

reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

EXAMPLE

INSTRUCTION PAGE FOR ENHANCED BIOSECURITY PLAN FOR FMD PREVENTION TEMPLATE

To be deleted

This document is a template to assist the Biosecurity Manager in developing an operation-specific, enhanced biosecurity plan for their dairy. Each item from the Secure Milk Supply Plan Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention: Dairy is included. The Biosecurity Manager should keep all items that apply to the dairy, modify them by replacing the [EXAMPLE TEXT] with information specific to the dairy, and delete information that does not apply as well as all **highlighted** text. Including additional information that best describes how this dairy meets each of the checklist items is encouraged. A labeled premises map must be included in this plan. Standard Operating Procedures (SOPs) may also be needed and should be available on the dairy, but do NOT need to be included in this written biosecurity plan. Edited for clarity September 2023; detailed list of edits available on SMS website.

[Name of Dairy] Enhanced Biosecurity Plan for FMD Prevention in [State]

Date [Created or Updated]: [Date MM/DD/YYYY]

This Biosecurity Plan is based off of the Secure Milk Supply (SMS) Plan Self-Assessment Checklist for Enhanced Biosecurity, [September 2017] and the Biosecurity Performance Standards (BPS) for Raw Milk Collection and Transport [September 2017] and was developed using guidance from the SMS Information Manual for Enhanced Biosecurity for FMD Prevention: Dairy. All documents are available at www.securemilksupply.org.

In our Plan below, all items have been implemented except those indicated which will be implemented prior to requesting an animal movement permit.

SCOPE OF BIOSECURITY PLAN

- National Premises Identification Number (Prem ID or PIN): [PIN] (request from the office of the State Animal Health Official)
- Premises address: [a valid 911 address]
- Premises GPS coordinates: [Latitude, Longitude]
- Animals* on primary premises: [All Species] and [Number of animals]
- Animal housing types: [e.g., buildings, pastures, dry lots]
- Other business operations on premises? [Yes or No] If yes, what? [e.g., sale of milk/milk products, vegetable stand; sale of feed fertilizer or compost; hosting farm tours]
- Secondary premises** locations: [list the PINs, 911 addresses, or GPS coordinates (latitude, longitude) where animals associated with this operation reside (e.g., dry cows off-site, heifers on pasture, steers)]
 - Will be provided if this premises is located in an FMD Control Area
 - _____
 - _____
 - _____

*Animals that are susceptible to FMD include cattle, pigs, sheep and goats. For biosecurity guidance for those species, see www.securebeef.org, www.securepork.org, www.securesheepwool.org, and www.securegoat.org/.

**Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises

1. BIOSECURITY MANAGER AND WRITTEN PLAN

The **designated Biosecurity Manager** for this premises and their contact information follows:

NAME:

PHONE: [xxx-xxx-xxxx]

EMAIL: [email address]

In the event the Biosecurity Manager is away from the operation, **their designee's** contact information is:

NAME:

PHONE: [xxx-xxx-xxxx]

EMAIL: [email address]

The Biosecurity Manager's contact information is posted [describe where located].

[PERSON ONE NAME and PERSON TWO NAME] have the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

[Name] developed the operation-specific biosecurity plan with the assistance of **(keep all that apply)**:

- [Name], a licensed veterinarian whose contact information is:
PHONE: [xxx-xxx-xxxx]
EMAIL: [email address]
- [Name], a consultant with [name of company] whose contact information is:
PHONE: [xxx-xxx-xxxx]
EMAIL: [email address]

The Biosecurity Manager or their designee **(check all that apply)**:

- communicates with and/or trains individuals entering on biosecurity measures to follow;
- reviews the biosecurity plan at least annually and updates it whenever the operation goes through changes affecting biosecurity;
- ensures that all individuals entering the operation frequently (weekly or more often) have access to a copy of the biosecurity plan; and
- is capable of implementing the written plan if FMD is diagnosed in the U.S.

