RACTOPAMINE?

There are a number of export markets that do not permit the use of Ractopamine. The most important of these is China. Federally inspected processing plants target these markets and require hogs that are "Ractopamine Free". If a producer wants to sell hogs to a federally inspected plant, the site Premise Identification (PID) must be registered under the Canadian Ractopamine-Free Pork Certification Program.

Even though provincially inspected slaughterhouses, which are unable to export, may accept pigs that have been fed Ractopamine, there are so few of these operations they may not represent a viable market for all producers.

#### WHO REQUESTED RACTOPAMINE-FREE PORK?

China is Canada's third largest pork export market. It is valued at approximately \$600 million annually and it does not permit the use of Ractopamine. It is also a market that has tremendous growth potential. Other markets such as Taiwan and the European Union also ban the use of Ractopamine. While not prohibited in Canada, there is unease about its use among consumers.

#### HOW TO REGISTER A SITE UNDER THE CRFPCP?

The table below lists the prerequisites to register a site in the CRFPCP.

Reg	istering in the CRFPCP	Implemented on-farm
1.	Demonstrate the site possesses a valid PID number.	
2.	Demonstrate the site possesses a valid PigSAFE   PigCARE status.	
3.	Demonstrate the site possesses barn-exclusive herd mark(s).	
4.	Have Annex 5 - On-Site Enrollment Assessment Checklist for Premise Identification (PID) site and On-Farm Feed Mills completed by an external assessor or a validator and sent to the Provincial Coordinator. A copy of Annex 5 must be kept on-site.	
5.	Complete Annex 2 - Agreement between the Premise Identification (PID) site and the Slaughter Establishment, and send it to the slaughter establishment where pigs are shipped. A copy of Annex 2 must be kept on-site.	

#### HOW TO MAINTAIN A VALID STATUS UNDER THE CRFPCP?

To maintain the CRFPCP registration, Annex 5.1 - Annual Assessment Checklist for PID sites and On-Farm Feed Mills must be completed by the validator and a copy must be kept on-site.

#### **CRFPCP REQUIREMENTS AND VERIFICATION**

The table below lists the program requirements found in Annexes 5 and 5.1 and provide the list of documents that must be verified to assess the compliance of the requirements. The Deviation column identifies the type of non-compliance, if a requirement is not met.

ID	site and/or On-Farm Feed Mill Requirements	Verification	Deviation
1.	The site and/or on-farm feed mill possesses a <b>valid PigSAFE   PigCARE status</b> and the validation report is kept on file since the last validation.	Certificate or letter of certification from the Provincial Office or contact the Provincial Office.	Not eligible
2.	The site and/or on-farm feed mill do not have any outstanding <b>corrective action requests</b> related to the PigSAFE   PigCARE programs.	Last validation report or contact the Provincial Office.	Minor
3.	The site possesses barn-exclusive <b>herd mark(s)</b> .	Each barn registered in the program must have barn exclusive herd mark.	Not eligible
4.	This site and/or on-farm feed mill has not kept or manufactured feed containing Ractopamine in the last 12 months or since a clean-up was completed (in accordance with <b>Annex 1</b> ) and records supporting these conditions are available to auditors upon request.	Verify a subset of the feed delivery slip and PigSAFE   PigCARE Ration Used On-Farm Record (R-R) or completion of Annex 1, if applicable.	Not eligible
5.	This PID site has a signed <b>Annex 2</b> Agreement between the PID site and the slaughter establishment stating that the PID site met the requirements of the CRFPCP upon enrollment.	Verify the Annex(es) 2 - Agreement between the PID site and the slaughter establishment.	Minor
6.	The site and/or on-farm feed mill has obtained a signed Annex 3 (letters of guarantees) issued by an enrolled Commercial Feed Facility (Type A-B-D) and the annex is kept on file. (Annex 3 is not required for single feed ingredients (such as concentrated minerals, vitamins, flavours and enzymes, any ingredient listed on Schedule IV and V of the Feed Act) manufactured in facilities other than feed mills).	Verify the Annex(es) 3 - Letters of Guarantee signed by an enrolled feed facility. www.inspection. gc.ca/animals/feeds/inspection-program/canadianractopamine-free-pork-certification-progr/eng/1437148393953/1437148949738	Minor
7.	The site and/or on-farm feed mill has started collecting or has the shipping documents or invoices (feed delivery slips) for each load of feed delivered since the last validation.	Verify a subset of feed delivery slips for each load.	Minor
8.	For on-farm feed mills, the PigSAFE   PigCARE programs feed mixing and sequencing records are maintained, kept on file since the last validation and available for inspection upon request.	Verify PigSAFE   PigCARE Feed Sequencing, Mixing and Distribution Record (R-S).	Minor

PID site and/or On-Farm Feed M	ill Requirements	Verification	Deviation
9. The site and/or on-farm feed to ensure that feeds of <b>unkn</b>	d mill has controls in place nown origin are not accepted.	Verify PigSAFE   PigCARE Ration Used On-Farm Record (R-R) and feed delivery slips or tag.	Minor
	ine Movement Document) g animals have not been fed amine since the last validation	Review a subset of the Swine Movement Document (R-G) (Annex 4) for incoming animals.	Minor
11. A copy of <b>Annex 5</b> is kept or site met the requirements of		Verify if the Annex 5 is on file.	Minor
12. The person in charge is awa or producer <b>responsibilities</b> .		Question the site manager or producer about their responsibilities (listed below).	Minor

The site manager or producer must know and abide by their responsibilities to ensure compliance with the CRFPCP.

The	responsibilities of the Site Manager and Producer	Implemented on-farm
a.	Assist external assessors, Validators and/or foreign auditors with enrollment or assessment activities.	
b.	Maintain a valid PigSAFE   PigCARE programs status.	
C.	Identify and correct any deviations in a timely and appropriate manner, taking into consideration the seriousness of the deviation and its impact.	
d.	In case of a <b>major deviation</b> , if Ractopamine is introduced or was likely to have been introduced to the site and/or on-farm feed mill, notify the Provincial Coordinator and slaughter establishment as soon as a deviation is observed on site or on-farm feed mill (maximum 24 hours).	
e.	Record keeping: The following records must be kept on-site:  i. Last PigSAFE   PigCARE validation report  ii. Annex 1 – Clean-up procedures (if applicable)  iii. Annex 2 – Agreement between the slaughter establishment and the site  iv. Annex 3 – Letters of guarantee from all commercial feed facilities  v. Annex 4 – Swine Movement Document (R-G) for all incoming pigs  vi. Annex 5 – On-Site Enrollment Assessment for PID Sites and On-Farm Feed Mills  vii. Annex 5.1 - Annual Assessment Checklist for PID Sites and On-Farm Feed Mills  viii. PigSAFE   PigCARE Ration Used On-Farm Record (R-R)  ix. PigSAFE   PigCARE Feed Sequencing, Mixing and Distribution Record (R-S)  x. Feed Delivery Slips	

#### WHAT TO DO IF THERE IS A CHANGE OF OWNERSHIP?

If a new site manager or producer is taking possession of a site or on-farm feed mill already enrolled in the CRFPCP the following responsibilities must be respected.

Re	sponsibilities when a change of ownership occur	Implemented on-farm
а	. Notify the Provincial Coordinator of any change of ownership.	
b	. Depending on the change of ownership, the Provincial Coordinator will indicate the requirements that the site must meet to maintain enrollment in the CRFPCP.	

NOTES			

# Section 10.2

# Outdoor Access Certification

#### REFERENCED IN THIS SECTION:

Identifier	Name	Importance
STANDARI	D OPERATING PROCEDURES	
2.2.1	Sanitation	
2.2.2	Alternative Cleaning	
6.1.1	Pest Management - With an Exterminator	Mandatory
6.1.2	Pest Management - In-House	
10.2	Parasite Management (to be developed by producer)	
RECORDS		
R-2	Incident Report	<b>N</b> 1.
R-4	Monitoring Record	Mandatory
FACT SHE	ETS	
F-2	Lime Application	
F-8	Toxoplasma	_
F-9	Trichinella	

#### **SECTION 10.2**

#### **OUTDOOR ACCESS CERTIFICATION**

#### **OUTDOOR ACCESS REQUIREMENTS**

#### Training requirements:

1. Personnel must consult the Fact Sheets F-8 Toxoplasma and F-9 Trichinella and understand the risks associated with these parasites.

#### Food Safety Requirements:

#### 2. Barn Maintenance

- a. The barn(s)/structure(s) used to house pigs must be free of obvious deterioration.
- b. The barn's environmental control system must be adequately maintained.
- c. Pigs must not have access to treated wood (where pigs have the opportunity to chew on it), including pressure-treated wood (e.g., treated with pentachlorophenol, chromated copper arsenate or other wood-preserving agents) in their housing system.

#### 3. Barn Sanitation

A Sanitation SOP (SOP 2.2.1) or an Alternative Cleaning SOP (SOP 2.2.2) must be adequately implemented in each interior area of the barn(s) / housing structure(s).

- a. A Sanitation SOP (SOP 2.2.1) must include
  - i. at least one cleaning measure,
  - ii. at least one washing measure, and
  - iii. at least one disinfection measure.
- b. An Alternative cleaning SOP (SOP 2.2.2) must include
  - i. at least one cleaning measure and
  - ii. at least one disinfection measure.

#### 4. Pest Management

- a. A Pest Management SOP for the control of rodents and birds, must be developed and adequately implemented on-farm and in the on-farm feed mill, if applicable, either by a licensed exterminator (SOP 6.1.1) or performed in-house (SOP 6.1.2). This SOP must include:
  - i. A list of all chemical products used indoors and outdoors. All products used must be licensed and approved for use where food-producing animals are raised and housed.
  - ii. The frequency of pest-activity monitoring.
  - iii. The type of traps and bait stations being used.
  - iv. The measures being used to prevent birds from accessing the barn(s), feeding areas or housing structures.
- b. If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1) it must also include
  - i. the exterminator's contact information and
  - ii. their recommended actions for extermination and the corrective actions to take if the situation remains unsatisfactory.
- c. Outdoor feeding areas must be designed, maintained and kept clean to prevent pests and wildlife from accessing them.
- 5. The Multiple-Species Certification must be completed.

#### ANIMAL CARE REQUIREMENTS FOR OUTDOOR ACCESS

- 6. Nose rings must not be used.
- 7. Measures must be in place to ensure that pigs are protected from hypothermia, hyperthermia and sunburn.
- 8. All areas of the barn or outdoor housing structure must have adequate drainage to prevent accumulation of stagnant water and/or manure and provide a dry resting area.
- 9. A Parasite Management SOP (SOP 10.2) describing how pigs are protected from parasites must be developed in consultation with a licensed veterinarian and adequately implemented.
- 10. Appropriate measures must be in place to prevent the presence of predators and other wildlife in the outdoor pens and pasture.

#### **RATIONALE**

#### Trichinella

- i. Although *Trichinella* has been virtually eliminated from Canadian herds, this parasite has historically been associated with pork meat. The disease may be fatal in humans.
- ii. *Trichinella* is found in wildlife in Canada, particularly in bears and especially in northern parts of the country. Rodents have often been found to be contaminated by *Trichinella* and can therefore be the source of contamination for pigs.
- iii. Access to wildlife and rodents is increased when pigs have access to the outdoors. These animals may host *Trichinella* larvae in their muscles and pigs may become contaminated by eating dead animals if adequate management strategies are not implemented.
- iv. Pigs that have access to the outdoors are therefore more at risk of being infected by *Trichinella* as well. If infected, the meat of these animals may be a potential source of contamination for humans.

