

South Carolina Department of Corrections
Division of Support Services
Agriculture Branch
Egg Laying Facility (MacCI)

BIOSECURITY PROGRAM

08/24/06

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Objectives

- A. To prevent the introduction of infectious diseases to livestock.
- B. To prevent the spread of disease from an infected area to an uninfected area.

Biosecurity/quarantine is an integral part of any successful poultry production system. It refers to those measures taken to prevent or control the introduction and spread of infectious agents to a flock. Such diseases, whether clinical or subclinical, significantly reduce the productivity, profitability and long term financial viability of a poultry operation.

Biosecurity in a correctional setting presents unique challenges that this program will address.

Biosecurity is about managing risk to meet the objectives stated above. It is essential that a risk assessment be conducted for each farming enterprise to establish what levels of risk exists in each phase of its operation and to introduce measures appropriate to these levels.

This manual identifies areas of risk and appropriate measures to minimize these risks. It is important, however, when undertaking the risk assessment that all factors that may impact on the biosecurity of the farm are taken into account. These examples include the location and layout of the farm, the disease status of the surrounding area, the proximity to other farms with avian species, and the interface with others in the area. The latter includes security, feed delivery, egg pickup and maintenance.

As in any management program, an audit process will be used to measure performance in meeting the established criteria. Management personnel on the farm may conduct part audits, while full audits covering all aspects of the operation will need to be done more formally. An audit team consisting of management personnel and animal health representatives will conduct audits at least annually. Depending on third party requirements, the audit process may need to be expanded to include other interest.

A biosecurity checklist for continuous improvement is attached as Appendix 6. Audits will be based on this checklist.

This program will be reviewed and amended as needed to achieve maximum results.

Date Implemented: August 28, 2006

Date Amended:

Date Amended:

Major Routes for Disease Transmission

Livestock

- Transfer of birds from farm to farm
- Dead Bird Disposal

Animals

- Wild birds, geese, ducks
- Feral and domestic animals
- Insects
- Rodents - rats/mice
- Domestic birds

People

- Staff, contractors, sales persons, maintenance personnel, neighbors, and other visitors
- Disease can be transmitted by hands, boots, clothing, tools, and carried articles

Equipment

- Vehicles - feed delivery trucks, egg pickup trucks, maintenance trucks, etc.

Air

- Transmission as an aerosol or dust

Water Supply

- Surface water attracts waterfowl and birds ingest contaminated water

Levels of Biosecurity

Level 1 - Routine Biosecurity Procedures

These procedures will be implemented and followed on a daily basis. They will give a high degree of assurance that diseases will not be carried into the poultry houses, and will reduce the risk of transmission between farms. These measures are seen as a minimum requirement.

Level 2 - High Risk Biosecurity Procedures

In the event of an outbreak of an emergency disease or serious endemic disease, High Risk Biosecurity Procedures will be implemented. These measures are seen as mandatory requirements.

SCDC Branch Chief for Agriculture will determine the appropriate biosecurity level.

Level 1 - Routine Biosecurity Procedures

1. Facility Standards

- 1.1 The farm site is defined as the processing facility, laying houses, feed bins, loading dock, equipment sheds and surrounding area.
- 1.2 Farm site gate must be lockable with appropriate signage indicating "**Biosecure Area - No Entry Unless Authorized**" or similar wording. In addition, signage should also indicate the visitor is to contact farm management before proceeding (i.e., via telephone and/or reporting to the Farm Office for clearance and instruction).
- 1.3 All persons entering the laying houses will enter through the processing facility, be properly sanitized, put on clean boots, protective clothing and headwear prior to entering areas.
- 1.4 Footbaths containing an iodophor at 200 PPM (or other suitable product) will be placed at laying house entrance. All persons exiting houses must follow procedures set forth in 1.3 before re-entering. Care must be taken to assure boots are properly cleaned prior to entrance into houses.
- 1.5 Footbaths will be inspected daily and replaced as required; color change will be used as an indicator.
- 1.6 Adequate dead bird disposal method will depend on environmental compliance requirements (incineration with after burner, composting as per Appendix 1, collection as per Appendix 2).
- 1.7 All poultry houses are designed and maintained so as to prevent the entry of wild birds and limit the access of rodents as far as is practical.
- 1.8 Landscape - trees and shrubs will not be in the immediate poultry house area (they attract wild birds), but set back to disperse air. Vegetation buffers for environmental compliance should not be compromised. The area around the poultry houses will be mowed and kept clear of debris.
- 1.9 Rodent bait stations will be placed at 15-yard intervals around the house.
- 1.10 No other avian species (poultry, ducks, geese, emus, ostriches, aviary birds, and pet birds) will be kept on the property.