A labeled premises map is included at the end of this plan and can be found on the premises at: [describe where].

2. TRAINING

The people listed below are trained at least [biannually, annually] about the biosecurity measures necessary to keep FMD out of the herd. This training is documented and available for review upon request.

- [describe who: Owners
- Biosecurity Managers
- Essential personnel]

The Biosecurity Manager(s) informs individuals crossing the line of separation (LOS) of the biosecurity measures they are to follow in a language they understand. Individuals are aware of the biosecurity concepts and procedures that apply to their specific areas of responsibility. Our required training is described below.

All individuals entering must understand how to

- Contact the Biosecurity Managers
- Respect the Line of Separation (LOS)
- Cross the LOS, if required, following arrival and biosecure entry requirements

- Perform biosecurity measures for their specific job duties

Essential personnel must ALSO:

- Understand the importance of biosecurity;
- Review the entire biosecurity plan;
- Review the labeled premises map;
- Know who to report to if they see someone not complying or something preventing compliance; and
- Recognize the consequences for not complying with biosecurity protocols.

3. PROTECTING THE DAIRY OPERATION

Line of Separation (LOS)

The Line of Separation is labeled on the premises map at the end of this plan. The LOS is marked on-site with [Describe (e.g., fencing combined with rope strung between marked poles)].

Cattle do not have access to other livestock, streams, waterways, or run-off water or organic matter that may have come from other premises.

LOS Access Point(s)

Entry to the operation is restricted to [number] controlled LOS Access Point(s) and each are labeled on the premises map at the end of this plan. The LOS Access Points are clearly marked with a suitable barrier of [describe barriers (e.g., gate, rope, cable)] to restrict entry. Unused driveways that are not LOS Access Points are protected with [describe barriers such as gates, cables, ropes, hay bales, trucks, etc.] to prevent vehicles and people from entering.

Signs written in [list languages provided] are posted at all LOS Access Points that include (**delete what does not apply**) [Biosecurity Manager's phone number; biosecurity protocols for entering; where to find biosecurity protocols for entering].

All movements (animals, vehicles, equipment, people) across the LOS are recorded and these documents are kept in the [describe where] and are available for review upon request.

The designated animal loading/unloading area is labeled on the premises map at the end of this plan and this is NOT used for a people entry point.

Deliveries not essential to the dairy are made outside of the LOS at the [describe where] and this area is indicated on the premises map and signage posted at the LOS Access Point.

Vehicles crossing through LOS Access Points are cleaned to remove visible contamination and then disinfected at the Cleaning and Disinfection Station.

People and items crossing through the LOS Access Points follow specific biosecurity steps, described under Biosecure Entry Procedure in this plan.

Cleaning and Disinfection (C&D) Station

There is an operational, clearly marked, and equipped C&D station located [describe where] and it is labeled on the premises map at the end of this plan. The wash pad for the C&D station is made of [describe the surface – paved, gravel, plastic lined] and slopes AWAY from animal housing, feed receiving or storage areas, waterways, and on-farm traffic areas. This operation uses [drainage ditches,

berms, or other physical barriers] to manage effluent from the C&D area to ensure susceptible animals are not exposed. Effluent from the C&D Station is managed following all state and local regulations.

This operation has access to all the equipment and supplies needed to successfully operate the C&D Station. The SOP for the C&D process is available upon request.

The following individuals have received documented training in proper selection and use of personal protective equipment, the principles of C&D to avoid introducing FMD virus to the operation, and are able to effectively operate the C&D station:

- [Name or Job Position]
- [Name or Job Position]
- [Name or Job Position]

In the case of inclement weather (freezing temperatures, thunderstorms, high winds) when the C&D Station cannot be operated, we have the following contingency plans to ensure vehicles do not bring visible contamination onto our operation:

- [Describe alternatives – many examples exist in the Information Manual]

Designated Parking Area

The designated parking area is clearly marked on the premises with [ropes, signs, etc.] and labeled on the premises map at the end of this plan. It is located outside of the LOS and away from animal areas.