#### **GUIDANCE**

#### a. Risk Management of Outdoor Facilities

- i. Viruses and parasites love humidity; they survive much longer in wet areas. Outdoor facilities should be designed to prevent the pooling of water.
- ii. Measures should be put in place to ensure cats and wildlife are kept away from outdoor facilities.
- iii. Fencing (woven wire or wire mesh) is a good way to deter the entry of wild animals and other species.
- iv. Consult the Fact Sheets F-8 Toxoplasma and F-9 Trichinella for more details.
- v. It is strongly recommended to wait a period of 4 months, making sure the area has been completely dried, before re-introducing animal to a parcel of land that was previously used as a pasture for pigs or other species. This period would allow the destruction of our most important food pathogens, such as Salmonella and Listeria monocytogenes. It would ensure the destruction of the Influenza virus and allow a reduction of more than 90% of zoonotic parasites.

#### b. Lime Application

- i. Ground limestone may be used as desiccant (drying agent) to dry pens and flooring, and consequently results in reduced pathogen loads. Ground limestone could be used in place of a disinfectant on surfaces that are not conducive to the application of liquid disinfectant, such as earthen ground.
- ii. Other forms of lime, such as quicklime and hydrated (slaked) lime, are much more corrosive when they come in contact with water or moist surfaces and can cause chemical burns on people and pigs. When mixed with water, they elevate the pH to above 12.5. After they dry again, they become less corrosive; however, the reintroduction of water can once again drastically increase the pH. Quicklime should not be used as part of a cleaning procedure, as it is even more dangerous to work with than hydrated lime. If you choose to use hydrated (slaked) lime as part of a cleaning procedure, e.g., "white-washing", you should first consult with an expert on the procedure, taking into account when it would be safe to introduce pigs back into the area.
- iii. Ensure full personal protective equipment is used during the procedure.
- iv. Consult the Fact Sheet F-2 Lime Application for more details.

## ? AUDIT QUESTIONS

Indicate i	f the site provides partial or full outdoor access	to the pigs						
enclosed pigs from that preve pigs and convention	but have a full, solid floor that prevents the accessing earthen ground, solid penning ents direct nose to nose contact between the wildlife and bird netting can be considered onal, such as natural ventilation barn.		Partial Outdoor Access  (Verify that pigs are kept on a solid floor that does not give them access to the earthen ground and that the enclosures are constructed with solid penning)					
Full outdoor access: Facilities that allow the pigs to have direct nose to nose contact with wildlife (i.e., penning is not completely solid) and/or access to earthen ground.			Full Outdoo	or Access				
Q#	Audit Questions and Interpret	tations		Caralian	Verifica		N1/A	
Training F	Training Requirements   Compliant   NC-Minor   NC-Major   N/A							
Q10.2.1	Verify that personnel have consulted the Fact Sheets F-8 Toxoplasma and F-9 Trichinella and understand the risks associated with these parasites.				partial val Training Re view			
	Have personnel consulted the Fact Sheets F-8 Toxoplasma and F-9 Trichinella and do they understand the risks associated							

with these parasites?

0,11	Audit Questions and Interpretations		Verification				
Q#			NC-Minor	NC-Major	N/A		
Food Safe	ety Requirements	'					
	Barn Maintenance (Section 2.1):						
	If a barn or housing structure is used, verify that it is free of obvious deterioration that could give the pigs access to:	Full valid					
	a. chemical hazards b. biological hazards	<b>&gt;</b> observation					
	a. Are the barns or housing structure used to house pigs free of obvious deterioration that could interfere with the production of safe pork?						
	Verify that the ventilation, heating and cooling systems of the barns are maintained adequately by ensuring the following measures are in place to control temperature and humidity:  a. fans and heaters working  b. air intakes are clear	Full validation:  > observation					
Q10.2.2	b. Are the ventilation, heating and cooling systems adequately maintained?						
	Verify that pigs do not have access to treated wood, including pressure-treated wood (e.g., treated with pentachlorophenols (PCPs), chromated copper arsenate or other wood-preserving agents) in their housing system or any other area accessible to pigs (i.e., where they have the opportunity to chew on it).  Verify that the outdoor pens, pasture fences and posts are made of non-treated wood. Treated wood posts must either be covered or have electric wire placed on the inside of the pen to ensure pigs cannot access it (i.e., will not chew on it).	Full and partial validation:  > observation (full validation or > interview			n only)		
	Treated wood chutes are acceptable, as pigs are not exposed for a significant period of time.						
	c. Are the housing system and other areas accessible to pigs free from any treated wood?						

0#	Audit Questions and Interpretations		Verification				
Q#			NC-Minor	NC-Major	N/A		
Q10.2.3	Barn Sanitation (Section 2.2):  Verify that the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) is in place and includes all required elements if pigs have access to a barn or housing structure.	Full and partial validation:  SOP 2.2.1: Sanitation  SOP 2.2.2: Alternative Cleaning  observation (full validation only)  interview					
	<ul> <li>a. Does the site have a Sanitation SOP (SOP 2.2.1) that includes: <ol> <li>at least one cleaning measure?</li> <li>at least one washing measure?</li> <li>at least one disinfection measure?</li> </ol> </li> <li>If a sanitation program does not include cleaning, washing and disinfection, go to question 10.2.3 b, below.</li> </ul>						
	<ul> <li>b. Does the site have an Alternative Cleaning SOP (SOP 2.2.2) that includes:</li> <li>i. at least one cleaning measure?</li> <li>ii. at least one disinfection measure?</li> </ul>						
	If pigs have access to a barn or housing structure, verify that the Site Manager applies the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) at least once every 12 months in each area of the barn.  A Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) have to be implemented on any solid flooring and penning (e.g., application of ground limestone on concrete, compacted ground, compacted stone/rocks).	<ul> <li>SOP 2.2.1: Sanitation</li> <li>SOP 2.2.2: Alternative Cleanin</li> </ul>					
	c. Is the Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) applied at least once every 12 months to all solid flooring and penning in the barn(s) or housing structure(s)?						

		Verification				
Q#	Audit Questions and Interpretations	Compliant	NC-Minor	NC-Major	N/A	
	Pest Management:  Verify that a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) has been developed and includes the PigSAFE-required elements. Traps and bait stations must be placed around the outdoor pens and pasture where feeding areas and housing structures are located.	Full and partial validation:  SOP 6.1.1: Pest Management – With an Exterminator or  SOP 6.1.2: Pest Management – In-House				
	a. Has a Pest Management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been developed and includes all the PigSAFE-required elements?					
	Verify that the pest management SOP for the control of rodents and birds (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) is adequately implemented on-farm and in the on-farm feed mill (if applicable). Traps and bait station must be placed around the outdoor pens or pasture where feeding areas or housing structure are located.	Full and partial validation:  SOP 6.1.1: Pest Management – With an Exterminator  SOP 6.1.2: Pest Management – In-House  observation (full validation only) interview				
Q10.2.4	<ul> <li>b. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2))</li> <li>been adequately implemented on-farm?</li> </ul>					
	c. Has the Pest Management SOP (whether completed by a licensed exterminator (SOP 6.1.1) or in-house (SOP 6.1.2)) been adequately implemented in the on-farm feed mill?					
	If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1) it must also include:  i. the exterminator's contact information and ii. their recommended actions for extermination and the corrective actions to take if the situation remains unsatisfactory.	Full and Partial Validation:  SOP 6.1.1: Pest Management - With an Exterminator  observation (full validation only				
	d. If the Pest Management SOP is implemented by a licensed exterminator (SOP 6.1.1), does it include the PigSAFE-required elements?					
	Verify that the outdoor feeding area is designed, maintained and kept clean to prevent pests and wildlife (e.g., rodents, birds, racoons) from accessing it. Outdoor feeders and feed carts are covered to prevent access by pests and wildlife. Feed spills are cleaned-up quickly.	Full and Partial Validation:  • observation (full validation			n only)	
	e. Are outdoor feeding areas designed, maintained and kept clean to prevent pests and wildlife from accessing them?					
Q10.2.5	Multiple Species Management (Section 10.3):  Verify that the Multiple-Species Certification has been completed successfully.	> Verif	Partial Val y Section 1 ies Certific	0.3: Multip	ole	
	Is the Multiple-Species Certification (section 10.3) completed?					

Q#	Audit Questions and Interpretations	Verification				
Q#	Audit Questions and interpretations	Compliant	NC-Minor	NC-Major	N/A	
Animal C	are Requirements					
Q10.2.6	Verify that nose rings are not used on-farm.		partial val	lidation: Il validation	n only	
	Is the usage of nose rings prohibited on-farm?					
Q10.2.7	Verify that measures are in place to ensure that pigs are protected from hypothermia, hyperthermia and sunburn and help them maintain thermal comfort (e.g., bedding, shelter, heating devices, shade) at all stages of production.			lidation: Il validation	n only	
	Are measures in place to ensure that pigs are protected from hypothermia, hyperthermia and sunburn?					
Q10.2.8	Verify that all areas of the barn and/or outdoor housing structure (e.g., outdoor pens, feeding areas, alleyways, etc.) have adequate drainage to prevent accumulation of stagnant water and/or manure and provide a dry resting area. Pigs must have a dry area to lie down.	Full validation:  > observation				
	Do all areas of the barn and/or outdoor housing structure have adequate drainage to prevent accumulation of stagnant water and/or manure and provide a dry resting area?					
Q10.2.9	Verify that a Parasite Management SOP (SOP 10.2) describing how pigs are protected from parasites has been developed in consultation with a licensed veterinarian and adequately implemented.  The Parasite Management SOP (SOP 10.2) must include management for both internal and external parasites.	Full and partial validation:  > SOP 10.2: Parasite Management  > R-T: Treatment Record  > R-P: Medication and Vaccine Usage Plan  > observation (full validation only  > veterinary prescription  > interview (for question 10.2.9 b)				
	a. Has a Parasite Management SOP (SOP 10.2) that describes how pigs are protected from parasites been developed in consultation with a licensed veterinarian?					
	b. Has a Parasite Management SOP (SOP 10.2) that describes how pigs are protected from parasites been adequately implemented?					
Q10.2.10	Verify that appropriate measures are in place to prevent predators and other wildlife from accessing the outdoor pens and pasture.	Full and partial validation:  > observation (full validation only) interview				
	Are appropriate measures in place to prevent predators and wildlife from accessing the outdoor pens and pasture?					



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

Personnel have consulted the Fact Sheets F-8 Toxoplasma and F-9 Trichinella and understand the risk associated with these parasites.

#### MINOR NON-COMPLIANCE Timeline: 12 months

A Sanitation SOP (SOP 2.2.1) and/or the Alternative Cleaning SOP (SOP 2.2.2) is missing a few elements.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- A Parasite Management SOP (SOP 10.2) has not been developed or implemented.
- Appropriate measures to prevent wildlife, predators and other animals from accessing the outdoor pen and pasture have not been implemented.

