Crossing the LOS Enhanced Biosecurity Plan for FMD Prevention in Iowa

Date [Created or Updated]: 12-2-2017

This Biosecurity Plan is based off of the Secure Milk Supply (SMS) Plan Self-Assessment Checklist for Enhanced Biosecurity, [Sept 2017] and the Biosecurity Performance Standards (BPS) for Raw Milk Collection and Transport [Sept 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.

SCOPE OF BIOSECURITY PLAN

- National Premises Identification Number (Prem ID or PIN): 000ZZZZ
- Premises address: 10000 West Highway; Halvern, IA 33333
- Premises GPS coordinates: 33.3333333, -33.3333333
- Animals on premises: 1,100 mature cows, 1,500 heifers
- Animal housing types: freestalls, packs, pasture
- Other business operations on premises? Yes If yes, please describe: cheese plant
- Secondary premises* locations: [list the PINs, 911 addresses, or GPS (latitude, longitude) where animals associated with this operation reside (e.g., dry cows off-site, heifers on pasture, steers)]
  - 10001 West Highway, Halvern, IA 33333
  - Others will be provided if this premises is located in an FMD Control Area

*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: Abbey Smith
PHONE: 444-444-4544
EMAIL: asmith@dairy.com

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

NAME: Danelle Weddle
PHONE: 444-444-4444
EMAIL: dweddle@dairy.com
The Biosecurity Manager’s contact information is posted in farm office and by C&D Station at controlled access point.

Abbey Smith and Danelle Weddle have the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

Abbey Smith developed the operation-specific biosecurity plan with the assistance of:

- Stan Lee, a consultant with IA Dept of Ag whose contact information is:
  
  PHONE: 444-440-4444

The Biosecurity Manager or their designee:
- 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 is on file in the farm office.

2. TRAINING

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

- Owners
- Biosecurity Managers
- Essential personnel

The Biosecurity Manager(s) informs individuals entering the operation 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;
- 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 **rope, fencing, and roads**.

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)**
Enter to the operation is restricted to **1** controlled LOS Access Point and is labeled on the premises map at the end of this plan. The LOS Access Point is clearly marked with a suitable barrier of **2 gates** to restrict entry. Unused driveways that are not LOS Access Points are protected with **ropes** to prevent vehicles and people from entering.

Signs written in **English/Spanish** are posted at all LOS Access Points that include **Biosecurity Manager’s phone number**.

All movements (animals, vehicles, equipment, people) across the LOS are recorded and these documents are kept in the **farm office** 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 **Cheese Plant** 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 in **front of gated entrance** 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 **pavement** and slopes AWAY from animal housing, feed receiving or storage areas, waterways, and on-farm traffic areas. This operation uses **buffer strips and holding pond** 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:

• Abbey Smith
• Danelle Weddle

In the case of inclement weather (freezing temperatures, thunderstorms, high winds), we have the following contingency plans to ensure vehicles do not bring visible contamination onto our operation:

Keep the mobile unit with the power washer, water and disinfectant in the heated shop near the C&D Station so that is functional when needed. Move it out when a vehicle needs to be C&D and back into the shop to prevent it from freezing. In the event of a thunderstorm, the C&D Station would not be operated until safe to do so.

Designated Parking Area
The designated parking area is clearly marked with rope 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
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 silage. 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.

✓ 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 having showered and wearing clean clothing and footwear since last contacting susceptible animals.

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

- Employees
- Dairy service people
- Veterinarian

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 controlled access point, unless they are a scheduled worker.

The entry logbook is monitored by biosecurity manager on the dairy to ensure accurate completion.

The contact information and work schedule records for all caretakers are maintained and posted at the controlled access point.

Biosecure Entry Procedure

All individuals contacting animals on this dairy must:

- Ensure that the inside of their vehicle is clean (free of all animal manure/excrement) prior to arrival and has not become contaminated by soiled clothes, footwear, or other items.
- Ensure they have showered and changed into clean clothes and footwear prior to arrival on the premises.
  - For individuals that work with the 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.
- Put on dairy-dedicated clothing and footwear at the LOS Access Point, OR
- Put on clean coveralls/protective outerwear and disposable or disinfectable footwear at the LOS Access Point or when they exit their vehicle on the cattle side of the LOS; AND
- Ensure hands are clean
- 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.

All non-animal handlers and those remaining away from animal areas on this dairy must:

- Wear dairy-dedicated footwear, OR
• Wear disposable or disinfectable footwear; AND
• Ensure hands are clean
  o Wash hands and/or
  o Wear disposable or disinfectable gloves over clean hands

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 ______ controlled access point ______ and remove protective outerwear, disposable footwear, and gloves. Hands can be washed ______ at the ____________ controlled access point ______.

All soiled clothing are ___washed at farm__.

All soiled footwear ___left at farm____.

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**

✓ We do not accept animals from operations within an FMD Control Area.

**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:

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

**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:

• _______ Abbey Smith _______
• _______ Danelle Weddle _______
7. ANIMAL PRODUCTS

Milk Collection
The drive path from the LOS Access Point to the milk house is made of pavement and is free of animal excrement and labeled on the premises map at the end of this plan.

The milk truck/tanker
- Crosses the LOS and the truck/tanker is cleaned and disinfected (C&D) at the LOS Access Point.
- This dairy operation only uses milk trucks/tankers that haul milk from this operation.

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

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. The milk hauler/driver:
  - EXITS their clean cab on the cattle side of the LOS
  - Wears gloves and protective footwear provided by the farm.
  - Samples, weighs, and pumps milk.
  - Has no direct contact with farm personnel, animals, or milk products to be fed to susceptible animals.

Milk samples are collected
- on-farm and are transported in plastic sealable bags that can be disinfected so they do not have visible contamination on the exterior.

The SOP for milk collection is available upon request.

Feeding Milk
Calves on the operation are fed:
- 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 not fed dairy products

Milk Disposal
In the event raw milk cannot be moved off-farm, our disposal options on-site include:
- Processing into cheese
- Disposal into the lagoon/manure slurry storage under normal weather conditions EXCEPT during the months of March, April, August, September
✓ Land-applying it as there are no streams or waterways in the area that can be contaminated

**Semen, Embryos**

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.
- 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 are disposed of by compost 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.

**9. MANURE MANAGEMENT**

Manure is stored lagoon and compost.

In the event of a prolonged outbreak, we can store manure for 1 month. After that time, manure will need to be moved off the operation by irrigation/dragline. This will prevent exposure of susceptible animals and meet state, local, and Responsible Regulatory Officials regulations.

✓ Operation-specific dedicated manure handling equipment is used and equipment is not shared with other operations unless absolutely necessary

**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.):

✓ This operation utilizes bait to discourage rodent movement. Bait is checked weekly by Steve and replaced as needed. This protocol is in accordance with state and local regulations for controlling rodents.

✓ Weeding and grass control is done weekly around animal housing areas 3-4 times per season

✓ The sanitation of general office areas is completed weekly
✓ Trash is removed every ______ week. In an outbreak, the garbage truck would not cross the LOS.
✓ Feed spills are cleaned up immediately by the feed manager
✓ Milk spills outside the parlor/milk house are cleaned up immediately by farm staff
✓ We are 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.

11. FEED

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

In an outbreak, feed trucks delivering feedstuffs would
  ✓ 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
Premises Address: 10000 West Highway; Halvern, IA 33333
PIN: 000ZZZZ

- 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)