2. Personnel Standards

- 2.1 Employees should not have contact with any other poultry, cage birds, emus, racing pigeons or pigs. An acceptable alternative will be to shower and change clothes before entering the farm site (see Appendix 3 "Personnel Quarantine Declaration").
- 2.2 Repair and maintenance personnel, who have had contact with poultry or other birds, should not enter laying houses unless it is an emergency. In such cases, they must use hand sanitizer, clean footwear and overalls. Routine maintenance should be conducted between batches when possible. Tools taken onto farm area must be thoroughly cleaned and free of dust and organic matter.
- 2.3 Delivery drivers, i.e., feed delivery, egg pickup, and others must not enter laying houses.

3. Operational Standards

- 3.1 Rodent Baiting - bait stations will be checked weekly and fresh bait will be laid monthly or more often if required. An activity log will be maintained (see Appendix 4 "Rodent Control Record").
- 3.2 Visitors - Visitors will park their vehicles at the farm office entrance and check in with Program Coordinator or his designee upon arrival and prior to entering any laying house or any area of the farm site.
- 3.3 Agency personnel may make occasional farm visits in the performance of their duties. Visits should be necessary and pre-approved whenever possible. All visitors must wear protective clothing, including headwear and boots, in laying houses. Hands must be sanitized before entering houses. Visiting personnel should make the minimal contact necessary to properly perform their duties, avoiding contact with the laying flock whenever possible.
- 3.4 Visitors to the facility, other than Agency personnel, will be limited to those approved by the Division Director of Support Services, Branch Chief for Agriculture or the Program Coordinator for the Egg Facility. Institutional staff will be permitted access as required in the performance of their duties.
- 3.5 An accurate visitor log will record all visits to the laying houses (see Appendix 5 "Visitor Farm Entry Permit").
- 3.6 Boots used on the farm site must not be worn or taken off-farm. They are the most likely method for spread of personal disease.
- 3.7 Trucks carrying feed should be cleaned/sanitized prior to loading.
- 3.8 Feed spills will be cleaned up as they occur. Feed attracts wild bird and rodents to the farm area.

- 3.9 Grass around the laying houses will be kept cut. Long grass attracts wild birds and rodents to the area.
- 3.10 End of Batch Procedures - after flock removal, the laying house doors will be kept closed until litter removal commences. After washing and disinfecting, laying house doors will be kept closed. If drying is required, ventilation fans will be used. Wild birds and animals must be kept out of the laying houses.
- 3.11 During cleanout, end of batch litter will be processed in accordance with DHEC regulations and approved farm plan.

Level 2 - High Risk Biosecurity Procedures

These are in addition to Level 1 procedures and should be implemented in the event of outbreaks of emergency and serious endemic diseases.

1. Facilities Standards

- 1.1 Gates will be locked.
- 1.2 Laying house doors will be locked
- 1.3 Processing plant doors will be locked.

2. Personnel Standards

- 2.1 No visitors. Outside personnel will discontinue routine visits. All visits must be approved as described within Level 1 paragraph 3.4.
- 2.2 On-site staff will accomplish routine repairs and maintenance. Repairs requiring outside personnel or contractors will be approved as described within Level 1 paragraph 3.4.

3. Operational Standards

- 3.1 Any vehicle (i.e., feed trucks, egg pickup, pickups, van, etc.), that must enter the farm area will be washed and disinfected at a wash pad before and after going onto the farm.
- 3.2 Vehicles not entering the farm but parking outside are to be washed and disinfected before visiting another farm.
- 3.3 No birds or litter will be moved on or off farm until disease status is clarified. If a major outbreak should occur, management will introduce further measures as required.

