

Introduction

This document is meant as a template to be followed by all contractors or producers in the creation of a Standard Operating Procedure (SOP) that, once approved by CFIA, will be followed at all times by the signatories. Canadian Food Inspection Agency (CFIA) will audit the signing parties for adherence to their SOP. Failure to adhere to the approved procedures will result in the immediate suspension agreement. The suspended party will no longer be permitted to continue working on any declared Infected Premise until corrective measures can be put in place and be demonstrated to be effective to CFIA under audit.

Repeated failures to adhere to the approved SOP may result in the signing party's permanent suspension from carrying out work on a declared Infected Premise

While operating under an approved SOP the signing party agrees to observe and follow at all times the restrictions and zones put in place by CFIA while attending properties designated as an Infected Premise (IP) as determined by CFIA. This includes all designated zones within the premise and the observances that apply as further described below.

The objective of the developed SOP is to mitigate the risk of the spread of Avian Influenza (AI). This is to be considered outcome based and therefore steps or measures are to be developed by the signing party while addressing the following aspects.

Special Terminology (in FR)

Aerosol (Aérosol)	A particulate suspended in a gaseous medium
Cold Zone (Zone Froide)	A controlled area, outside of potentially contaminated Zones that contains the support functions necessary for the activities on the suspect or declared infected premises or quarantined premises
Decontamination Lines (Lignes de décontamination)	Decontamination lines serve the purpose of removing or neutralizing contaminants that have accumulated on personnel and equipment. Usually, two lines are setup and are located at the interface between the Hot and the Warm zones and at the interface between the Warm and Cold zones.
Fit test (Essai d'ajustement)	Use of a qualitative or quantitative method to evaluate the fit of a specific make, model, and size of a respirator on an individual. Fit testing must occur every two years or if any changes to the facial contour occur (e.g. surgery, scarring, weight gain or loss, dental work).

Hot Zone (Zone Chaude)	The structures and area considered to be contaminated or potentially contaminated with the hazard (e.g. AI, Foot-and-Mouth Disease [FMD] viruses). This would include equipment and environments contaminated with feces or litter from the infected animals, as well as high traffic routes in and out of the barns where the animals live, and areas downwind of aerosol-producing processes.
Respirator (respirateur)	A device to protect the user from inhaling a hazardous atmosphere.
Warm Zone (Zone Tiède)	Zone between the Cold and Hot Zones, where contamination reduction takes place. It is important to remember that the Warm Zone must be considered to be contaminated, albeit at a lower level than the Hot Zone. It is also called the “transition” Zone.

1. Zones

1.1) The signing party, prior to attending a premise agrees to receive a site map, provided by CFIA, and incorporate the zones as specified into their work plan.

It is important to note that depending on the stage the IP is at there may be 2 or 3 zones described on this provided map. The zones will be either “Cold, Warm and Hot”, or simply “Cold and Hot” (see definition above).

1.2) The signing party agrees that they will respect the Decontamination Lines of all zones in set in place by the CFIA within the IP. That all procedures that are hereafter described will be followed in full with the understanding that these are subject to audit at any time by the CFIA.

A three-zone system is used until disposal is verified as capped by CFIA disposal specialists, after which point a two-zone system is employed.

2. Personal Protective Equipment

All personnel entering the Warm or Hot zones as designated by the CFIA must wear PPE. PPE must include, but is not necessarily limited to the following.

- 2.1) PPE that is to be worn by all personnel entering a “3 zone” IP:**
- a) Durable footwear that can be disinfected or disposed of (e.g. rubber boots)
 - b) 2 layers of coveralls, the outer layer of which must be disposable and have a hood (e.g. chemical resistant Tyvek-style suit. If desired two sets of disposable coveralls may be worn in place)

- c) 2 pairs of disposable gloves, the inner layer of which will be chemical resistant (e.g. Nitrile gloves)
- d) A fit tested respirator mask (strongly recommended – Consult public health or medical authorities for recommendations).
- e) Eye protection (well-fitting goggles are recommended if entering structure or handling material considered infectious)

2.2) Please describe the PPE that your personnel will be supplied with.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