4. VEHICLES AND EQUIPMENT

Vehicles and Equipment (non-animal transport)

All vehicles not containing live animals are cleaned and effectively disinfected prior to crossing the LOS.

Harvest and Feed Delivery Equipment (Pick one, delete the other)

- Freshly harvested crops are not delivered to this operation. **OR**
- A plan is in place to temporarily modify the LOS to create a direct path to the feed storage area for harvest vehicles/equipment that may be transporting feedstuffs during harvest of (LIST CROPS such as silage, haylage, hay, small grains, etc.). This route is NOT used by vehicles inside the LOS to feed or contact animals. We are able to access this feed storage area from another direction that does NOT cross paths. Visible material on tires/undercarriage will be removed prior to entering the premises, with every effort made to not spray the feedstuffs (hay, silage, grain) carried by the vehicle. Once visible material has been removed, the harvest vehicles/equipment should drive directly to the feed storage area. The drive path should be cleaned and disinfected after harvest/feed delivery is complete, ensuring run-off/effluent does not enter animal housing, waterways, or traffic areas within the LOS. Once the area is decontaminated, the LOS can be re-established as it was prior to harvest.

Livestock Truck/Trailers (animal transport vehicles)

All **empty** animal transport vehicles are cleaned and disinfected prior to arrival at the operation (outgoing loads) or before animals are loaded for delivery to the operation (incoming loads).

Occupied livestock truck/trailers are not allowed to cross the LOS. (Pick one, modify, delete the other)

- Gates are installed to safely move livestock onto the operation from the livestock trailer.
- On-farm livestock trailers are used to transport animals to or away from the arriving livestock trailer at a designated cattle crossing LOS Access Point.

5. PERSONNEL

Prior to Arriving at the Dairy

The Biosecurity Manager ensures that everyone crossing the LOS on foot or exiting their vehicle inside the LOS has been instructed to arrive at the dairy

- with a clean vehicle interior (free of all animal manure/excrement) that has not become contaminated by soiled clothes, footwear, or other items.
- having showered and wearing clean clothing and footwear since last contacting susceptible animals.
 - For individuals that work with animals and live on-site, showering and changing into clean clothing/footwear before leaving the house is required.
 - For individuals living off-site, after showering and changing into clean clothes and footwear, they must NOT contact animals, live or dead, or facilities where they are held prior to arrival at the dairy.

Essential personnel who will need to cross the LOS during an FMD outbreak include:

- List essential positions [e.g., Milkers, Manager, Parlor Manager, Herdsman/person, Feeder, Milk Haulers, Veterinarian, Dairy Service, etc.]
- List essential positions
- List essential positions

These individuals have a signed Employee and Visitor Arrival Agreement on file agreeing to follow our biosecure entry procedures (described below).

Entry Logbook

Everyone crossing the LOS Access Point(s) completes the entry logbook posted at the [location], unless they are a scheduled worker.

The entry logbook is monitored by [individual responsible] on the dairy to ensure accurate completion.

The contact information and work schedule records for all caretakers are maintained and posted [location].

Biosecure Entry Procedure

All individuals **crossing the LOS** on this dairy must:

- Wear dairy-dedicated footwear, **OR**
- Wear disposable or disinfectable footwear; **AND**
- Ensure hands are clean
 - Wash hands and/or
 - Wear disposable or disinfectable gloves over clean hands
- All **animal handlers** must also put on dairy-dedicated clothing OR put on clean coveralls/protective outerwear

The **milk hauler** must follow specific details under **Milk Collection and the SOP**.

Biosecure Exit Procedure

Individuals crossing the LOS to the non-cattle side must exit through the [describe location] and remove protective outerwear, disposable footwear, and gloves. Hands can be washed [A hand washing station is provided].

All soiled clothing are [left on the dairy to be laundered **OR** transported off premises enclosed in a garbage bag/tote and stored until they can be laundered/cleaned and disinfected].