NOTES			

# Section 10.3

# Multiple Species Certification

#### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
STANDARD	O OPERATING PROCEDURE	
10.3	Multiple Species Manure Management	Mandatory, if applicable
RECORDS		
R-2	Incident Report	Mandatory
R-4	Monitoring Record	iviaridatory
FACT SHEE	ET	
F-8	Toxoplasma	_

#### **SECTION 10.3**

#### MULTIPLE SPECIES CERTIFICATION

#### **REQUIREMENTS**

- 1. If cats are kept in the barn or on site, the following measures must be in place:
  - a. Personnel must be trained on the additional risk associated with having cats in the barn and the implementation of good production practices to mitigate the risk of toxoplasmosis.
  - b. Cats must be vaccinated for rabies.
  - c. Only mature and neutered/spayed cats must be allowed in the barn or on-farm feed mill.
  - d. Feed carts and feeders must be covered.
  - e. A litter box must be present in an area accessible only to cats (and humans) and kept clean.
- 2. Measures must be implemented that ensure wildlife is kept out of the barn/building and on-farm feed mill.
- 3. For cattle, other ruminants, horses and other non-avian species:
  - a. Those species must be penned separately from pigs, and;
  - b. A SOP must be adequately implemented and must include how the manure-management system and/or other cross-contamination areas (e.g. common dock) can mitigate the risk of pathogen cross-contamination due to exposure to the fecal material of other species.
- 4. For poultry, fowl, and other avian species:
  - a. Those species must not be housed in the same rooms as pigs, and;
  - b. A SOP must be adequately implemented and include how the ventilation and manure-management system can mitigate the risk of pathogen cross-contamination.

#### **RATIONALE**

#### a. Toxoplasmosis

- i. Toxoplasmosis is one of the most significant parasitical diseases in humans living in developed countries, both in term of occurrence and health consequences.
- ii. The main reason why toxoplasmosis is still associated with pigs raised in closed facilities is the presence of cats. Pigs in direct contact with cat feces that contain the "eggs" of this parasite are believed to be the most common source of infection. It is also established in the scientific literature that finisher pigs raised in pasture are at risk of *Toxoplasma* infections (Wallander et al., 2016).
- iii. A significant proportion of infection in humans may occur after consumption of contaminated undercooked meat. This parasite presents a greater risk when immunosuppressed people or pregnant women are exposed for the first time.

#### b. Domesticated Animals and Wildlife

- i. Dogs and cats may be actively infected carriers of many other human pathogens, such as *Salmonella*, and mechanical carriers of swine pathogens (e.g., transmissible gastroenteritis and porcine epidemic diarrhea (PED)).
- ii. Other cloven-hooved animals (e.g., cattle) may be carriers of foreign animal diseases and some microbes, such as *E. coli* O157:H7, that are not normally present in pigs.
- iii. Other types of wild animals and domesticated birds, such as poultry, can also transmit pathogens to pigs.

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#### **GUIDANCE**

#### a. Multiple Species

- i. Generally speaking, in closed and well-maintained facilities, pigs harbour minimal contamination of the pathogenic bacteria (except *Salmonella* and *Yersinia enterocolitica*) that have the most significant impact on human health such as *E. coli* O157:H7 (and other shiga toxin–producing *E. coli*), *Campylobacter jejuni* and *Listeria monocytogenes*.
- ii. For example, *E. coli* O157:H7, the bacteria that causes the well-known (beef) hamburger disease, is observed almost exclusively in cattle and other ruminants in Canada. It has very rarely been associated with swine and, when it was, it was often because of contact between pigs and live cattle or cattle feces.
- iii. Another example is *Campylobacter jejuni*, the most significant food-borne bacteria in terms of impact on human health. It is very commonly observed in poultry and cattle.
- iv. Keeping various animal species such as poultry and pigs within the same herd raises the very real concern of the possible emergence of new epidemic strains of influenza. New epidemic strains of human influenza emerge, usually, where poultry and pigs are raised close to each other and when humans are in regular contact with these animals. While it has little impact on food safety, the possibility that new pandemic strains could emerge cannot be ignored.
- v. Measures should be implemented to minimize the movement of employees and/or visitors between sections of the barn where different animal species are kept.

#### b. Toxoplasma

- i. Although cats are considered by some people to be good rodent-control tools, cats and rodents often carry the same microbes. Therefore, when cats ingest rodents, there is an increased possibility that cats will become positive and shed even more parasites in the environment.
- ii. Cats are the definitive host of *Toxoplasma* and may shed the parasites in their feces and contaminate pigs that would otherwise be free.
- iii. Cats can carry, without any clinical signs, many microbes that may be harmful for humans, such as *Salmonella* and *Toxoplasma*.
- iv. Infections by *Salmonella* and *Toxoplasma* can both be transmitted to humans either directly through contact with feces (employees) or by meat (consumers).
- v. Although many people with toxoplasmosis show no symptoms, a significant proportion of infected people will experience clinical signs ranging from a flu-like syndrome to permanent eye diseases or even infant death.
- vi. Consult the Fact Sheet F-8 Toxoplasma for more details.

## ? AUDIT QUESTIONS

Q#	Audit Questions and Interpretations	Verification						
Q#	Addit Edestions and interpretations		NC-Minor	NC-Major	N/A			
	If cats are kept in the barn or on site, verify whether the following measures have been implemented:							
	<ul> <li>Personnel have received training on the additional risks associated with having cats in the barn or on site and on implementing good production practices to mitigate the risk of toxoplasmosis.</li> </ul>		Full and partial validation:  R-B: Training Record					
	<ul> <li>Cats (part of the site population) have been vaccinated for rabies and vaccine certificates are available to demonstrate this.</li> </ul>	> obse	rvation (full	validation	•			
	c. Only mature and neutered cats (part of the site population) are allowed in the barn or in the on-farm feed mill. There is proof that cats have been neutered or spayed (invoice, certificate).		<ul><li>invoice, certificate verification</li><li>interview</li></ul>					
	d. Feed carts and feeders are covered.							
Q10.3.1	<ul> <li>e. A cat litter is located in an area accessible only to cats (and people) and is kept clean.</li> </ul>							
Q10.5.1	Have the following measures been implemented if cats are kept in the barn or on site:							
	a. Have personnel received training on the additional risks associated with having cats in the barn or on site and on implementing good production practices to mitigate the risk of toxoplasmosis?							
	b. Have the cats been vaccinated for rabies?							
	c. Are only mature and neutered cats allowed in the barn and near the on-farm feed mill?							
	d. Are feed carts and feeders covered?							
	e. Is the cat litter located in an area accessible only to cats (and people) and kept clean?							
	Verify whether measures that ensure wildlife is kept out of the barn/building and on-farm feed mill have been implemented. Examples:	Full and partial validation:						
	a. doors	_	rvation (full	validation	only)			
Q10.3.2	<ul> <li>b. fences in doors</li> <li>c. wire fence or screens in windows.</li> </ul>	) interv	interview					
	Have measures ensuring that wildlife is kept out of the barn/ building and the on-farm feed mill been implemented?							

Q#	Applie Oppositions of the control of	Verification						
	Audit Questions and Interpretations		NC-Minor	NC-Major	N/A			
Q10.3.3	If cattle, other ruminants, horses and other non-avian species are kept in the same barn/ building verify that:  a. these species are penned separately from pigs  b. a Multiple Species Manure Management SOP (SOP 10.3) has been implemented that includes how the manure-management system can mitigate the cross-contamination of pathogens.  Types of measures in place:  a. Verify that a different manure management system is in place for each species.  b. Describe how you mitigate the risk of other species feces contaminating the pig pen.  For cattle, other ruminants, horses and other non-avian species:	Full and partial validation:  SOP 10.3: Multiple Species Manure Management  observation (full validation only)  interview (for question 10.3.3 b)						
	<ul> <li>Are cattle, other ruminants, horses and other non-avian species penned separately from pigs?</li> </ul>							
	b. Has a Multiple Species Manure Management SOP (SOP 10.3) that includes how the manure-management system can mitigate the cross-contamination of pathogens been adequately implemented?							
Q10.3.4	If poultry and other avian species are kept in the same barn/building, verify that:  a. poultry and other avian species are housed in a room that is separate from the pigs, and  b. a Multiple Species Manure Management SOP (SOP 10.3) that includes how the ventilation and manure-management system can mitigate the cross-contamination of pathogens has been adequately implemented.  Types of measures in place:  a. The ventilation system is separate for each species.  b. A different manure-management system is in place for each species.	Full and partial validation:  SOP 10.3: Multiple Species Manure Management  observation (full validation only)  interview (for question 10.3.4 b)						
	For poultry and other avian species:							
	<ul> <li>a. Are poultry and other avian species housed in a room that is separate from the pigs?</li> </ul>							
	b. Has an Multiple Species Manure Management SOP (SOP 10.3) that includes how the ventilation and manure- management systems can mitigate the cross-contamination of pathogens been adequately implemented?							

N/A = not applicable; SOP = standard operating procedure.



#### LEVELS OF COMPLIANCE – EXAMPLES

#### COMPLIANT

- All appropriate measures for keeping cats in the barn are being followed.
- A Multiple Species Manure Management SOP (SOP 10.3) is in place if other species are kept in the same barn.

#### MINOR NON-COMPLIANCE

Not applicable.

#### MAJOR NON-COMPLIANCE Timeline: 60 days

- Appropriate measures for keeping cats in the barn are not being followed.
- > Other species are being kept in the same barn and Multiple Species Manure Management SOP (SOP 10.3) is not in place.

# Section 10.4

# **Group Sow Housing Certification**

#### **REFERENCED IN THIS SECTION:**

Number/ Identifier	Name	Importance
RECORD		
R-2	Incident Report	Mandatory

#### **SECTION 10.4**

#### GROUP SOW HOUSING CERTIFICATION

This section ensures the requirement #7 of section 7.3 – Housing system is met.

#### **REQUIREMENTS**

- 1. At least 60% of the bred gilts and sows in the breeding and gestation area(s) must be in group housing (unless using a multi-week batch farrowing system).
- 2. If using a multi-week batch farrowing system, at least 50% of the bred gilts and sows in the breeding and gestation area(s) must be in group housing.
- 3. All group-housed sows must be provided with sufficient space for separation of dunging from lying and eating areas.

#### **RATIONALE**

- a. A farm's group-housing system for breeding pigs can be evaluated by using the Code of Practice. This is done by comparing the number of pigs that are individually and group housed, respectively, in the barn's breeding and gestation areas against the ratio that would be expected in the Code of Practice.
- b. Four-week batch farrowing has additional animal health and welfare benefits because it creates a gap in time when there are no suckling pigs on the farm. This allows for a break in disease cycles, as young pigs are relatively naive to pathogens and therefore can amplify diseases on-farm. A complete cleaning and drying of the farrowing area(s) will also help to break up disease cycles.

Farms that use four-week batch farrowing often have healthier herds, resulting in enhanced animal welfare. To achieve these breaks in disease cycles, good herd management requires that bred sows be moved into groups at either 21 days or 49 days post-breeding. However, moving bred sows into groups at 21 days post-breeding can result in reduced conception rates and increased aggression. These are both indicators of reduced welfare. It is therefore recommended that bred sows not be moved into groups between days 3 and 28 post-breeding.

To optimize the welfare of the sows in these systems, it is recommended that bred sows be moved into groups at around 49 days post-breeding.

#### **GUIDANCE**

- a. The time spent by bred gilts and sows in both breeding and gestation areas combined are made up of the following:
  - i. the time from weaning to first service
  - ii. one day of breeding
  - iii. the time from breeding to being moved into gestation housing (max 35 days)
  - iv. the time from entering gestation housing to being moved to the farrowing area
  - v. non-productive days if an animal is not successfully bred but remains a part of the breeding herd (for the fraction of pigs that are unsuccessfully bred), and;
  - vi. Time spent in a stall after being removed from a gestation pen for welfare reasons (potentially full term, for the fraction of pigs that require individual housing).
- b. Note: Maiden gilts and cull pigs are not considered to be part of the breeding herd and should not be considered in evaluating qualification of the farm for this certification.
- c. Definitions:
  - i. Batch-farrowing: Weaning occurs a maximum of once per week, and could occur every 2, 3, 4, 5 or 6 weeks.
  - ii. Multi-week batch farrowing: Weaning occurs once every 2 weeks or less frequently, such as every 3, 4, 5 or 6 weeks.
  - iii. Continuous flow: Weaning occurs multiple times per week on an ongoing basis.