Any additional PPE

2.3) PPE that is to be worn by all personnel entering a “2 zone” IP:

- a) Durable footwear that can be disinfected or disposed of (e.g. rubber boots)
- b) 1 layer of disposable coveralls with a hood (e.g. chemical resistant Tyvek-style suit)
- c) 1 pair of disposable gloves, though 2 pair are still recommended. the inner layer of which will be chemical resistant (e.g. Nitrile gloves)
- d) Fit-tested Respirator mask (recommended) or minimally an N95 disposable mask.
- e) Eye protection

2.4) Please describe the PPE that your personnel will be supplied with.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

Any additional PPE

3. Cleanliness

All personal clothing, equipment and vehicles entering an IP must come onto the property clean. No amount of organic material is permissible. This will minimize cleaning and disinfection time upon exiting.

3.1) The signing party agrees to assuring cleanliness of the following things prior to having them enter onto an IP

3.2) Please describe how you will assure that the following items as clean and free of all organic materials prior to entering onto an IP

Personal clothing - _____



Equipment - _____

Vehicles - _____

4. Donning (putting on) PPE

4.1) The signing party agrees that all PPE must be in place and secured prior to entering into the Warm or Hot Zones.

4.2) The signing part agrees to the following approved method of Donning (putting on) and Doffing (removing) PPE.

Coverall Layers	
Note: Make sure to choose a size that is not too tight otherwise it is more difficult to remove and it increases the risk of cross-contamination	
	
1. Put on the inner (primary) layer coveralls (cloth or disposable coveralls) over the privacy layer and tuck the coveralls into the rubber boots.	2. Put on the outer disposable coveralls over the inner layer of coveralls and the boots. Leave the hood down and suit unzipped for the moment.

Disposable Treaded Boot covers

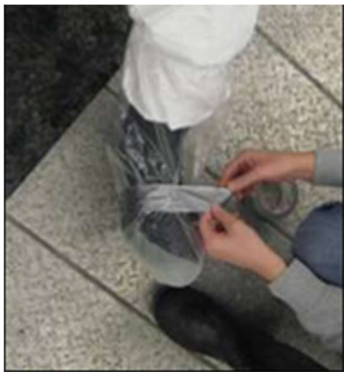
Note: Not mandatory, but they help ease the exiting process by decreasing the time spent cleaning the boot treads. However if safety hazards exist, don't put them on.



1. Place disposable boot covers over the rubber boots and coveralls.



2. Place tape around the instep of the rubber boot (optional).



3. Leave a tab on each piece of duct tape in order for quick removal at doffing.



4. Stretch arms over head to reach maximal movement amplitude, then place tape around the seam between the disposable boot covers and disposable coveralls to seal. Remember to leave a tape tab

Gloves



1. Remove all rings and jewelry. Depending on weather conditions, put a pair of liners (e.g. cotton gloves) as a part of the privacy layer (optional but helps with moisture build-up).



2. Put on the first layer of gloves so that the cuffs are tucked under the sleeves of the first (or inner) layer of coveralls.



3. Put on the second layer of gloves so that the cuff covers the sleeve of the second (or outer) layer of coveralls.



4. Stretch arms over head one more time to reach full range of motion. **Loosely** duct tape the seam between the glove and the sleeve of the coveralls.



5. Leave a tab for easy removal of duct tape during doffing.

6. Put on a protective third layer of gloves depending on the work to be done. (optional)

Respirator

Method to don and check full face mask is demonstrate here. Same principle applies for half-mask as well as disposable N-95 type mask, excepted that goggles need to be added.



4. Place the respirator over the head, adjust the straps without overtightening, and check to ensure a proper seal



5. To check the seal, plug the inhalation valves and breathe in, then plug exhalation valves and breathe out. In both instances, there should be no air leaks in the seal. If any of these conditions are not met and cannot be corrected, contact the team leader or biosecurity group supervisor immediately.



6. Place the bouffant hair net over the hair and the respirator straps.



7. Lift up the hood of the disposable coveralls so that it covers the head and the respirator straps. To hold the hood in place when using a full face mask, tuck it behind the ridge around the mask. A small piece of duct tape can be added to the top of the mask to prevent the hood to draw back.