All soiled footwear are [left on the dairy **OR** cleaned and disinfected before exiting].

6. ANIMAL MOVEMENT

Incoming Animals

Animals only come from sources with documented biosecurity practices that align with this dairy's biosecurity practices. The animal caretakers on the farms of origin are trained to look for signs of FMD. The incoming animals have no current or previous evidence of FMD infection.

Pre-movement Isolation Period

(pick one, delete the other)

- We do not accept animals from operations within an FMD Control Area.
- OR**
- We only accept animals from an operation in the FMD Control Area that have not received any animals from another production site with susceptible animals for at least [7 days].

Contingency Plan for Interrupted Animal Movement

In the event animal movement is stopped for several weeks, this is our plan for managing animals in a biosecure manner: (keep and modify all applicable statements, delete the others)

- Cull cattle will be humanely euthanized and properly disposed of on the operation (described under Carcass Disposal below).

For dairies that normally raise their own heifer and bull calves:

- All [heifer and bull] calves born on the operation can be housed, fed, and cared for in an outbreak. We have personnel trained in calf husbandry and do not need to borrow housing or feeding equipment.

For dairies that normally send calves off-site for rearing, describe your plan to manage those animals

- There is enough housing, feed, and feeding equipment available for [number] heifer calves for a period of [XX days, weeks, or months]
- There is enough housing, feed, and feeding equipment is available for [number] bull calves for a period of [XX days, weeks, or months]
- We plan to [buy, borrow] calf housing, feeding equipment to house/feed calves if we are unable to move off-site.
- Personnel trained in pre-weaned calf husbandry are available.

Loading/Unloading Animals

Animals leaving the operation only move in one direction across the LOS at the LOS Access Point labeled on the premises map at the end of this plan. The animal loading/unloading area is NOT a people entry point. All areas inside the LOS that become contaminated by personnel or animals loading are

cleaned and effectively disinfected by trained personnel after loading is complete. The SOP for the C&D process is available upon request.

The following individuals have received documented training in proper selection and use of personal protective equipment, the principles of C&D to avoid introducing FMD virus to the operation, and are able to effectively C&D the loading area:

- [Name]
- [Name]
- [Name]

7. ANIMAL PRODUCTS

Milk Collection

The **drive path** from the LOS Access Point to the milk house is made of [describe surface, e.g., paved, gravel] and is free of animal excrement and labeled on the premises map at the end of this plan.

The milk truck/tanker (pick one, modify, delete the other)

- Crosses the LOS and the truck/tanker is cleaned and disinfected (C&D) at the LOS Access Point.
- Does NOT cross the LOS and the truck/tanker is not cleaned and disinfected (C&D).

(pick one, modify, delete the other)

- This dairy operation only uses milk trucks/tankers that haul milk from this operation. **OR**
- This dairy operation uses milk trucks/tankers that haul commingled loads.
 - The Biosecurity Manager ensures the milk truck/tanker hauling milk from other operations does not leak milk in an area that cannot be effectively disinfected.
 - C&D Station personnel are responsible for inspecting the milk tanker storage compartment and external surfaces for milk leakage during transit.
 - o In the event personnel find excessive milk leakage, [describe how it will be fixed; on-site if possible; return to the milk plant, hauler operation, elsewhere] to address the problem before picking up additional raw milk.
 - o In the event that large quantities of milk NOT originating from this dairy spill outside of the milk house, the hauler must alert C&D personnel to clean and disinfect the area.
 - o To mitigate the risk of bioaerosols escaping the air vent during milk pumping and transporting, the dome lid is closed and locked (secured by the clamps).

The milk transfer hose is (pick one, delete the other)

- Truck-mounted.
 - o Contamination from residual raw milk from other dairies is minimized.
 - o Transfer hose undergoes exterior C&D when crossing the LOS.
- Farm-dedicated.

