

Secure Pork Supply Plan: Biosecurity Overview

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Today's Discussion

- Enhanced Biosecurity
 - Review main SPS biosecurity concepts
 - Discuss creating a site map and writing site-specific biosecurity plans
 - Cover inputs and outputs to consider when writing the plans
 - Review employee training
 - Introduce assignment for in-person workshop



Main Biosecurity Concepts



Protecting Your Pigs

UK farmers with good biosecurity procedures were **5 times** less likely to become infected

*Unpublished research:
Carlisle Epidemiology Team, DEFRA
UK 2001 Outbreak*



Biosecurity

- Producers responsibility
 - Protect their herds by keeping the disease off the farm
- Regulatory Officials responsibility
 - Protect the US herd by keeping the disease from spreading



Enhanced Biosecurity

Four concepts emphasized

- Biosecurity Manager
- Written site-specific biosecurity plan
- Defined Perimeter Buffer Area (PBA)
- Defined Line of Separation (LOS)



Biosecurity Manager

- Understand infectious diseases and production animal agriculture, familiar with facility
- Use the Self-Assessment Checklist and Info Manual for Enhanced Biosecurity
- Write site-specific biosecurity plan
 - With assistance of herd veterinarian
- Responsible for employee training
- Ensure compliance on the site



SPS Plan: Biosecurity

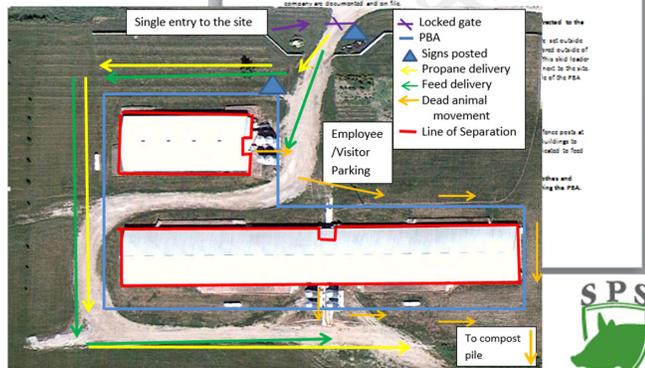
Create a Site-Specific Enhanced Biosecurity Plan

- Explain how site meets all biosecurity measures listed in checklist

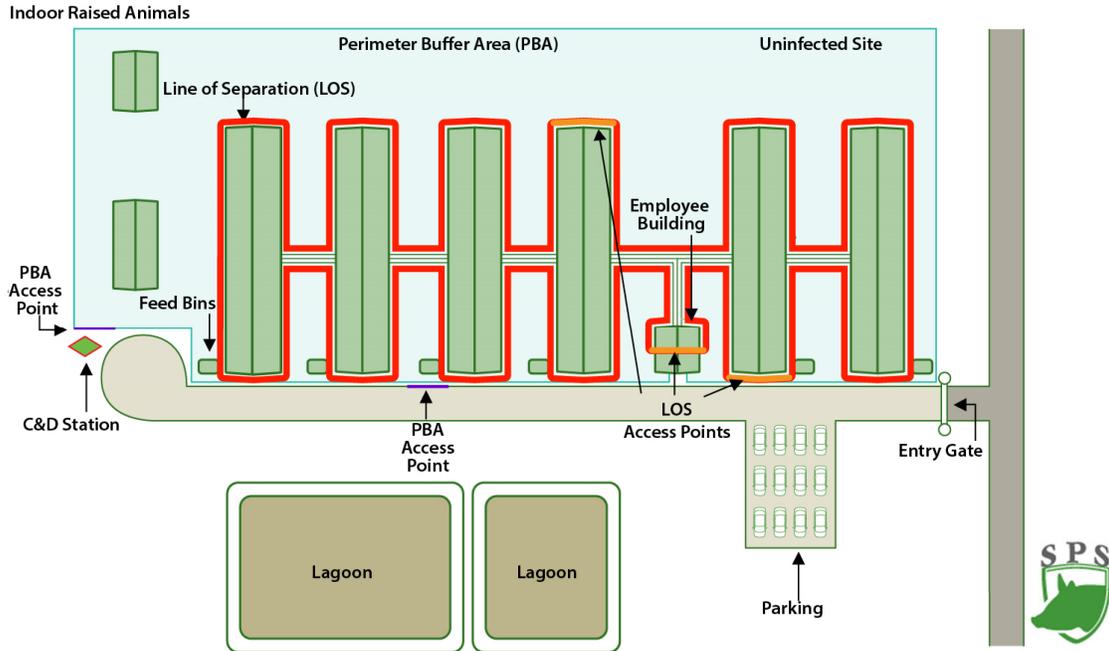
Example of a Site-Specific Biosecurity Plan
 SPS Biosecurity Plan for Swine site