## **CALCULATION**

## STEP 1:

When the barn is fully stocked, calculate how many animals are being housed in individual stalls and how many are being housed in group or individual pens¹ respectively. Do not count maiden gilts or cull pigs.

<sup>1</sup> All sides of pens must be at least 1.83 m (6 feet) long for housing to be considered "pens"; otherwise, they are individual stalls.

Questions		Answers	Unit
(A)	How many bred gilts and sows are in individual stalls?		Bred gilts and sows
(B)	How many bred gilts and sows are in (group or individual) pens?		Bred gilts and sows

## STEP 2:

Calculate the actual percentage of sows and gilts in pens (as a percentage of total sows and gilts in breeding and gestation areas).

$$= 100 \times \frac{B}{A + B}$$

Calculations:	

## ? AUDIT QUESTIONS

Q#	Audit Quest	tions	Yes	No	N/A
Q10.4.1	O10.4.1 If the producer is using a sow management system in continuous flow (other than a batch farrowing system), is the actual percentage of bred gilts and sows in pens in the breeding and gestation area(s) greater than or equal to 60%?				
Q10.4.2	If the producer is using a <b>batch farrowing</b> of bred gilts and sows in the pens in the l greater than or equal to 50%?	system, is the actual percentage breeding and gestation area(s)			
Q10.4.3	Are all group-housed sows provided with of dunging area from lying and feeding a				
I observed a	all of the pigs in the breeding and gestation and sows in both individual stalls and group	areas when the farm was fully stock			
		(far	m name an	d premises	ID number)
	<b>mplies with</b> all the requirements of the Cana oup Sow Housing Certification Program.	adian Pork Excellence			
	es not comply with all the requirements of oup Sow Housing Certification Program.	the Canadian Pork Excellence			
Name of V	Name of Validator (print)  Signature of Validator  Date				
Name of S	Name of Site Manager (print)  Name of Site Manager (print)  Date				



## IN THIS MODULE

R-1	Verification Record	Mandatory
R-2	Incident Report	Mandatory
R-3	Corrective Action Request	(if applicable)
R-4	Monitoring Record	Mandaton
R-A	Personnel and Responsibilities List	Mandatory
R-A1	Personnel Tasks and Training List	Highly recommended
R-B	Training Record	Mandatory
R-C	Code of Conduct	ivialidatory
R-D	Quiz	
R-E	Inspection Checklist	Highly recommended
R-F	Barn Sanitation and Cleaning Record	
R-G	Swine Movement Document	Mandatory
R-H	Letter of Guarantee – Bedding	
R-I	Visitor Log	
R-J	Traps and Baits Network Map	Highly recommended
R-K	Pest Activity Record	
R-L	Farm Plan	

R-M	Mortality Record	Mandatory
R-N	Animal-Based Measures Record	<b>Mandatory</b> (if applicable)
R-O	Observation Record	Highly recommended
R-P	Medication and Vaccine Usage Plan	Mandatory
R-P1	Other Products Used On-Farm	Highly recommended
R-R	Rations Used On-Farm Record	
R-R1	Rations Used On-Farm Record (Québec)	
R-S	Feed Sequencing, Mixing and Distribution Record	Mandatory
R-T	Treatment Record	
R-U	Emergency Contact List	Highly
R-V	List of Feed Suppliers	recommended
R-W	Letter of Guarantee – Recycled Food Products and Distillers' Grains	Mandatory
R-X	Calibration Record	Mandatory (if applicable)
R-Y	Letter of Guarantee – Licensed Veterinarian	Mandatory
R-Z	Space Allowance Record	



## R-1 VERIFICATION RECORD

Name of farm/building identification:		PID#:
Site Manager:	Person in charge:	Date:
- · · · · · · · · · · · · · · · · · · ·	3	(yy/mm/dd)

## **INSTRUCTIONS**

The Verification Record (R-1) must be completed annually by someone who is not responsible for the relevant SOP, such as:

- a. The Site Manager, reviewing the work completed by his or her personnel
- b. A barn worker who knows the tasks but does not implement them
- c. A trained production system technician
- d. A veterinarian or professional agronomist (prior to validation) if a, b or c are not possible.

More than one person can complete the Verification Record.

	SOP # and name	CCP #	Personnel in Charge (Name)	Written SOP Review Date	Records Review Date	Date of Observation (of Person in Charge)	Problems or Deviations	Name and Signature of the Verifier
4.2	Medicated Water	1						
4.4	Feed Sequencing, Mixing and/or Distribution	2						
4.5	Feed Distribution	2						
5.3	Risk Management of Broken Needles	3						
5.4	Medication Withdrawal	4						

CCP = critical control point; SOP = standard operating procedure

1	NOTES



Signature of Site Manager: \_\_\_

## R-2 INCIDENT REPORT

Name	of farm/building identificati	on:	PID‡	<b>‡:</b>		
Site Manager: Person in c		Person in charge:	Date	Date:		
					mm/dd)	
INISTI	RUCTIONS					
The Incorproduction of	ident Report (Record R-2) must be tion practice or when there is a de ive action must be taken and deta non-compliance) or Section B (ma	e completed by the Site Manager when a deviation from the Ractopamine-Free Pork Certifically of both the non-compliance incident and the ajor or critical non-compliance) of the Incident Rephe course of daily operations or during an audit (completed).	ation Program requirements corrective action are to be re port. The names of all perso	. As a result, im ecorded in Sec nnel involved i	nmediate ction A in the	
lnci	dont Catagory		Level	of Non-comp	oliance	
Inci	dent Category		Minor	Major	Critica	
1.1	Personnel Training					
4.2	Medicated Water					
4.4	On-Farm Feed Sequencing, M	ixing and Distribution				
4.5	Feed Distribution					
5.3	Risk Management of Broken N	Veedles				
5.4	Medication Withdrawal					
10.1	Canadian Ractopamine-Free F	ork Certification Program				
	ibe the minor non-compliar	ce incident (i.e., an incident with no dire	ect impact on food safe	ety):		
Signat	ture of Site Manager:		Date:			
SECT	ION B					
ГО ВЕ	COMPLETED WHEN A MAJO	DR OR CRITICAL NON-COMPLIANCE INCID	ENT IS OBSERVED.			
Loc	ation of Affected Pigs		Number of	Affected Pig	ıs	
	mber of pigs affected by this n	on-compliance that:				
	. are still at the production unit	· ·				
i	i. have been shipped to market					
What	are the main causes of this	non-compliance?				
What	corrective actions have bee	en taken to eliminate the cause of this no	on-compliance and pre	vent a recur	rence?	

1	NOTES



## R-3 CORRECTIVE ACTION REQUEST

Validator name (print)

Name of farm/building identification: PID#			
Site Manager: Person in charge:		Date:	(yy/mm/dd)
SECTION	A: DESCRIPTION OF THE NON-COMPLIANCE		
Ţ	Non-compliance Details/Description Minor	☐ Major	Critical
	Producer Manual section number:		
	Audit question number:		
	Non-compliance description:		
			Follow-up date
provided	cases of minor or major non-compliance, the proof of the correctively lelectronically (e.g., documents or photos). However, an on-site for the timplementation and effectiveness of the corrective actions	llow-up may be required	Date by which an answer to the
that an o	n-farm visit is required, the validator needs to contact the PigSAF tor before visiting the site. (If the observed non-compliance is criti	E   PigCARE provincial	corrective action request is required:
	ne provincial coordinator immediately, i.e., within 24 hours.)		
Is an on-	site visit required to evaluate the implementation of the correcti	ve action? YES NO	(yy/mm/dd)
			Validation date
	Site Manager name (print)	(Signature)	

(Signature)

(yy/mm/dd)

SECTION B: ACTION PLAN						
The validator may give the producer a reasonable amoimplemented (and, in the case of major non-compliance)		ime to show that the corrective action(s) requested has been emonstrate the effectiveness of the action taken).				
Describe the actions taken to correct the non-completion, explain the immediate action that was taken to bring the	Describe the actions taken to correct the non-compliance noted above:					
(i.e., explain the infinediate action that was taken to bring the	: HOH-COI	inpliance under control)				
Main causes of the non-compliance:						
Explain the corrective actions taken to eliminate the	cause	of this non-compliance and prevent a recurrence:				
Describe the proof (e.g., record, photo or video sen that the requested corrective actions were impleme		onically) to demonstrate				
Site Manager name (print):						
Signature:		Date:				
SECTION C: CLOSURE OF CORRECTIVE ACTION	ON REG	QUEST (FOR VALIDATOR USE ONLY)				
Evaluation Performed:						
OFF-SITE ON-SITE						
Decision Following the Evaluation:						
□ ACCEPTABLE □ NOT ACCEPTABLE		EFFECTIVENESS TO BE VERIFIED AT NEXT VALIDATION				
Name of validator (print)		Date of closure				



## R-4 MONITORING RECORD

Name of farm/building identification:		PID#:
Site Manager:	Signature:	Year:

**Instructions:** When the task is performed, check "C" for "compliance" or "NC" for "non-compliance" and enter the date in the appropriate box. Check "NA" for "not applicable" if the task does not apply. (Refer to PS Manual – Introduction section 6.1 Monitoring Measures.) If a task is not in compliance, Record R-2 Incident Report must be completed.

	All <b>GPP tasks</b> listed below must be imple monitored and recorde			ut must be	С	NC	N/A
1.1.3	Personnel respect the measures to prevent food safety issues such as the rules and principles of CCP(s), GPP, Personal Hygiene and Biosecurity including exposure to parasites from animal or human feces (Toxoplasma, Trichinella, and Teania Solium). Refer to Fact Sheets.	Date	Date	Date	_		
2.1.1	The building is free from obvious deterioration that could interfere with the production of safe pork.	Date	Date	Date	_		
2.1.2	The ventilation, heating and cooling systems are well maintained.	Date	Date	Date	_		
2.1.3	The pig housing areas are free of treated wood.	Date	Date	Date	_		
2.2.1 2.2.2	The building sanitation SOP is applied at least once a year (SOP 2.2.1 or 2.2.2) (circle the one applied).	Date	Date	Date	_		
2.2.3	The feeding areas and feed storage areas are free of chemicals (e.g. rodenticides and cleaning products).	Date	Date	Date	_		
2.2.4	Measures are in place to minimize contamination of pig feeding areas by urine and feces.	Date	Date	Date	_		
2.3.1	The drainage in all areas of the barns prevents the accumulation of stagnant water and / or manure.	Date	Date	Date	_		
2.3.2	For bedded production systems: Bedding is added to keep the environment dry and clean.	Date	Date	Date	_		
2.3.2	For bedded production systems: Bedding is removed at least once a year and stored away from pigs.	Date	Date	Date	_		
3.2.6	Feed for pigs does not contain raw and cured meat products.	Date	Date	Date	_		
3.5.1	Tattoo ink and markers (e.g. crayons and sprays) are approved for use on food animals.	Date	Date	Date			
3.5.2	Livestock markers and topical wound treatments do not contain any prohibited substances.	Date	Date	Date	_		
3.5.3	The use of surgical staples is prohibited on-farm.	Date	Date	Date			