Milk haulers/drivers and all personnel involved in the milk collection process must follow a specific SOP which is available upon request. These individuals must sign the Employee and Visitor Arrival Agreement verifying they have been informed of these biosecurity protocols and will abide them. The signed agreements are available upon request. Milk haulers/drivers ensure the inside of their vehicle is kept clean (free of all animal manure/excrement) and not be contaminated by soiled clothes, footwear, or other items.

The milk hauler/driver [pick one, modify, delete all non-applicable statements]

- STAYS in the cab.
 - We have a licensed weigher/sampler on staff.
 - [Name, license expiration date]
 - [Name, license expiration date]
 - Milk is loaded directly onto the tanker and there is no need for the driver to exit.
- EXITS the cab but does not cross the LOS. [delete all non-applicable statements]
 - Passes/receives transfer hose across LOS.
 - Connects hose to truck/tanker
 - Wears gloves and protective footwear provided by [the hauler **OR** the dairy]
 - Disconnects trailer and connects trailer for direct load.
 - Wears gloves when handling any equipment that remains on farm.
 - The milk house is **OUTSIDE** the LOS during milk collection.
 - The milk hauler samples, weighs, and pumps milk.
 - Farm staff C&D the milk house after hauler/driver finishes collection and leaves
- EXITS the cab and crosses the LOS
 - Connects truck-mounted hose to truck/tanker prior to crossing the LOS
 - Receives farm-dedicated transfer hose across LOS and connects to truck before crossing LOS
 - Puts on gloves and protective footwear provided by the hauler at the LOS
 - Puts on gloves and protective footwear provided by the dairy at the LOS
 - Samples, weighs, and pumps milk
 - Has no direct contact with farm personnel, animal housing, animals, or milk products to be fed to susceptible animals
- EXITS the cab on the cattle side of the LOS
 - Wears gloves and protective footwear provided by [the hauler **OR** the dairy].
 - Samples, weighs, and pumps milk.
 - Has no direct contact with farm personnel, animal housing, animals, or milk products to be fed to susceptible animals

Milk samples are collected (pick one, delete the other)

- on-farm and are transported in [describe the type of disinfectable outer container e.g., plastic sealable bag, plastic container, etc.] that can be disinfected so they do not visible contamination on the exterior.
- at the plant

The SOP for milk collection is available upon request.

Feeding Dairy Products (pick one, delete the other)

- There are no calves on this operation

OR

Calves on the operation are fed: (keep all that apply, modify as needed)

- Colostrum originating from this operation.
- Milk originating from this operation.
- Colostrum/milk replacer that is manufactured according to OIE recommendations for inactivation of FMD virus for animal consumption.

Adult cattle on the operation are:

- Fed dairy products that have been treated to OIE recommendation for inactivation of FMD virus for animal consumption.

OR

- NOT fed dairy products.

Milk Disposal

In the event raw milk cannot be moved off-farm, our disposal options on-site include:

- Disposal into the lagoon/manure slurry storage under normal weather conditions EXCEPT during the months of [describe]
- Land-applying it as there are no streams or waterways in the area that can be contaminated
- [Describe other options]

Semen, Embryos

(pick one, modify, delete the other)

- This dairy operation does not introduce semen or embryos from off-site locations.

OR

- The Biosecurity Manager will ensure that any semen or embryos collected after FMD has been diagnosed in the U.S. and introduced to this dairy only come from sources with documented, enhanced biosecurity practices and have no current or previous evidence of FMD infection.
 - Semen and embryos must be held and frozen at the source herd for 14 days after collection, and animals re-evaluated for signs of FMD after the 14 days before shipping.
 - Semen and embryos are transported in containers whose exteriors can be cleaned and effectively disinfected as it crosses the LOS.

- o The source herd must document Active Observational Surveillance for at least 14 days prior to movement of product.

8. CARCASS DISPOSAL

In an FMD outbreak, dead animals (normal mortality numbers) are disposed of by [List methods e.g., burial, incineration, composting] which prevents the attraction of wildlife, rodents, and other scavengers, and is in accordance with state and federal laws.