Final Zipping



1. Place some duct tape on the zipper tab of the disposable coveralls to make it easy to grasp while doffing.



2. Zip up coveralls to the top and place a piece of duct tape with tab across the outer zipper to ensure it will not unzip.

5. Doffing (removing) PPE

Doffing of PPE is only permissible upon exiting the Hot/Warm Zones and must adhere to the procedures laid out in the following sections.

5.1) The signing party agrees that at no time is it permitted that PPE be removed, lowered, opened or in any way unsealed within either the Hot or Warm Zones and that they will disallow any such activity by any personnel under their direction.

5.2) The signing agrees to adhere to the following procedures as they pertain to doffing of PPE and exiting the controlled zones.

Best practice while doffing any layer of PPE upon exiting a zone across the decontamination line is to keep in mind the principle that ***Clean touches Clean and Dirty touches dirty***. This means that whether with self-doffing or in assisted doffing the hands being used to remove the PPE should be in the same state as the layer they are in contact with (e.g. if you are assisting someone in removing their disposable coveralls and your hands are also contaminated, touch only the outside of their suit and not the clean inner layer or inner suit). If this is not easily achieved remember to spray your gloves with disinfectant for each step you take in removing articles of PPE either from yourself or others.

6. Disinfectants or Virucide

A disinfectant or virucide must be used in order to mitigate the transfer of pathogens when personnel, equipment or vehicles are exiting across the decontamination line from one zone to another (moving from Hot to Warm or Warm to Cold).

6.1) The signing party agrees to use the following disinfectant(s) or virucide

(Please ensure the chemical compatibility of all disinfectants if more than one is to be used on site)

Please describe and/or attach labels showing the product name, chemical make-up, Canadian registration against AI, wet contact time required of product required, and adjustments for temperature and DIN #.

7. Materials and Equipment

Upon ENTERING the Warm and/or Hot Zones across the Disinfection Lines personnel should have with them the following minimum materials and equipment whether entering by foot or by vehicle.

7.1) The signing party agrees to carry with them the following minimum materials and equipment.

- a) An appropriate sized sprayer filled with enough of the aforementioned disinfectant or virucide for the job required

- b) Garbage bags for each disinfection line to be crossed or steps observed as per below
- c) Tools to help remove organic build up from boot treads or tire treads (e.g. long handled scrub brush and hoof pick)

7.1.2) Please describe all materials and equipment that will be crossing Disinfection Lines including, but not limited to the above:

- 1. _____
- 2. _____
- 3. _____

Any additional materials

8. Exiting the Zones by foot

Upon EXITING the Warm and/or Hot Zones across the Disinfection Lines personnel must perform the following minimum disinfection.

8.1) The signing party agrees that the following exit procedures will followed each time they, their personnel, vehicles or equipment are crossing any Decontamination Line set in place by the CFIA on a declared IP

8.1.1) Prior to exiting by foot at the Hot/Warm Disinfection Line, personnel must:

- a) Apply, or have applied, a liberal spray of the aforementioned disinfectant or virucide all over their outer layer including treads of boots and back
- b) Remove outer layer according to the procedure described in the Donning and Doffing attachment being sure to keep the respirator in place (this is to be removed at the Warm/Cold Line)
- c) Open the garbage bag carried to the line and after spraying inside the bag with disinfectant or virucide, place the discarded outer layer into the bag and seal
- d) Spray, soak, bush durable footwear as necessary to remove all organics from all surfaces including within the treads

Only after these steps are observed may the individual complete crossing the Disinfection Line from the Hot Zone into the Warm Zone.

8.1.2) Prior to exiting by foot at the Warm/cold Disinfection Line, personnel must:

Please note that applying additional spray to the individual at the cold line is not necessary in a 3 zone system as this inner layer will have been protected by the outer suit. In a 2 zone system a light spray

should still be applied to the disposable coveralls as it is unprotected but has been in a lower risk environment.