4.1.3	Disinfectants and water treatment additives ar approved for use in food animals.	е		Date			Date			Date				
4.3.1	Farm areas used for storing and mixing feed a kept clean, dry, free of easily detectable feces, free of chemical contamination and free of formaterial (e.g. metal, screw).	,		Date		Date								
4.3.2	Feed and Feed ingredients bins, distribution li and feed transfer-systems are clearly identified		Date			Date			Date					
5.2	The use of needles and injection techniques comply with SOP 5.2.			Date			Date			Date				
6.1.1	If the pest management is performed in-house SOP 6.1.2 - internal procedure is followed.	€,		Date		Date				Date				
6.2	No domesticated animals (other than pigs) have access to the barn and on-farm feed mill.			Date			Date			Date				
6.3	Dead animals are removed as soon as reasona possible, at least daily.	bly		Date			Date			Date				
7.8	Elective husbandry procedures used on farm complies with SOP 7.8			Date			Date			Date				
10.2	Outdoor: The measures applied comply with the requirements and the SOP (Sanitation, Pest and Parasites Management).			Date Date				Date						
10.3	Multiple Species: The measures applied comply with the requirements and the Manure Management SOP.	;		Date Date		Date								
	All CPP and CP tasks listed below must be implemented on an ongoing basis and must be monitored and recorded monthly when applicable.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	N/A
4.2.4	The medicated water treatment complies with the protocol of SOP 4.2 (CCP).													
4.4.3	The feed sequencing, mixing and distribution complies with the protocol of SOP 4.4 (CCP)													
4.5.2	The feed distribution complies with SOP 4.5 (CCP)													
5.3	The management of broken needles complies with SOP 5.3 (CCP)													
5.4	The management of withdrawal periods complies with SOP 5.4 (CCP)													
7.6	The care of sick and injured pigs complies with SOP 7.6 (CP)													
7.9	Personnel respect the low-stress pighandling techniques and the use of electric prods (Pigs Code of Practice) to comply with 7.9 (CP)													

L		WILL 301 7.0 (CI)								
	7.9	Personnel respect the low-stress pig- handling techniques and the use of electric prods (Pigs Code of Practice) to comply with 7.9 (CP)								
ç	iignatur esponsi	e of the person ble for monitoring:					Da -	ite:		



## R-A PERSONNEL AND RESPONSIBILITIES LIST

Site Manager:			PID#:
INSTRUCTIONS			
The Site Manager must complete fall within the parameters of the I	e the R-A Record. It mu PigSAFE and PigCARE	ust contain the names of all barn pe programs.	rsonnel whose responsibilities
Personnel		Respons	sibilities
Name	Date Hired (yy/mm/dd)	Production Area(s) <sup>1</sup>	Relevant SOP(s) and Record(s) <sup>2</sup>
SOP = standard operating proce	dure		
	ery; GF: growth/finish; B:	breeding; GDU: gilt development unit.	
<sup>2</sup> List SOPs and records for critical co	ontrol points only.		
Signature of Site Manager:			Date:

## R-A PERSONNEL AND RESPONSIBILITIES LIST

PID#:

lities	Relevant SOP(s) and Record(s) $^2$				
Responsibilities	Production Area(s)¹				
	Date Hired (yy/mm/dd)				
Personnel	Name				

## SOP = standard operating procedure

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t	1	7	

Date:

<sup>&</sup>lt;sup>1</sup> Use the following production area abbreviations: G: gestation; F: farrowing; N: nursery; GF: growth/finish; B: breeding; GDU: gilt development unit.

<sup>&</sup>lt;sup>2</sup> List SOPs and records for critical control points only.



## R-A1 PERSONNEL TASKS AND TRAINING LIST RECORD

Name of farm/building identifica		PID#:								
Site Manager:							Da	te:	(yy/mm/c	dd)
	Date hired				/	,	,	,		
Tasks/Responsibilities	Responsible									
Production Area										
Gestation and breeding barn										
Farrowing										
Nursery										
Grow/finish										
Barn maintenance and sanitation	on 🗌									
On-farm feed mill										
Boar stud										
Gilt development unit										
Quarantine										
Food-Safety Critical Control Po	oints and A	Animal Ca	re Contr	ol Points	<b>i</b>	I	I	I		
CCP 1: Medicated water										
CCP 2: Sequencing, mixing and distribution										
CCP 3: Risk management of broken needles										
CCP 4: Medication withdrawal										
CP 1: Feed- and water- management strategies										
CP 2: Care of sick and injured pi	gs									
CP 3: Handling										
CP 4: Euthanasia										

CCP = critical control point; CP = control point

Initials of Person Responsible							
					l	I	
Gestation and Breeding Barn							
Gestation barn manager							
Feeding/watering sows							
Breeding							
Sow movement							
Gilt management							
Individual treatment/injections							
Vaccinations							
Record treatments/vaccines							
Record sow mortality							
Order dry sow diet							
Farrowing Barn							
Farrowing barn manager							
Feeding/watering sows							
Sow/piglet movement							
Treating/vaccinating sows							
Treating/vaccinating piglets							
Processing piglets		$\overline{}$		$\overline{}$			
Farrowing assistant		$\overline{}$					
Recording sow injections							
Creep feeding of piglets							
Record mortalities	$\Box$				П		
Order lactation diet					П		
Nursery Barn							
Nursery barn manager							
Feeding/water of pigs							
Pig movement							
Pig treatments/vaccinations							
Record mortalities							
Record treatments							
Order nursery diet							

Initials of Person Responsible					
Grow/Finish Barn					
Grow/finish barn manager					
Feeding/watering of pigs					
Pig movements					
Individual pig treatments					
Individual pig vaccinations					
Record pig treatments/vaccines					
Load out/ship pigs					
Order diets					
Barn Maintenance and Sanitation					
Pressure wash / disinfect barn					
Rodent control supervisor					
Clean alleys/walkways					
Maintenance/repairs					
Check feed bins					
Outdoor barn cleanup					
Double-check power backup					
On-Farm Feed Mill					
Feed mill manager					
Mix feed					
Order feed ingredients					
Check blowpipes/bins are marked					
Label product/storage area					
Mill repair/upkeep technician					
Rodent control					

Initials of Person Responsible					
Boar Stud					
Barn manager					
Feeding/watering					
Boar vaccinations/treatments					
Semen collection					
Semen extension					
Equipment cleanup upkeep					
Lab cleanup/upkeep					
Order supplies					
Annual verification by:					

(printed name and signature)

1	NOTES



	PID#:	
Name of trainee:	Date hired:	
		(yy/mm/dd)

## **INSTRUCTIONS**

The Training Record may only be approved by a person who has completed PigSAFE | PigCARE training. Complete each item for which the employee has been trained.

ITEM	Module	Requirements	Trainee's Initials	Approved by (Initials)	N/A (If Not Applicable)	Date (yy/mm/dd)
		General Training				
1	1.1	The trainee has signed the Code of Conduct and understands the importance of their responsibilities.				
		The trainee is aware of the four critical control points and GPPs for food safety and the four critical points and GPP for animal care.				
2	1.1	Personnel respect the measures to prevent food safety issues such as the rules and principles of CCP(s), GPP, Personal Hygiene and Biosecurity including exposure to parasites from animal or human feces (Toxoplasma, Trichinella, and Teania Solium).				
		Food Safety Critical Control Points	·			
	<b>(</b>	The trainee has been adequately trained to implement and/or complete the following SOPs and records:				
3	4.2	» SOP 4.2 Medicated Water and the Treatment Record (R-T), and understands the Medication and Vaccine Usage Plan (R-P)				
4	4.4	» SOP 4.4 and record R-S (Feed Sequencing, Mixing and Distribution) and Ration Used On-Farm (R-R)				
5	4.5	» SOP 4.5 Feed Distribution and Rations Used On-Farm (R-R)				
6	5.3	» SOP 5.3 Risk Management of Broken Needles and the Treatment Record (R-T)				
7	5.4	» SOP 5.4 Medication Withdrawal, the Treatment Record (R T), the Swine Movement Document (R-G), and understands the Medication and Vaccine Usage Plan (R-P)				
		Animal Care Critical Points				
	<b>(</b>	The trainee has been adequately trained to implement and/or complete the following:				
8	7.2	» The requirements under Section 7.2 Feed- and Water-Management Strategies and the evaluation of the body condition score of pigs				
9	7.6	» The requirements under Section 7.6 Care of Sick and Injured Pigs, the Mortality Record (R-M) and the Treatment Record (R T), and understands the Medications and Vaccine Usage Plan (R-P)				
10	7.9	» The requirements under Section 7.9 Handling Practices				
11	7.10	» The SOP 7.10 Euthanasia and the Mortality Record (R-M)				

ITEM Modul		Requirements	Trainee's Initials	Approved by (Initials)	N/A (If Not Applicable)	Date (yy/mm/dd)			
PigSAFE Technical Training									
		The trainee has been trained to:							
12	2.2	» Implement the sanitation SOPs							
13	2.2	» Safely handle and store chemical products used for on-farm sanitation							
14	3.2	» Verify and sign each feed delivery slip							
15	5.2	» Implement SOP 5.2 Needles and Injections to ensure proper injection techniques							
16	6.1	» Implement the pest management SOPs							
17	6.2	» Has read and understood the management of domesticated animals in the barn and at the on-farm feed mill							
18	6.3	» Implement proper methods to dispose of dead stock							
19	7.8	» Implement SOP 7.8 Elective husbandry procedures to ensure equipment is kept clean and sharp							
20	10.2	» Has read and understood the risks associated with production that takes place either partially or fully outdoors due to diseases that can be transmitted by wildlife and other domesticated animal species							
		PigCARE Technical Training							
		The trainee has been trained to:							
21	7.1	» Evaluate pig body condition (score)							
22	7.3	» Implement the nursery and grow/finish space allowance SOPs							
23	7.3	» Evaluate pig housing systems and ensure they are maintained in a manner that avoids potential for injury							
24	7.4	» Evaluate and ensure that pigs are in a comfortable environment (including temperature, ventilation and lighting) at all stages of production							
25	7.5	» Provide all pigs with at least two enrichment options, regardless of the housing system							
26	7.6	» Implement SOP 7.6 Care of sick and injured pigs to provide humane treatment							
27	7.6	» Identify sick or injured pigs and identify behavioural problems requiring corrective action							
28	7.6	» Complete the mortality record							
29	7.7	» Implement the farrowing and/or weaning SOPs to minimize negative impacts on the health and welfare of the sows and piglets							
30	7.8	» Implement SOP 7.8 Elective husbandry procedures to ensure that piglets are handled with care							
31	7.9	» Utilize low-stress methods for handling, moving, restraining and treating pigs							
32	7.9	» Minimize or eliminate aggression by using proper strategies when mixing different pigs							
33	7.9	» Determine when and how to use an electric prod properly							
34	7.10	» Implement a plan for SOP 7.10 Euthanasia that follows appropriate and acceptable euthanasia methods for each weight class of pigs							
35	7.11	» Implement SOP 7.11 Emergency plan							
36	9.2	» Implement SOP 9.2 Humane transportation							

N/A = not applicable; SOP = standard operating procedure.