- Rendering trucks and other vehicles hauling dead animals to a common disposal site do not cross the LOS.
- Routes for carcass movement and disposal are labeled on the premises map at the end of this plan.

In the event of a large number of mortalities unrelated to FMD infection (toxicity, heat stress, etc.), dead animals will be disposed of by [List methods e.g., burial, incineration, composting] which also prevents the attraction of wildlife, rodents, and other scavengers, and is in accordance with state and federal laws.

9. MANURE MANAGEMENT

Manure is stored in [describe how – lagoon, slurry, composted, etc.].

In the event of a prolonged outbreak, we can store manure for [days, weeks, months]. After that time, manure will need to be moved off the operation by [method(s)]. This will prevent exposure of susceptible animals and meet state, local, and Responsible Regulatory Officials regulations.

(Pick one, modify, delete the other)

- Operation-specific dedicated manure handling equipment is used and equipment is not shared with other operations unless absolutely necessary
- OR**
- All manure handling vehicles and equipment from other sites must be cleaned to remove all manure and disinfected with either heat or a chemical disinfectant followed by drying. All manure handling personnel must have showered and changed into clean clothes and footwear prior to arriving at the operation. These expectations have been communicated to contract companies, and signed and dated when read. This communication is kept on file here: [location]. In the event that manure handling equipment from another location cannot be effectively C&D, a plan to temporarily modify the LOS near the manure storage facility during manure removal is in place. The affected areas are cleaned and disinfected before returning to the original LOS.

10. RODENT, WILDLIFE, AND OTHER ANIMAL CONTROL

The following control measures are in place to minimize interaction between cattle and other animals (deer, feral pigs, rodents, dogs, cats, horses, etc.): **(pick one of the following, modify, delete the other)**

- This premises utilizes [method(s)] to discourage rodents. Bait is checked [frequency] by [individual' name] and replaced as needed. This protocol is in accordance with state and local regulations for controlling rodents.

OR

- This premises works with [professional rodent company] and has [invoices or documentation logs] describing the frequency and observations by the company representative. This protocol is in accordance with state and local regulations for controlling rodents.

(mark those that apply, provide details where requested)

- Weeding and grass control is done [describe frequency]
- The sanitation of general office areas is completed [frequency]
- Trash is removed every [frequency]. In an outbreak, the garbage truck [would/would not] cross the LOS
- Feed spills are cleaned up immediately by [describe who]
- Milk spills outside the parlor/milk house are cleaned up immediately by [describe who]
- We are [able or unable] to prevent wildlife access to livestock on this operation
- Dogs, cats, and other pets are NOT allowed to roam between operations during an outbreak.

OR

- There are no dogs or cats on this operation

11. FEED

Grain and feed commodities are delivered in trailers that are covered during transport.

In an outbreak, feed trucks delivering feedstuffs or finished feed (total mixed ration) would

- Cross the LOS through an LOS Access Point
- Auger feed across the LOS into a farm vehicle/feed wagon located on-site

Feed spills are cleaned up as soon as possible to minimize attraction of wildlife and rodents.

LABELED PREMISES MAP

Guidance for creating a premises map (satellite images are preferable) can be found in Appendix A of the SMS Information Manual for Enhanced Biosecurity for FMD Prevention: Dairy.

Premises Name: [Name]



Premises Address: [911 address]

Prem ID or PIN: [list]

Label your premises map with the following (either by hand or electronically):

-  Public road
-  Line of Separation (LOS)
-  LOS Access Point
-  Vehicle cleaning and disinfection (C&D) station(s)
-  Designated parking area
-  Milk truck route to milk house
-  Milk house
-  Carcass disposal/pickup location
-  Carcass removal pathways
-  Deliveries (non-essential to the dairy)
-  Animal Loading/Unloading

Additional details to consider including:

-  N Compass indicating North (use a color that stands out on the map - yellow in example)
-  Label animal housing areas, feed areas, manure storage