Summary:

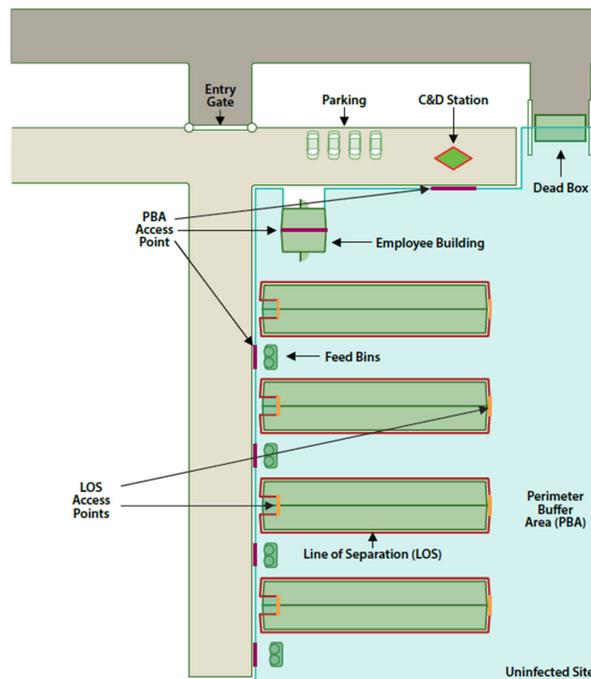
1. A written site-specific plan for meeting Level Two SPS has been developed. This document fulfills the requirement of a site-specific biosecurity plan.
2. Training of all employees and communication with delivery/service personnel on the Level Two SPS has been documented. We have certificates on file that all current employees have completed the online SPS Employee Biosecurity Training. The food mill, service personnel, propane delivery personnel, and the facility have all been given a copy of this site-specific biosecurity plan. We also included biosecurity guidelines they are to follow when coming onsite. The individuals and companies who received this information has been documented as well as the date given distributed to them. Copy of the distributed document is located in Appendix A.
3. The site has a written rodent control plan which has been implemented, utilizes a professional rodent control company, or is a Certified Production Site in the National Porkmeat Certification Program. This site is a Certified Production Site in the National Porkmeat Certification Program.
4. The site has a written insect control plan which has been implemented or utilizes a professional pest control company. This site utilizes a professional pest control company. All visits and compounds utilized by the company are documented and on file.



SPS Plan: Perimeter Buffer Area and Line of Separation



Line of Separation (LOS) Perimeter Buffer Area (PBA)





SPS Plan: Biosecurity



Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors

Target Audience

- Sites with several buildings or just one building that includes sites with other animals raised indoors.
- All individuals (including no, semi, or non-family employees responsible for animal care) who have access to the site.
- Sites that have never been subjected to classical swine fever (CSF), and African swine fever (ASF).