4. Additional Action

- 4.1 High Risk Biosecurity Procedures will be coordinated with public/animal health officials.
- 4.2 In the event of discovery of a catastrophic illness or disease in one or more laying houses and when so advised by public/animal health officials and approved by the

- SCDC Branch Chief for Agriculture, the effected house(s) will be immediately depopulated. Depopulation will be accomplished as quickly as possible and in accordance with DHEC regulations and recommendations of public/animal health officials.
- 4.3 Bird carcasses will be removed from the effected house(s) and taken directly to the pre-selected mass burial sight on MacDougall Farm. Burial will be accomplished by placing birds in prepared trenches and covering with liter, sawdust and dirt until covered sufficiently to facilitate composting and eliminate the possibility of carcasses being uncovered by wildlife.
 - 4.4 Litter and eggs from the effected houses may be used in the lower layers of the disposal pit but are not to be used as the final covering. Any remaining litter will be buried and covered over in the same manner.
 - 4.5 Depopulated house(s) will be thoroughly cleaned and sanitized as directed by public/animal health officials. All equipment used in the disposal process will be thoroughly cleaned and sanitized. All workers involved in the process will wear appropriate safety equipment.
 - 4.6 These procedures will also be followed whenever mass disposal of bird carcasses is required due to mechanical or natural disaster.
 - 4.7 Method of depopulation will be as directed by SCDC Branch Chief for Agriculture and will be decided on a case by case basis.
 - 4.8 In the event of depopulation, the Food Service Branch will immediately change the Master Menu to an alternative protein source until a source of fresh, frozen or powdered eggs can be located.
 - 4.9 Emergency procurement for replacement birds will be initiated for delivery when the birds have reached the proper age (18 weeks of age).
 - 4.10 The Food Service Branch will be outsourcing eggs until production can return to normal in six to eight months.

Appendix 1 - Dead Bird Composting

1. Rodents, cats, dogs, feral animals, scavenging bird, flies, must be kept away from composting areas.
2. Compostors should be away from laying houses and boundary lines.
3. Composting area must be kept neat and clean at all times.

Appendix 2 - Dead Bird Collection

1. Dead birds must be collected daily and taken to the incinerator site promptly. The dead bird count is to be posted in the appropriate log (see Appendix 7 "Dead Bird Collection Report").
2. Dead birds must be incinerated daily. Previous day's ashes will be removed and mixed into a composting material in the compost shed.

Appendix 3 - Farm Personnel Quarantine Declaration

I, _____ hereby agree to abide by my **EMPLOYER'S BIOSECURITY** rules and standards.

I understand the following quarantine rules/standards apply:

1. No avian species to be kept at my place or residence (i.e., no poultry or birds of any type to include, but not limited to ostriches, aviary birds or racing pigeons) without prior approval of my employer. If approved, I must shower and change clothes before entering the farm site.
2. No pigs are to be kept at my place of residence.
3. No untreated poultry manure from other farms is to be used at my place of residence.
4. No member of my household is to work in any area where contact can be made with poultry or pigs (i.e., on other farms or at hatcheries, processing plants, by-product plants or laboratories or with pick-up crews), unless I shower and change clothes before commencing work and with the notification and approval of my employer.
5. I will not visit poultry abattoirs, pig farms, or poultry shows unless approved by my employer and appropriate quarantine measures are taken.

Signature _____ Date _____

Witness _____ Date _____

Physical location of residence _____

Appendix 4 - Rodent Control Record

Rodent Control Record						
Date	Bait	Initials	Comments	Date	Bait	Initials

Appendix 5 - Visitor Farm Entry Permit

Authorized for Entry to: _____

Authorization for: _____

Date of entry: _____

Entry to the Farm is subject to the following conditions;

- I do not have poultry, caged birds or pigs at home.
- I have not been in contact with any avian species or untreated poultry manure within 12 hours.
- Wear protective clothing provided.
- Wear protective boots.
- Sanitize in the footbath provided on entering laying houses.
- Sanitize hands before entering laying houses.

I agree to the terms and conditions of entry. *

OBJECT OF VISIT _____

Name _____ Signature _____ Date _____

Approved by _____ Date _____

*Government representatives, inspectors, and audit teams will need to make special arrangements if they cannot comply with the entry permit conditions.

Appendix 6 - Biosecurity Checklist for Continuous Improvement

	Review Date	Visitor Control	Visitor Log	Footbath Usage	Protective Clothing	Equipment Cleaned	Area Cleaned	Reviewed By
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

	Review Date	Bird Proofing	Feed Spills	Wild Bird Control	Litter Disposal	Worker Training	Reviewed By
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