- a) Remove the inner layer of PPE, including respirator according to the procedure described in the Donning and Doffing attachment
- b) Open the garbage bag carried to the line and after spraying inside the bag with disinfectant or virucide, place the discarded inner layer as well as the garbage bag from the Hot/Warm line into the bag and seal
- c) Spray, soak, bush durable footwear as necessary to remove all organics from all surfaces including within the treads

Only after these steps are observed may the individual complete crossing the Disinfection Line from the Warm Zone into the Cold Zone.

9. Biosecurity Procedure for Cleaning and Disinfection of Vehicles/Equipment on Infected Premises

9.1) Vehicles and Equipment without contact to infectious materials

For vehicles such as gas trucks that have not entered into structures containing infectious materials or driven over significant organic materials such as litter, manure or soil and mud the following steps are to be observed.

9.1.1) The signing party agrees to follow the prescribed procedure as outlined in this section below when exiting with vehicles or equipment which have not had contact with infectious materials besides paved or hard surfaced driveways.

This procedure may be carried out by an outside operator or assistant while the driver remains inside the cab **or** may be carried out by the driver **in combination with the procedures in Section 11** describing the entry and exit of drivers below.

9.1.2) Steps taken at the Hot/Warm Decontamination Line

- a) Proceed to the Hot/Warm Decontamination Line
- b) The vehicle or equipment tires/tracks, wheel wells and points of contact such as handles, gates, latches, blower lines, and gas lines must be wetted with the approved disinfectant and scrubbed free of any organic materials.
- c) A final wetting with the approved disinfectant again on all cleaned surface is then carried out and the wet contact time is then observed
 - a. In order to wet the entire surface of tires or tracks it is necessary to first spray all exposed surfaces, then roll the wheel or track enough to expose the portion previously in contact with the ground.
 - b. Once this portion of the tires or track has been sprayed the wet contact time can be said to begin.

Once this procedure has been completed the driver may move to the Warm/Cold line (in the case where a 3 zone system is still in effect).

9.1.3) The same steps as described in Section 9.1.2 are repeated at the Warm/Cold decontamination line a final time prior to exiting.

9.2) Vehicles and Equipment with contact to infectious materials

9.2.1) The signing party agrees to follow the prescribed procedure as outlined in this section below when exiting with vehicles or equipment which has had contact with infectious materials besides paved or hard surfaced driveways.

For vehicles and equipment that has been in contact with infectious materials such as dead birds, litter, feathers, and feed or has entered in any way into a structure housing these; such as blower lines for chips or sawdust, loaders, skid steers etc. there is an primary cleaning that must first take place.

- This cleaning will use **HIGH VOLUME/LOW PRESSURE** water if conducted outside. Pressure washing is only permissible within the confines of a fully enclosed structure such as a barn or garage where all doors, windows and other openings are fully shut.
- A detergent and/or disinfectant should be used at this stage for heavily soiled vehicles and equipment such as loaders and skid steers that have been in direct contact with infectious materials.
- Once this step has been completed and all organic materials removed the vehicle or equipment may proceed to the Decontamination line and follow the process laid out in **Section 9.1** and its subsections above.

10. Biosecurity Procedure for Drivers of Vehicles/Equipment on Infected Premises

10.1) Drivers who will not exit the cab of their vehicle while in the Hot Zone

The preferred option to prevent contamination of the cab is to prevent the driver from exiting the enclosed cab of the vehicle while in the Hot Zone. The Driver would remain inside their cab at all times with the windows, doors and outside air intake shut at all times while in the Warm or Hot zones (Recirculated air for air-conditioning or heating is permitted).

10.1.2) The signing party agrees to in selecting this option to notify CFIA which of the following procedures they will follow:

Procedure "A")

- That the signing party send a second operator to assist the driver.
- This second operator will don the approved PPE in the Designated Cold zone prior to crossing the Decontamination Lines and into the Warm and/or Hot Zones and perform the required tasks.

- During that time the driver would stay in the enclosed cab and drive the vehicle through the required decontamination steps.