Introduction

In the event of a foreign animal disease (FAD) outbreak in the United States, the pork industry is critical to the agricultural economy and well-being. The goal of the Secure Pork Supply (SPS) enhanced biosecurity plan for pork producers that have pigs indoors is to ensure that the industry is credible to Responsible Regulatory Officials (RROs) in the event of an outbreak. In an actual FAD outbreak, decisions will be made by RROs based on the unique characteristics of each outbreak.

During an FAD outbreak, it is the producer's responsibility to keep their animals safe, focusing on what they can control on their site. Biosecurity approaches are categorized into three types: Structural biosecurity is built into the physical construction of the facility; Operational biosecurity involves management practices designed to prevent the entry of disease agents onto or off of the production site. An FAD will test the effectiveness of biosecurity practices because successful implementation of these practices depends on the behavior of individuals on the site.

The three foreign animal diseases of concern for the SPS Plan are 1) Foot and Mouth Disease (FMD), 2) African Swine Fever (ASF), and 3) Classical Swine Fever (CSF), also known as Hog Cholera. These diseases are highly contagious and have a high impact on animal health and the pork industry. Some of these diseases pose a food safety or public health concern.

Existing biosecurity plans for pork production often may offer protection against biosecurity practices that are needed for FADs. The enhanced biosecurity record document are based on the known exposure routes for the three FADs of concern.

SPS Plan: Enhanced Biosecurity Checklist: Animals Raised Indoors



**Routine biosecurity is not enough
Enhanced Biosecurity**

ENHANCED BIOSECURITY PLAN FOR PORK PRODUCTION ANIMALS RAISED INDOORS

Enhanced Biosecurity Plan for FAD Prevention in _____

Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors: All sites are located in an area where separate PINs are needed.

For biosecurity guidance for dairy cattle and beef cattle, see www.secureporksupply.org and www.securebeef.org. For biosecurity guidance for swine, see www.secureporksupply.org. **To work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises. When a premises becomes infected, all premises with the same PIN number will be considered to be infected.

1. Biosecurity Manager and Written Plan
The designated Biosecurity Manager for this site and their contact information follows:

NAME: _____
PHONE: _____
EMAIL: _____

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

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The Biosecurity Manager's contact information is posted in _____.



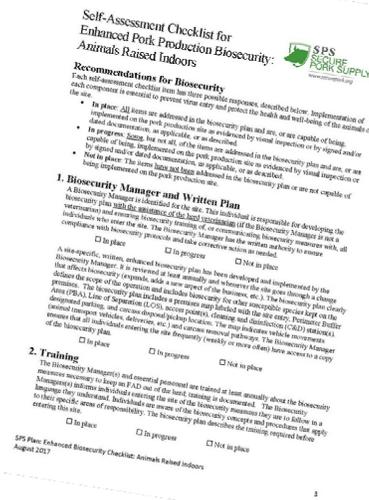
Enhanced Biosecurity Plan

2



Enhanced Biosecurity Self-Assessment Checklist

- **Biosecurity Manager and Written Plan**
- **Training**
- **Protecting the Pig Herd**
- **Vehicles and Equipment**
- **Personnel**
- **Animal and Semen Movement**
- **Carcass Disposal**
- **Manure Management**
- **Rodent, Wildlife, and Other Animal Control**
- **Feed**



In place In progress Not In place



SPS Plan: Biosecurity

Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors



Target Audience

- This checklist and corresponding Information Manual for Enhanced Biosecurity are written for pork production sites where the animals are raised in enclosed animal buildings. The biosecurity measures apply to:
- Sites with several buildings or just one as long as all the pigs are raised indoors.
 - This includes sites with other susceptible species (e.g. cattle, sheep, and goats) kept on the premises.
 - All individuals delivering to, servicing, or working on the site including family members and/or non-family employees responsible for animal care and husbandry.
 - Sites that have never been infected with or vaccinated for foot and mouth disease (FMD), classical swine fever (CSF), and African swine fever (ASF).