Training completed:
☐ The tasks were performed under supervision until the trainee was thoroughly trained in all aspects of the task.
$\begin{tabular}{ll} \hline \end{tabular} The trainee is adequately trained and has demonstrated the ability to understand, explain and follow the tasks identified above. \\ \hline \end{tabular}$
☐ The trainee has successfully completed the training related to their responsibilities.
☐ The Site Manager and the trainee reviewed the details of the Introduction- Section 6.1 to learn the different Monitoring Measures for requirements and procedures.
The Site Manager and the trainee reviewed the details of the Introduction- Section 6.2 to learn the different Deviation Measures for requirements and procedures when a requirement is not met.
Signature of Site Manager:

1	NOTES



## R-B TRAINING RECORD - Update

Name	of trainee:			PID#:		
This do		ust be completed and added to the existing Record F below have been added to the 2023 version of the F				
Item	Module	Approved by (initials)	N/A (If Not Applic able)	Date (yy/mm/dd)		
		General Training				
2	1.1	The trainee is aware of the four critical control points and GPPs for food safety and the four critical points and GPP for animal care.  Personnel respect the measures to prevent food safety issues such as the rules and principles of CCP(s), GPP, Personal Hygiene and Biosecurity including exposure to parasites from animal or human feces (Toxoplasma, Trichinella, and Teania Solium).				
N/A = not	applicable, S	SOP = standard operating procedure				
Trainin	g complet	red:				
differer □ The \$	nt Monitor Site Mana	ger and the trainee reviewed the details of the Inting Measures for requirements and procedures. ger and the trainee reviewed the details of the Inton Measures for requirements and procedures wi	troduction-	Section 6.2 t	o learn	
Signat	ure of Site	Manager:				

1	NOTES



Nar	Name (print): Date hired	(yy/mm/dd)
	PigSAFE   PigCARE PROGRAMS CODE OF CONDUCT	
All	All personnel who sign this document agree to comply with the following Code of Conduct.	
l (na	I (name),	
agr	agree to respect the highest standards of food safety, animal care and their associated technical pr	rinciples in fulfilling
my	my responsibility on behalf of (company name)	
and	and to respect the following commitments under the Code of Conduct:	
1.	To act professionally and in a respectful manner.	
2.	2. To assist those under my supervision (if applicable) to develop their food safety and animal ca	are skills.
3.	3. To perform all tasks for which I am responsible in accordance with the procedures that I have	been taught.
4.	4. To act ethically toward animals using appropriate handling practices.	
5.	5. To report to my supervisor any situation related to animal care and food safety that is conside	ered unacceptable.
6.	6. To report, within 24 hours, any cruelty or neglect (as defined in the Animal Welfare Policy) that to the Site Manager, owner or the herd veterinarian.	t I observe
Siaı	Signature: Date:	

1	NOTES



Naı	me (print)	):Date hired	(yy/mm/dd)
NS	STRUCT	IONS	
n t	heir prese	is a knowledge-assessment quiz. It should be completed by every person hired and should be ence to ensure the person taking the quiz has a good understanding of the requirements. The a copy of this quiz in the person's file.	
<b>✓</b>	CHECK	THE RIGHT ANSWER.	
Pig	JSAFE C	QUESTIONS	
1.	What is	a Hazard Analysis Control Critical Point (HACCP) program? 1 POINT	
	П а.	A food safety system that is recognized only in Canada.	
	b.	An international food safety system recognized worldwide.	
	c.	A food safety and animal care system recognized internationally.	
2.	What ar	re good production practices (GPP)? 1 POINT	
		A generally accepted good practice in animal production.	
		General conditions for management systems that can be implemented to reduce risks in ani	mal production.
			•
	e.	Both a and c are true.	
3.	What is	a standard operating procedure (SOP)? 1 POINT	
		The general description of a task.	
		A detailed set of instructions describing how to carry out tasks or perform duties that apply to all production types.	
	C.	A detailed set of instructions describing how to carry out tasks or perform duties that apply to a specific production type.	
4.	What is	a critical control point (CCP)? 1 POINT	
	a.	The act by which one can be critical of the way to control a specific animal production point.	
	b.	A point or step in animal production that is deemed critical and where it is impossible to introduce control measures to prevent, eliminate or reduce a risk to an acceptable level.	
	c.	A point or step in animal production where control measures can be applied to prevent, eliminate or reduce a risk to an acceptable level.	
<u>5</u> .	What is	the meaning of "medication withdrawal period"? 1 POINT	
	a.	The time that elapses between two treatments given to animals.	
	b.	The time that has to elapse before an animal can be sent to slaughter to ensure there is no drug residue in the meat.	
	c.	The time that has to elapse between the transport and slaughter of pigs.	

6.	Wha	at ar	re the main on-farm records that need to be completed to ensure proper medication tracking? 2 POINTS
		a.	The Medication and Vaccine Usage Plan.
		b.	The visitor log.
		C.	The pest activity record.
		d.	The rations used on-farm record.
		e.	The treatment record and sow cards.
		f.	Both a and d.
		g.	Answers a, d and e.
7.	Che	ck t	he four food safety critical control points in the list below: 4 POINTS
		a.	Barn sanitation
		b.	Broken needle
		C.	Withdrawal period
		d.	Injection techniques
		e.	Rodent control
		f.	Medicated water
		g.	Water quality
		h.	Incoming pigs
		i.	On-farm sequencing, mixing and/or distribution of feed
		j.	Medication and vaccines
		k.	Domesticated animals
Tru	e or l	Fals	e:
8.			re no risks associated with leaving chemical cleaning products sticides in the barn alleyways while pigs are in the pens. 1 POINT
		TRU	E FALSE
9.	If ca	ats a	re kept clean, they can be used to adequately control rodents in the barn. 1 POINT
		TRU	
	Ш	1110	TO LOUBLE

## PigCARE QUESTIONS

10.	10. Check the four animal care critical points in the list below: 4 POINTS												
		a.	Feed and wat	er management									
		b.	Water medica	tion									
		C.	Handling prac	ctices									
		d.	Enrichment										
		e.	Care of sick a	nd injured pigs									
		f.	Housing syste	m									
		g.	Transportation	٦									
		h.	Methods of e	uthanasia									
11.	Whi	Which practices listed below are related to animal care? 2 POINTS											
		a.	The arrival of	feed bags.									
		b.	The space allo	ocated to each anim	mal acco	ording to its weight.							
		C.	The segregati	on of weak, sick or	treated	animals.							
		d.	The presence	of controlled venti	ilation.								
		e.	Answers b, c a	and d.									
		f.	Both c and d.										
12.		nals TRU		ter and feed for a FALSE	nimal ca	re requirements to	be met.	1 POIN	т				
		SC	ORE		/20								
Ver	ificat	ion											
This	s pers	on l	has learned the	basics of food saf	ety and	animal welfare.	[	YES	□ NO				
Sigi	natur	e of	Site Manager:				[	Date:					
Sigi	natur	e of	individual:				[	Date:					

1	NOTES



## R-E INSPECTION CHECKLIST

Name of farm/building identification:	PID#:
Site Manager:	Date:
	(yy/mm/dd)

## **INSTRUCTIONS**

- This record of interior and exterior building inspection and maintenance should be completed at least once every year.
- Check **N/A** when a statement does not apply to your operation.
- Check C for compliant and NC for non-compliant.
- In cases of non-compliance, complete the "Non-compliant Follow-Up" table below and indicate the corrective action taken, with the date.

	Items to Examine	С	NC	N/A
	There are no holes or openings in the walls, in the floor or around the doors and windows.			
	2. The floor drainage operates properly; there are no areas with pooling water or manure.			
	3. There are no leaks from pipes or any condensation running on the walls.			
Building	4. Supplies are all stored in their designated locations.			
Interior	5. The fans and heating vents are clean, dust-free, operational and well maintained.			
	6. The alleyways, ramps and enclosures where animals move around are free of any objects that could scratch them (e.g., bolts, sharp edges).			
	7. Pens are built without the use of pressure-treated wood or other treated wood.			
	8. The building is well maintained, sound, reasonably clean, and free of sharp protrusions.			
	9. There are no holes or openings in the walls or around the doors and windows.			
	10. The sides of the barns are well maintained and free of clutter, debris and pooling water.			
Exterior	11. Openings around augers, pipes and wires are closed to avoid rodent entry.			
	12. A perimeter of 2 meters of gravel is maintained around the barns or grass and the weeds/ grass surrounding the barns are trimmed and maintained at a maximum height of 20 cm.			
	13. The area surrounding grain bins is kept clean.			

	ltems	to Examine	С	NC	N/A			
	14. The building exterior is in good condit							
Feed	15. Chemical products (e.g., pesticides, lubricants, fertilizers, disinfectants and detergents) are stored away from feed and feed ingredients.							
Mills and Bins	16. Medicated feed is stored away from the feed mill.							
	17. The feed bins are uniquely identified.							
	18. The feed bins are in good condition.							
19. The bedding storage area is protected from biological contaminants (e.g., bird's feces, rodents).								
Areas	20. The bedding storage area is not used (e.g., pesticides, lubricants, gas, oils).	to store chemical contaminants						
	nt; N/A = not applicable; NC= non-compliar							
Item #	Description of Non-Compliance Corrective Action Taken							



## R-F BARN SANITATION AND CLEANING RECORD

Name of farm/building identification:	PID#:
Site Manager:	Date:
	(yy/mm/dd)

## **INSTRUCTIONS**

This record should be completed by the person in charge of sanitation every time the sanitation procedure is followed according to the steps required by the selected procedure.

		SOP Fo			
Production Stage or Barn/Room Identifier	Date	Type 1: Sanitation SOP	Type 2: Alternative Cleaning SOP	Initials	

SOP = standard operating procedure

# R-F BARN SANITATION AND CLEANING RECORD

PID#:

	Initials						
SOP Followed	Type 2: Alternative Cleaning SOP						
SOP Fc	Type 1: Sanitation SOP						
	Date						
Production Stage or Barn/Room Identifier							

SOP = standard operating procedure



### R-G SWINE MOVEMENT DOCUMENT

### **COLOUR LEGEND**

Regulatory requirements
CPE only
Racto-Free Program only
Slaughter or assembly yard movements only (regulatory)
Optional (Recommended)

### **SECTION 1: TO BE COMPLETED BY SHIPPER**

Site name (s	hipper):					PID#	/Location:				
Name of shi	pper (print):					Shipp	per's phone #:				
# of pigs		Description o	f pigs		Herd Mark g. Tattoo or E		Average		last fed, red, rested	Broken   Pres	
loaded		(e.g. age, pur	pose)	(e.	Numbers		pig weight	DATE	TIME	YES	NO
Declarations	S									YES	N/A
I attest that	these pigs were	produced in a	ccordance wi	th the standard	ls of the CQA	-ACA or	PigSAFE PigCA	RE programs			
	e no outstanding	•	·	the following (	date:						
I attest that	these pigs were	not fed with fe	eed containing	g ractopamine.							
I attest that	these pigs were	produced in a	ccordance wi	th the Canadia	n Ractopamir	ne-Free P	ork Certification	Program.			
Signature of	f Shipper:						Date:				
Name of tra	2: TO BE COnsport compadriver(s) (print)	ny:					rss: r's phone #: _				
	cense plate or co								nd disinfected		
Province	<u>'</u>	Number		otal floor space ft²) available to		Date		Time	na aisimectea	Place	
110111100											
Pigs loaded	at origin:	Date:		Tir	ne:			M □PM			
_	-										
Comments	on condition o	or pigs at ioa	ading:								
Welfare cor	ncerns during	transport an	d actions ta	ken:							
Only if appli	cable: , water and res	st (of 8+ hou	urs) provided	d during trans	sport:						
Rest l	ocation:			Date:	1	ime:			AM PM		
Destination	site name:				F	PID#/L	ocation:				
Declarations	<b>.</b>									YES	NO
Certification	ify that these pig Program and the in this vehicle.										
Signature(s)	of driver(s):						_ Date:				
SECTION	3: TO BE CO	OMPLETED	BY RECE	IVER (CON	ISIGNEE)						
Name of red	ceiver (print):				Signatur	e:			Dat	æ:	
Pigs loaded	at origin:	Date:		Tin	ne:			М ПРМ			
Number of	Pigs on Arrival		er of Pigs by C			-1-1	la a P	Comments			
		DOA	Compromise	d Unfit	(e.g.	delayed	unloading, con	aition of pigs	s at unloading,	actions take	n)

The transfer of care from the transporter to the receiver occurs immediately upon written acknowledgement from the receiver (e.g. email, text, signature) of the shipment having arrived.