Procedure “B”)

- That the signing party arrange to have an alternate third party, such as the producer, who has also signed and had approved a Biosecurity SOP perform all outside functions on behalf of the vehicle operator.
- That this alternate third parties name or company name be provided to CFIA prior to the start of operations to verify a valid SOP is in place for the alternate third party.
- The alternate third party working outside of the vehicle will, upon completion of their tasks, exit the Hot and/or Warm Zones observing the decontamination lines in place and the approved SOP procedures for exiting as per **Section 8** and all its subsections.

***Procedures for drivers that will exit the vehicle while within the Hot or Warm Zones are more complex.**

10.2) Drivers who will exit the cab of their vehicle while in the Hot Zone, carry out limited functions, but have no contact with infectious materials

This includes drivers with no contact with animals/poultry, their wastes or by-products or contaminated materials from the barns, etc. This includes CO2 truck driver getting out to hook up gas lines or operate hydraulics, drivers who have to re-enter the vehicle to move the vehicle during cleaning and disinfection of vehicles, etc.

10.2.1) The signing party agrees to all following procedures for driver who will exit the cab of their vehicle or are operating equipment or vehicles that do not have fully enclosed cabs such as skid steers.

Entering the Warm and or Hot Zones:

- The driver is to dress in full PPE Including, at minimum, an N95 respirator as described in the approved to SOP before crossing the Decontamination Lines from the Cold Zone into the Warm and Hot Zones. **Also the driver is to wear an extra set of disposable boot covers and an extra set of gloves**, and have with them a garbage bag and a sprayer with the approved disinfectant or virucide.
- They will take with them two more sets of new, additional boot covers and leave these in the cab.
- Contact with ground, items and materials outside of the vehicle are to be strictly limited to minimal contact work (hook up of gas lines or trailer). **The driver is not to handle any contaminated materials.**

Exiting the Warm and or Hot Zones:

- Prior to re-entering into the cab of the vehicle, but **after** first opening the door, the driver takes off outer pair of gloves, puts them in a garbage bag.
- The driver then removes their **outer** boot covers (treaders) and as they do this steps up onto the first step.
- The driver sprays all the surfaces of the bag and secures the bag to the outside of the vehicle.
- The driver then sprays inside the cab using the approved disinfectant and enters the cab.
- The driver drives the vehicle so as to position the passenger cab just over the Hot/Warm line.

STOP at Hot/Warm Line:

- The driver positions the cab of the truck so that the front wheels are at, but not over the Hot/Warm Decontamination Line
- The driver dons one of the new sets of treaders they have carried with them in the cab.
- The driver exits the cab into the Hot Zone at the Disinfection line and proceeds to perform the disinfection and cleaning of all surfaces of the wheels, wheel wells, blower or gas lines that have been in contact with the ground as well as all points of contact such as handles, gates, bumpers, etc.
- This cleaning and disinfection must follow the step given in **Section 9 and all its applicable subsections including full wet contact time**
- Once complete the driver will enter the cab following the same steps as above (open door, remove boot covers as stepping onto step, spray and dispose into garbage bag attach to outside of cab)

STOP at Warm/Cold Line:

- The driver positions the cab of the truck so that the front wheels are at, but not over the Warm/Cold Decontamination Line
- The driver dons the remaining new set of treaders they have carried with them in the cab.
- The driver exits the cab into the Warm Zone at the Disinfection line and proceeds to perform the disinfection and cleaning of all surfaces of the wheels, wheel wells, blower or gas lines that have been in contact with the ground as well as all points of contact such as handles, gates, bumpers, etc.
- This cleaning and disinfection must follow the step given in **Section 9 including full wet contact time.**
- Once complete the driver will enter the cab following the similar steps as above but at this stage they will remove all PPE (open door, remove PPE as stepping onto step, spray and dispose into garbage bag attach to outside of cab)

Exiting into the Cold Zone:

- Once this process is complete and the wet contact time has elapsed the driver may exit into the cold zone.
- A final disinfection of the interior of the cab of all contacted surfaces is required. Chemically compatible wipes or spray may be used. Wipes may be preferred for electronic consoles etc.
- The garbage may be deposited into the receptacle provided prior to leaving the IP.

X _____

Date: _____

Company Name: _____

Individual Signing on Behalf of Company: _____