Introduction

In the event of a foreign animal disease (FAD) outbreak in the United States (U.S.), maintaining business continuity for the pork industry is critical to the agricultural economy, food security, as well as animal health and well-being. The goal of the Secure Pork Supply (SPS) Plan is to provide a workable business continuity plan for pork producers that have pigs with no evidence of the FAD infection and associated biosecurity practices because successful implementation of these practices depends on the awareness and behavior of individuals on the site.

During an FAD outbreak, it is the producer's responsibility to keep their animals from becoming infected, focusing on what they can control on their site. Biosecurity approaches are both structural and operational. Structural biosecurity is built into the physical construction and maintenance of a facility. Operational biosecurity involves management practices designed to prevent the introduction and spread of disease agents onto or off of the production site. An FAD will test the effectiveness of operational biosecurity practices because successful implementation of these practices depends on the awareness and behavior of individuals on the site.

The three foreign animal diseases of concern for the SPS Plan are 1) foot and mouth disease (FMD), 2) African swine fever (ASF), and 3) classical swine fever (CSF), also known as hog cholera. All three diseases are highly contagious and have a high impact on animal health and international trade; however, none of these diseases pose a food safety or public health concern.

Existing biosecurity plans for pork production sites may offer protection against endemic diseases but heightened precautions are needed for FADs. The enhanced biosecurity recommendations outlined in this document are based on the known exposure routes for the three FADs of concern. This document

SPS Plan: Enhanced Biosecurity Checklist: Animals Raised Indoors



Information Manual

- Additional resource
- In-depth approaches



INFORMATION MANUAL FOR ENHANCED BIOSECURITY FOR PORK PRODUCTION: ANIMALS RAISED INDOORS



SPS Plan: Biosecurity

The screenshot shows the SPS website interface. The top navigation bar includes 'SPS PLAN', 'PORK PRODUCERS', 'VETERINARIANS', 'PACKERS', 'REGULATORY OFFICIALS', and 'TRAINING MATERIALS'. The 'PORK PRODUCERS' tab is active. On the left sidebar, the 'Biosecurity' menu item is circled in red. The main content area is titled 'Biosecurity Resources for Producers' and contains several sections: 'Write a site-specific enhanced biosecurity plan', 'Already have a biosecurity plan?', 'Are caretakers trained in biosecurity?', 'Biosecurity Checklist', 'Biosecurity Manuals', 'Protect Your Premises', 'Creating a Premises Map', 'Biosecurity Plan Examples', 'Customizable Templates', 'Biosecurity Forms', and 'Signs and Posters'. A red arrow points from the 'Biosecurity Checklist' link to the right, and a large blue arrow points from the 'Biosecurity Checklist' section towards the right side of the page.



INFORMATION MANUAL FOR ENHANCED BIOSECURITY FOR PORK PRODUCTION: ANIMALS RAISED INDOORS



Creating a Site Map

- How to create site map
- Items to label
- How to create the symbols using Microsoft Word

Creating a Premises Map for a Biosecurity Plan



Animals Raised Indoors
The first step is to get an aerial map of your operation (steps described below). It can then be labeled by hand or using a computer (also described below).

Getting an Aerial View from Google Maps*

*Google Maps is one example of aerial images provided free of charge online. There are others such as www.bing.com/maps and <https://zoom.earth/>, use what works best for your operation. The steps below pertain to Google Maps.