1	NOTES



### R-H LETTER OF GUARANTEE – BEDDING

Name of farm/building identificat	ion:		PID#:	
Site Manager:	Person i	in charge:	Date:	(yy/mm/dd)
INSTRUCTIONS Please return the completed and s Recipient (Purchaser) of Animal E		o the requester.		
Company name:				
Name of contact person:				
Address:				
Phone:				
Fax:				
Email:				
Date:				
Supplier of Animal Bedding				
Name of animal litter (bedding) production facility:				
Product(s) (SELECT)	CHIPS	SAWDUST	STRAW	
Address:				
Phone:				

### Bedding Containing Wood Chips and/or Sawdust

1.	We, th	ne supplier	named above, certify the following:	
	an	ıd/or sawdı	mitted to meeting the requirements of on-farm quality progr ust free from pentachlorophenol, chromated copper arsena od-treatment chemicals can leave a residue in animal meat.	
	YE	ES	□ NO	
2.			ne wood chips and sawdust we produce and store are sold wohenol or other harmful wood-preserving agents.	without
	YE	ES	□ NO	
Na	me of sı	upplier rep	presentative (print):	
Sig	nature:			Date:



### R-I VISITOR LOG

Name of farm/building identification:		PID#:
Site Manager:	Person in charge:	Date:
	<b> </b>	(yy/mm/dd)

Signature						
Sign-Out Time						
Sign-In Time						
Phone Number						
Date of Last Barn Visit						
Date						
Visitor Name and Company Name (Print)						

### INSTRUCTIONS Each visitor should complete this record.

R-I VISITOR LOG

Signature						
Sign-Out Time						
Sign-In Time						
Phone Number						
Date of Last Barn Visit						
Date						
Visitor Name and Company Name (Print)						

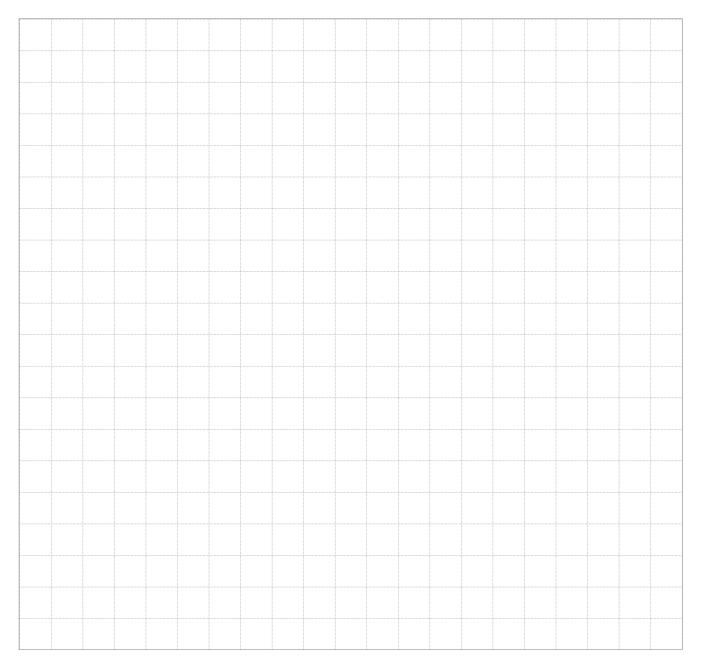


### R-J TRAPS AND BAITS NETWORK MAP

Name of farm/building identification:		PID#:	
Site Manager:		Date:	
Person in charge:	Last update:		(yy/mm/dd)
reison in Glarge.		rear)	

### **INSTRUCTIONS**

This record should indicate all traps and baits on the premises (i.e., PID-registered site). Draw the premises plan and identify where the traps and baits are located.






### **R-K** PEST ACTIVITY RECORD

Name of farm/building identification:	PID#:
Site Manager:	Date:
Person in charge:	(yy/mm/dd)  Last update:
1 013011 III Clidigo.	(year)

	Person in Charge						
	Observation Made and Measures Implemented						
	Level of Activity						
20:100	Station Number or Location						
	Date						

### INSTRUCTIONS

R-K PEST ACTIVITY RECORD

Person in Charge						
in Cha						
Observation Made and Measures Implemented						
Observat Measures						
Level of Activity						
Station Number or Location						
Date						
Δ						



Name of farm/building identification:							PID#:												
Site N	/lanag	er:								 	Date:(yy/mm/dd)								
Perso	n in ch	narge:								 L	_ast update:(year)								
l a a a t	o +b o :	fallou	ing o		<b>t</b> a an :	tha fa	ما مس												
<b>&gt;</b> Cor	e the ntrolle es (CA	d acce				ed acc	-	>	Feed k			Acce				<ul><li>On-farm feed mill</li><li>Generator</li></ul>			nill
	·	·			arking				Chemi storag	oduct s	>	Barn	s/build	dings					
				0															

1	NOTES



Name of farm/building identification:	PID#:	
Site Manager:	Person in charge:	Date:(yy/mm/dd)

Date Mortality Type¹ Of Pigs Of Death² Animal Identification³ Date of First Observation Cause of Problem	Highly Recommended							
	Initials							

<sup>&</sup>lt;sup>1</sup> Types of mortality:

ND = natural death; ED = euthanized death.

A = arthritis; B = injury; C = diarrhea; D = meningitis; E = pneumonia; F = prolapse; G = runt; H = hernia; I = sudden death; M = other.

1 = weaned pig under 10 weeks of age (32 kg); 2 = grower pig (less than 68 kg); 3 = finisher (over 68 kg); 4 = adult sow or boar.

<sup>&</sup>lt;sup>2</sup> Causes of death:

<sup>&</sup>lt;sup>3</sup> Animal identification:

### R-M MORTALITY RECORD

	Initials						
nmended	Cause of Problem						
Highly Recommended	Date of First Observation						
	Animal Identification <sup>3</sup>						
	Cause of Death²						
	Number of Pigs						
Mandatory	Mortality Type¹						
	Date						

Types of mortality: ND = natural death; ED = euthanized death.

Causes of death: A = arthritis; B = injury; C = diarrhea; D = meningitis; E = pneumonia; F = prolapse; G = runt; H = hemia; I = sudden death; M = other.

Animal identification: 1 = weaned pig under 10 weeks of age (32 kg); 2 = grower pig (less than 68 kg); 3 = finisher (over 68 kg); 4 = adult sow or boar.



### **R-N** ANIMAL-BASED MEASURES RECORD

Name of farm/building identification:	PID#:	
Site Manager:	Person in charge:	Date:
<b>.</b>		(yy/mm/dd)

									Pig Does	
		Body Condition	Lameness Score			Injury Score			Not Fit in Stall/ Crate	Comments
	Sampled (Total)	Emaciated (BCS = 1)	Severely Lame	With Abscess(es) /Swollen Ears or Joints	With Prolapse	With Moderate to Severe Hernia	With Shoulder Sore(s)	With Open Wounds/ Lacerations	Crate	
CATEGORY #1:	Breeding	stock (sow	s, mature	gilts and m	ature boar	rs)				
Sows/gilts in groups									N/A	
Sows/gilts in individual stalls										
Sows/gilts in farrowing crates										
Mature boars										
Total breeding stock										
Percentage (%) sampled breed with each cond	ing stock									
CATEGORY #2:	Suckling F	Pigs								
Total suckling pigs (number of litters × 11)									N/A	
Percentage (%) sampled sucklir with each cond	ng pigs								N/A	
CATEGORY #3:	Non-Bree	ding Pigs								
In nursery pens									N/A	
In grow/ finish pens									N/A	
Total non-breeding pigs									N/A	
Percentage (%) sampled non-bi pigs with each	of total reeding condition								N/A	

1	NOTES



Name of farm/building identification:		PID#:
Site Manager:	Person in charge:	Date:
		(yy/mm/dd)

### **INSTRUCTIONS**

This record should be completed by the Site Manager and person in charge. Record any observation that would indicate deviations related to any of the following:

- Issues regarding temperature, ventilation and/or lighting
- Pigs' behaviour
- > Pigs' health and injuries

### Stage of Production:

Deviation Observed	Suspected Cause	Date Detected	How Did You Fix the Issue?	Date Fixed
Example: Too cold in nursery room 5	Broken air inlet	2015, Dec. 1	Fixed inlet	2015, Dec. 1

R-O OBSERVATION RECORD

PID#:

2015, Dec. 1 Date Fixed How Did You Fix the Issue? Fixed inlet Date Detected 2015, Dec. 1 Suspected Cause **Broken air inlet Deviation Observed** Example: Too cold in nursery room 5 Stage of Production:



### R-P MEDICATION AND VACCINE USAGE PLAN

Name of farm/building identification:		PID#:	
Site Manager:	Person in charge:	Date:	(yy/mm/dd)

### **INSTRUCTIONS**

This record must list all medications and vaccines used on-farm.

Us in 1	Used in Last 12 months	Product	D (Yes c	DIN (Yes or No)	Presc (Yes o	Prescribed (Yes or No)	Reason for	Dosage	Methods of	Cautions and	Storage	Withdrawal Period
Œ	9	ָ פֿי פֿי	YES	02	YES	9	ages o nanci.		Administration	o Co	00000	(Days)

Date: Product cautions and warnings should refer only to human or animal health concerns related to product usage. Site Manager's signature:

onship	
nt relatic	Policy.
nt-patier	orug Use
rian-clier	ne and ${\mathbb L}$
eterina	'E Vaccir
a valid v	<b>PigCAR</b>
t I have	SAFE
ertify tha	the Pic
Plan cer	tent with
e Usage	e consis
d Vaccin	farm ar
tion and	on this
Medica	d for use
ning the	escribec
, by sigr	have pr
d above	ns that I
ı, named	dication
erinariar	that me
sed vete	rm and
he licen:	h this fa
l, tı	with

Veterinarian's signature<sup>3</sup>:

Date:

Name of Veterinarian (print):

# R-P MEDICATION AND VACCINE USAGE PLAN

PID#:

Used in Last 12 months	Product	DIN (Yes or No)		Prescribed (Yes or No)	o) Reason for Broduct Honor	Dosage	Methods of	Cautions and Warnings <sup>2</sup>	Storage	Withdrawal Period
YES NO		YES	O <sub>N</sub>	YES NO	ON					(Days)
					П					
					П					

<sup>1</sup> Methods of administration: IM = in the muscle; IW = In the water; IV = In the vein (intravenous); SQ = under the skin (subcutaneous); T = topical (on the skin); O = oral.

Date:	Date:
	Veterinarian's signature³:
Site Manager's signature:	Name of Veterinarian (print):

<sup>&</sup>lt;sup>2</sup> Product cautions and warnings should refer only to human or animal health concerns related to product usage.

<sup>3 1,</sup> the licensed veterinarian, named above, by signing the Medication and Vaccine Usage Plan certify that I have a valid veterinarian -client-patient relationship with this farm and that medications that I have prescribed for use on this farm are consistent with the PigSAFE | PigCARE Vaccine and Drug Use Policy.



### R-P1 OTHER PRODUCTS USED ON-FARM

Name of farm/building identification:	PID#:
Site Manager: Person in cha	ge:

### **INSTRUCTIONS**

The table below should list all Veterinary Health Products (VHP), any product that goes in, on and around the pigs that is used on-farm. (e.g., probiotic, prebiotic, enzymes, sanitation products, water acidifier, essential oils).

All products must be approved for food-animals in Canada.

Withdrawal Period	(565-)					
Storage Location						
Cautions and Warnings²						
Methods of Administration <sup>1</sup>						
Dosage						
Reason for Product Usage						
Pre- scribed (Yes or No)	9					
Scri	YES					
DIN (Yes or No)	9					
2 چ ۵	YES					
Product Name						
Used in Last 12 months	9					
ج 'ڌ _ 5	Œ					

Methods of administration: IM = in the muscle; IW = in the water; IV = in the vein (intravenous); SQ = under the skin (subcutaneous); T = topical (on the skin); D = oral. DIN = drug identification number.

Product cautions and warnings should refer only to human or animal health concerns related to product usage.

Site Manager's name:

Date:

Site Manager's signature:

## R-P1 OTHER PRODUCTS USED ON-FARM

PID#:

Used in Last 12 months	t ths Product	DIN (Yes or No)		Prescribed (Yes or No)	Reason for	Dosage	Methods of	Cautions and Warnings <sup>2</sup>	Storage	Withdrawal Period
YES	NO	YES	NO	YES NO	and control of the co		אמוווווווווווווווווווווווווווווווווווו		LOCATION	(Days)
	П									

DIN = drug identification number.

Methods of administration: IM = in the muscle; IW = ln the water; IW = ln the vein (intravenous); SQ = under the skin (subcutaneous); T = topical (on the skin); O = oral. Product cautions and warnings should refer only to human or animal health concerns related to product usage.

Date:	
Site Manager's name:	Site Manager's signature:



### R-R RATIONS USED ON-FARM RECORD

Name of farm/building identification:	PID#:
Site Manager:	Date:
	(yy/mm/dd)

### **INSTRUCTIONS**

This record must be completed by the Site Manager or the person responsible for the rations used on-farm. It must be updated annually and whenever a ration is modified, added or removed.

PPM = parts per million.

	Withdrawal	reriod					
	Active Ingredient (grams) per	1,000 kg of Feed or ppm					
Medication	Amount of Medication (kg) per	1,000 kg of Feed					
	Name of	Medication					
	ated	ON					
	Medicated	YES					
	Feed Supplier						
	Purchased or Mixed On-Farm						
	Ration Name or Number						

<b>ECORD</b>	
2	
-FARM	
O	
USED	
<b>RATIONS</b>	
R-R	

Site Manager:

					Medication		
Ration Name or Number	Purchased or Mixed On-Farm	Feed Supplier	Medicated	Name of	Amount of Medication (kg)	Active Ingredient (grams) per 1,000 kg	Withdrawal Period
			YES NO	Medication	per I,000 kg of Feed	of Feed or ppm	



### FOR QUEBEC-BASED PRODUCERS ONLY

Name of farm/building identification:	PID#:
Site Manager:	Date:
	() ),

### **INSTRUCTIONS**

This record must be completed by the Site Manager or the person responsible for the rations used on-farm. It must be updated yearly and whenever a ration is modified, added or removed.

PPM = parts per million.

	parts pe						
	Amount of Feed (kg)						
	Duration of Ration	Usage (Days)					
	Withdrawal						
Medication	Active Ingredient (grams) per	1,000 kg of Feed or ppm					
	Amount of Medication (kg) per	1,000 kg of Feed					
	Name of	Medicallor					
	cated	O Z					
	Medicated	YES					
	Feed Supplier						
	Purchased or Mixed On-Farm						
	Ration Name or Number						

RECORD	
<b>ON-FARM</b>	
<b>IS USED</b>	
RATION	
R-R1	

Site Manager:



### R-S FEED SEQUENCING, MIXING AND DISTRIBUTION RECORD

Name of farm/building identification:		PID#:	
Site Manager:	Person in charge:	Date:	
		(y)	y/mm/dd)

### **INSTRUCTIONS**

This record must be completed for feed sequencing and for medicated rations made on-farm.

- 1. Each batch must be recorded in chronological order.
- 2. Each flush must be recorded.
- 3. Deviations must be recorded on the Incident Report (R-2).

		Medic	cated?	Flu	sh?		Desti	nation		
Date	Ration Name or Number	YES	NO	YES	NO	Quantity Produced	Bin ID	Pen/ Room ID	Comments	Initials

R-S FEED SEQUENCING, MIXING AND DISTRIBUTION RECORD

	:	Medicated?	ited?	Flush?	h?	:	Destir	Destination		
Date	Kation Name or Number	YES	O Z	YES	9	Quantity Produced	Bin ID	Pen/ Room ID	Comments	Initials



### R-T TREATMENT RECORD

Name of farm/building identification:	PID#:
Site Manager:	Date:
- · · · · <b>g</b>	(yy/mm/dd)

### **INSTRUCTIONS**

This record must be completed for all stages of production and for individual, and group treatment. This record must include treatments administered in water, by injection, topically or orally. Any natural products and homeopathic treatments must also be recorded.

						Y			
Broken Needle? Initials									
oken sedle?									
Need NES									
Safe Shipping Date									
With- drawal Period (Days)									
Amount given per animal									
Dosage (HR)									
Product Name									
Weight of Animal(s) Treated									
Number of Animals Treated									
Animal, Pen and Room ID									
Treatment End Date									
Treatment Start Date									

HR = Highly Recommended

R-T TREATMENT RECORD

Initials							
Broken Needle? YES NO							
Safe Shipping Date							
Withdrawal Period (Days)							
Amount given per animal							
Dosage (HR)							
Product Name							
Weight of Animal(s) Treated							
Number of Animals Treated							
Animal, Pen and Room ID							
Treatment End Date							
Treatment Start Date							

HR = Highly Recommended



Name of farm/building identification:	PID#:
Site Manager:	Date:
	(yy/mm/dd)

Roles	Name	Phone Number
Site Manager		
Marketing agency/slaughterhouse		
Veterinarian		
Transporter		

1	NOTES



Name of farm/building identification:	PID#:	
Site Manager:	Person in charge:	Date:
<b>.</b>		(yy/mm/dd)

### **INSTRUCTIONS**

List all feed suppliers and their contact information.

Company Name	Name of Designated Person	Address	Phone Number	Email Address

1	NOTES



### **R-W** LETTER OF GUARANTEE – RECYCLED FOOD PRODUCTS AND DISTILLERS' GRAINS

Name of farm/building iden	ntification:	PID#:
Site Manager:	Person in charge:	
		(yy/mm/dd)
PigSAFE PROGRAM REQU	JIREMENTS FOR RECYCLED FOOD PRODUCTS AND	DISTILLERS' GRAINS
There are several recycled for	ood products and distillers' grains currently listed in Sche	dule IV (Part I and Part II)
and Schedule V of the Feed		(
Please return this duly com	pleted and signed letter of guarantee to the producer	;
Farm Information		
Farm name:		
Person's name:		
PID number:		
Address:		
Phone:		
Fax:		
Email:		
Date:		
Supplier Information		
Company name:		
Person's name:		
Address:		
Phone:		
Fax:		
Email:		
in Part I of schedules IV and required standards and labe of schedule IV and V, a regis	ifies that the supplier named above attests that the ingre V of the Feeds Regulations and meet the ingredient defi elling requirements set out in the regulations. If the ingred tration number must be issued by CFIA for this ingredier Registration number (if applicable):	inition(s), appropriate guarantees, dients provided are listed in Part II nt.
Name of company represer	ntative:	
Title of representative:		
Signaturo	Da	<b>+</b> ~.

1	NOTES



lame of farm/bu	uilding identif	ication:				PID#:	 
ite Manager:		F	erson in charge	:		Date:	y/mm/dd)
ON-FARM FEE	ED MILL EQI	JIPMENT CAL	LIBRATION				
Equipment: Ma		Model:			Type: Scal	le	
Date of Calibration (yy/mm/dd)	Capacity	Units of Measure (kg or g)	Variation Test ± 0.2%	Actual Weight	Difference	Withi	Verification (Initials)
2018/09/15	20,000	kg	40	19,960	(40.00)	✓	JB
Equipment: Mi		Model:			T	asure device	
Date of Calibration (yy/mm/dd)	Capacity	Units of Measure (kg or g)	Variation Test ± 5%	Actual Weight	Difference	Withi	Verification (Initials)
2018/09/15	1,000	kg	50	950	(50)	TES V	JB
1							
Equipment: Mi	xer	Model:			Туре: Міх	er Withi	
Date of Calibration (yy/mm/dd)	Capacity	Units of Measure (kg or g)	Variation Test ± 15%	Actual Weight	Difference		Verification (Initials)
2018/09/15	1,000	kg	150	1,000		<b>✓</b>	JB
VATER MEDIC	CATOR CALI	BRATION					
Pro	ocedure Comple	eted By (Name)		Inclusion Rate		Date of Calibration	Person in Charge (Initials)

### R-X CALIBRATION RECORD 2023

1	NOTES



### R-Y LETTER OF GUARANTEE – LICENSED VETERINARIAN

Name of farm/building identification:	PID#:
Site Manager:	
Veterinarian License Number :	(yy/mm/dd)
Please return the completed and signed document to the requ	ester.
Licensed Veterinarian	
Name of Licensed Veterinarian:	
Phone:	
Email:	
Producer or Site Manager	
Farm Name:	
PID number:	
Phone:	
Email:	
I, the Licensed Veterinarian named above, by signing this letter of  a. I certify that I have a valid veterinarian–client–patient relatio	
b. I certify that medications that I have prescribed for use on the with the PigSAFE   PigCARE Vaccine and Drug Use Policy.	his farm are consistent
Name of Licensed Veterinarian (print):	
Signature of Licensed Veterinarian:	Date:

1	NOTES



### R-Z SPACE ALLOWANCE RECORD

Name of farm/building identification:	PID#:
Site Manager:	Date:
	(yy/mm/dd)

### **INSTRUCTIONS**

Calculate the space allowance and maximum number of pigs for each nursery and grow/finish pen. To calculate space allowances, refer to the Space Allowance for Nursery and Grow/Finish Pigs fact sheet.

Identification of the Barn, Pen or Room		Floor Space in Pen Weight of Pigs in Pen at First Pull/		Space	Maximum	
Barn Number(s)	Room Number(s)	Pen Number(s)	in Pen (m² or f²)	Weight of Pigs in Pen at First Pull/ Exit (kg or lbs)	Allowance per Pig	Number of Pigs per Pen

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	771717
	771717
VOLIV HOVEN	7717171
VOLIV HUVOV V	7717171
VOLIV HOVED NE	7717171

N construction	of Pigs per Pen						
Space Allowance per Pig							
Average Body Weight of Pigs in Pen at First Pull/Exit (kg or lbs)							
Floor Space in Pen (m² or f²)							
Identification of the Barn, Pen or Room	Pen Number(s)						
	Room Number(s)						
	Barn Number(s)						