1. Open an internet browser. Type in the URL: <http://www.google.com/maps>
2. Type in the address of your production site (address where the buildings are located, not home address—if different).
3. Click on the small box in the lower left that says "Satellite"
4. Zoom in so that you can visualize all barns and accessory structures once you see the satellite view. The entire site should still fit within the screen.
5. Find your site location on the map where the animals are located and click. A gray "pushpin" icon will appear. At the bottom of the screen, you will see the GPS coordinates in light gray below the location's address. Copy this information to include in your premises map.
6. Go to your biosecurity plan in Microsoft Word, but keep the internet browser in Google Maps open behind Word. Click on "Insert" in the toolbar; click "screenshot"; click "screen clipping." The browser will move to the front and be frosted. You can now use the mouse to select the area you want to copy into the word document.
7. Label the map with the following items and include a legend:



- Perimeter Buffer Area (PBA)
- PBA Access Point(s)
- Line of Separation (LOS)
- LOS Access Point(s)
- Cleaning and disinfection (CRD) station(s)
- Designated parking area (label)
- Carcass disposal/pickup location (label)
- Carcass removal pathways
- Vehicle movements (animal transport vehicles, deliveries, etc.)
- Site Entry



SPS Plan: Biosecurity

Creating a Premises Map for a Biosecurity Plan



Animals Raised Indoors
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- Cleaning and disinfection (CRD) station(s)
- Designated parking area (label)
- Carcass disposal/pickup location (label)
- Carcass removal pathways
- Vehicle movements (animal transport vehicles, deliveries, etc.)
- Site Entry



Inputs and Outputs



Animals and Semen Movement



Feed



Fuel or Propane Delivery



Personnel



Package Deliveries



- Supplies
- Medications
- Vaccines



Garbage Removal



Carcass Disposal



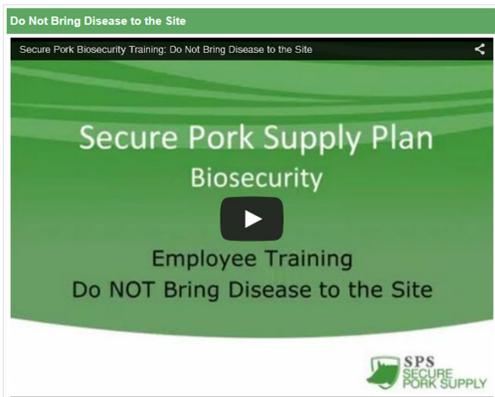
Manure Management



Contingency Plans

- Inclement Weather
 - Sheltered C&D area
 - Off-site location
 - Alternate delivery options
- Stop Movement
 - Welfare concerns
 - Carcass disposal



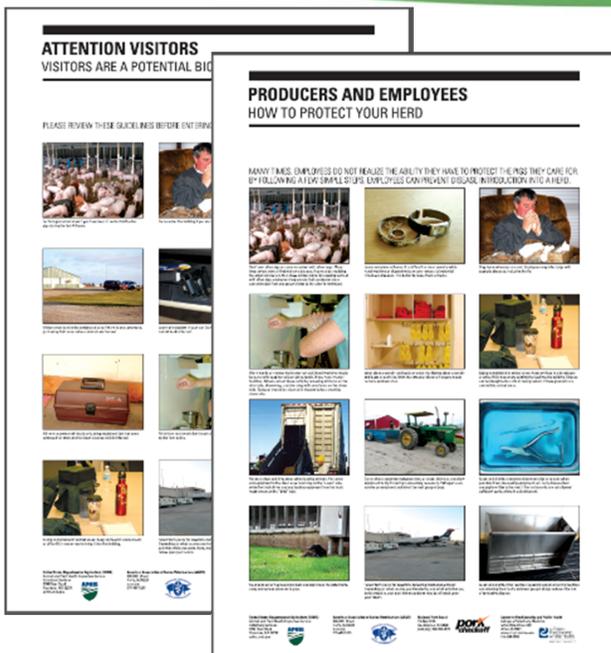


Biosecurity Topics:

- Introduction
- Do not bring disease to the site
- Perimeter Buffer Area
- Line of Separation and Bench Entry



Biosecurity Posters



- Producers and Employees
- Visitors
- English and Spanish
- Laminated copies at the pork store

www.securepork.org



SPS Plan: Biosecurity



SPS PLAN	PORK PRODUCERS	VETERINARIANS	PACKERS	REGULATORY OFFICIALS	TRAINING MATERIALS
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Training Materials
Biosecurity
Disease Monitoring:
Observe
Disease Monitoring:
Sample
Forms
Outreach

Enhanced Biosecurity Training
 The biosecurity plan can only work if EVERYONE on the site follows it ALL of the time, which requires training. The following videos and materials provide caretakers with some of the information they need to be part of the herd health protection team. Remember to document all training (visit [Forms](#) page).

- Four Biosecurity Training Videos**
- 1. Introduction to Biosecurity:** why it is important to follow biosecurity measures
 - Video (download): [English \(3mb\)](#) | [Spanish \(17mb\)](#)
 - Video (watch): [English \(3:39 mins\)](#) | [Spanish \(5:44 mins\)](#)
 - 2. Do Not Bring Disease to the Site:** Biosecurity measures to follow to avoid bringing diseases to a production site
 - Video (download): [English \(3mb\)](#) | [Spanish \(19mb\)](#)
 - Video (watch): [English \(3:45 mins\)](#) | [Spanish \(5:56 mins\)](#)
 - 3. Perimeter Buffer Area (PBA):** What the PBA is and biosecurity measures to follow when entering the PBA
 - Video (download): [English \(6mb\)](#) | [Spanish \(19mb\)](#)
 - Video (watch): [English \(4:08 mins\)](#) | [Spanish \(11:11 mins\)](#)
 - 4. Line of Separation (LOS) and Biosecure Entry:** What the LOS is and biosecurity measures to follow when crossing the LOS – English | Spanish

- Biosecurity Signs**
 Several signs have been made for use on pork production sites for biosecurity.
- Do Not Enter – Cross only at Biosecure Entry Point: [English/Spanish](#)
 - Authorized Personnel Only: [English](#) | [Spanish](#)
 - Biosecure Entry Ahead: [English](#) | [Spanish](#)

- Biosecurity Posters**
 Download and print these full color 11" by 17" posters for educational use.
- Producers and Employees: How to Protect Your Herd:
 - [English](#) | [Spanish](#)
 - Attention Visitors: Visitors are a Potential Biosecurity Risk:
 - [English](#) | [Spanish](#)

Order Free 11" by 17" Laminated Posters!
 Go to [the Pork Store](#) and enter item #
Protect Your Herd: English (item #04880); Spanish (item #04889)
Visitors are a Risk: English (item #04892); Spanish (item #04896)



Assignment



Site Map



Review Inputs/Outputs

- Review inputs and outputs for site
 - Animals/semen
 - Feed
 - Fuel/propane deliver
 - Personnel
 - Package delivery
 - Garbage delivery
 - Carcass disposal
 - Manure



Enhanced Biosecurity Checklist

Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors



Recommendations for Biosecurity
 Each self-assessment checklist item has three possible responses, described below. Implementation of each component is essential to prevent virus entry and protect the health and well-being of the animals on the site.

- **In place:** All items are addressed in the biosecurity plan and are, or are capable of being, implemented on the pork production site as evidenced by visual inspection or by signed and/or dated documentation, as applicable, or as described.
- **In progress:** Some, but not all, of the items are addressed in the biosecurity plan and are, or are capable of being, implemented on the pork production site as evidenced by visual inspection or by signed and/or dated documentation, as applicable, or as described.
- **Not in place:** The items have not been addressed in the biosecurity plan or are not capable of being implemented on the pork production site.

1. Biosecurity Manager and Written Plan
 A Biosecurity Manager is identified for the site. This individual is responsible for developing the biosecurity plan with the assistance of the herd veterinarian (if the Biosecurity Manager is not a veterinarian) and ensuring biosecurity training of, or communicating biosecurity measures with, all individuals who enter the site. The Biosecurity Manager has the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

- In place In progress Not in place

A site-specific, written, enhanced biosecurity plan has been developed and implemented by the Biosecurity Manager. It is reviewed at least annually and whenever the site goes through a change that affects biosecurity (e.g., adds a new aspect of the business, etc.). The biosecurity plan clearly defines the scope of the operation and includes biosecurity for other susceptible species kept on the premises. The biosecurity plan includes a premises map labeled with the site entry, Perimeter Buffer Area (PBA), Line of Separation (LOS), access points, cleaning and disinfection (C&D) stations, designated parking, and carcass disposal/lymph location. The map indicates vehicle movements (animal transport vehicles, deliveries, etc.) and carcass removal pathways. The Biosecurity Manager ensures that all individuals entering the site frequently (weekly or more often) have access to a copy of the biosecurity plan.

- In place In progress Not in place

2. Training
 The Biosecurity Manager(s) and essential personnel are trained at least annually about the biosecurity measures necessary to keep an FAD out of the herd; training is documented. The Biosecurity Manager(s) informs individuals entering the site 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. The biosecurity plan describes the training required before entering the site.

- In place In progress Not in place

INFORMATION MANUAL FOR ENHANCED BIOSECURITY FOR PORK PRODUCTION: ANIMALS RAISED INDOORS



Enhanced Biosecurity Template

Enhanced Biosecurity Plan for FAD Prevention in _____

Date: _____
 This Biosecurity Plan is based off of the Secure Pork Supply (SPS) Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors, (August 2017) and was developed using guidance from the SPS Information Manual for Enhanced Biosecurity: Animals Raised Indoors. All documents are available at www.securepork.org.

- Scope of Biosecurity Plan**
- National Premises Identification Number (Prem ID or PIN): _____ (request from the office of the State Animal Health Official)
 - Premises Address: _____
 - Premises GPS Coordinates: _____
 - Animals* on primary premises: _____
 - Other business operations on premises? _____ If yes, what? _____
 - Secondary premises** locations (PIN, 911 address, or GPS coordinates): _____
 - Will be provided to Responsible Regulatory Officials if this premises is located in an FAD Control Area
 - *Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises.

*Animals that are susceptible to FAD include cattle, pigs, sheep, goats, and elk. For biosecurity guidance for dairy cattle and beef cattle, see www.securemilkgoats.org and www.securebeef.org.
 **Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises. When a premises becomes infected, all premises with the same PIN number will be considered to be infected.

1. Biosecurity Manager and Written Plan

The designated Biosecurity Manager for this site and their contact information follows:
 NAME: _____
 PHONE: _____
 EMAIL: _____
 In the event the Biosecurity Manager is away from the site, their designee's contact information is:
 NAME: _____
 PHONE: _____
 EMAIL: _____
 The Biosecurity Manager's contact information is posted _____.



Writing Biosecurity Plan

Enhanced Biosecurity Plan for FAD Prevention in _____

Date: _____
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 The Biosecurity Manager's contact information is posted _____.



Assignment Checklist

- Print copies aerial views of 1-2 site(s)
- Make a list of inputs/outputs
- Draw the PBA on the map
- Identify Biosecurity Manager for site
- Review checklist items 3-10 and fill out "easy" items in biosecurity templates
 - Make a list of challenges and bring to workshop



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Search

About Us Questions?

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SPS PLAN PORK PRODUCERS VETERINARIANS PACKERS REGULATORY OFFICIALS TRAINING MATERIALS

Move Your Pigs

LEARN MORE

SPS Plan for Continuity of Business

If foot and mouth disease (FMD), classical swine fever (CSF), or African swine fever (ASF) is found in United States livestock, Regulatory Officials will limit the movement of animals and animal products to try and control the spread of these very contagious animal diseases.

FMD, CSF, and ASF are not public health or food safety concerns. Meat will still be safe to eat.

The Secure Pork Supply (SPS) Continuity of Business Plan provides opportunities to voluntarily prepare before an outbreak. This will better position pork premises with animals that have no evidence of infection to:

