

Appendix 5

Standard Operating Procedures

Each of the following Standard Operating Procedures are provided as examples, with some preceded by a template specific for that example. The template may be used to create a unique document for each farm. Alternatively, a universal template is presented at the end of this section, which can be used to create any Standard Operating Procedure. In its electronic form, details can be typed directly into the template or sections can be cut from the examples and pasted into the template. It is important, however, that the procedures outlined be edited to properly reflect the procedures actually used on the farm. While some specific details are given in these examples, they are generalizations only and do not necessarily need to be followed. The details in a farm plan must reflect the needs and conditions of that farm.

STANDARD OPERATING PROCEDURE

FARM NAME: Costa Lotta Farms

TITLE: Barn Entry Protocol

Date: September 10, 2006

Supersedes: New

Objective: To describe the procedures for entering or leaving the anteroom

Responsibility: All personnel.

Introduction:

In order to prevent any potentially infectious material from entering or leaving the barn, an orderly process for farm personnel and visitors to proceed through the anteroom is required.

Procedures:

1. Barn Entry
 - Rinse or brush outside footwear to remove soil and other organic material.
 - Step into footbath while entering anteroom.
 - Remove outside outerwear (coats, sweaters, hats) and hang in “outward” side of the anteroom barrier.
 - Wash or sanitize hands.
 - Remove outside footwear while stepping over barrier to “inward” side, putting on inside boots (or while putting on plastic boot covers).
 - Put on barn outerwear (coveralls, headcover).
 - Step through footbath while entering the barn area.

2. Barn Exit
 - Brush or scrape all manure off boots before leaving the bird holding area.
 - Step through footbath while leaving the bird holding area.
 - Remove outerwear.
 - Remove boots and step over barrier, putting on outside footwear.
 - If plastic boot covers used, remove while stepping out of the “inward” side of the anteroom and dispose into proper container.
 - Wash or sanitize hands.
 - Take outside outerwear, step through the footbath and depart.

STANDARD OPERATING PROCEDURE

FARM NAME: _____

TITLE: **Anteroom Maintenance**

Date: _____

Supersedes: _____

Objective: To describe the procedures for maintaining the anteroom

Responsibility: *Write in name or position of personnel responsible.*

Introduction:

A clean and tidy anteroom not only reflects on the perceived quality of care that the flock within the barn receives but also provides an environment in which the risk for accumulation of pathogens is significantly reduced. This will also be an environment that discourages the presence of pests that may be vectors of pathogens.

Procedures:

1. Cleaning and disinfection
 - The anteroom will be cleaned and disinfected every _____ weeks (*or after each flock is removed*).
 - Clean and disinfect the room according to the procedures outlined in the Clean and Disinfect SOP.
2. Routine Maintenance
 - Replace all used coveralls with clean outerwear every _____ days
 - i. Remove used coveralls from the barn in clean plastic bags for transport for washing
 - ii. Dump the coveralls directly into the washing machine and discard the plastic bags, preferably by incineration. Clean the floor and washing machine with a disinfecting cleaner to remove any potential contamination.
 - Check all supplies every _____ and ensure that a sufficient inventory is readily available. The following minimum amounts should be in stock:
 - _____ Hand sanitizer bottle at least _____ full.
 - _____ bottle of disinfectant for footbath.
 - _____ pairs of boot covers.
 - _____ head covers and masks.
 - _____ dust masks.
 - _____ pairs of spare coveralls.
 - If any of these supplies are below the minimum, have a new supply readily available.
 - Check and replace the footbath solution as required. This should be replaced at least once every 2 days and more as required.
 - Check for and remove any non-essential equipment every _____ days.
 - Sweep the floor and remove the debris every _____ days:
 - On the “inward” side of the barrier, sweep up all debris and dispose of it in the bird holding area (into the litter or manure pit).
 - On the “outward” side of the barrier, sweep up all debris and dispose of the sweepings in an area away from the barn entrance.

STANDARD OPERATING PROCEDURE

FARM NAME: Costa Lotta Farms

TITLE: Anteroom Maintenance

Date: September 10, 2006

Supersedes: January 30, 2005

Objective: To describe the procedures for maintaining the anteroom

Responsibility: Barn manager, hired hand

Introduction:

A clean and tidy anteroom not only reflects on the perceived quality of care that the flock within the barn receives but also provides an environment in which the risk for accumulation of pathogens is significantly reduced. This will also be an environment that discourages the presence of pests that may be vectors of pathogens.

Procedures:

3. Cleaning and disinfection
 - The anteroom will be cleaned and disinfected every 8 weeks and after each flock is removed.
 - Clean and disinfect the room according to the procedures outlined in the Clean and Disinfect SOP.
4. Weekly Maintenance
 - Replace all used coveralls with clean outerwear
 - Remove used coveralls from the barn in clean plastic bags for transport for washing
 - Dump the coveralls directly into the washing machine and discard the plastic bags, preferably by incineration. Clean the floor and washing machine with a disinfecting cleaner to remove any potential contamination.
 - Check all supplies and ensure that a sufficient inventory is readily available. The following minimum amounts should be in stock:
 - Hand sanitizer bottle at least ½ full.
 - ½ bottle of disinfectant for footbath.
 - 8 pairs of boot covers.
 - 8 head covers and masks.
 - 8 dust masks.
 - 2 pairs of spare coveralls.
 - If any of these supplies are below the minimum, have a new supply readily available.
5. Daily Maintenance
 - Check and replace the footbath solution as required. This should be replaced at least once every 2 days and more as required.
 - Remove any non-essential equipment.
 - Sweep the floor and remove the debris:
 - On the “inward” side of the barrier, sweep up all debris and dispose of it in the bird holding area (into the litter or manure pit).
 - On the “outward” side of the barrier, sweep up all debris and dispose of the sweepings in an area away from the barn entrance.

STANDARD OPERATING PROCEDURE

FARM NAME: Costa Lotta Farms

TITLE: Barn Cleaning and Disinfection

Date: September 10, 2006

Supersedes: July 1, 2004

Objective: To describe the procedures for cleaning and disinfecting a barn and anteroom

Responsibility: Barn manager, farm hand

Introduction:

Thorough cleaning and disinfection of the barn and anteroom are critical control points for the reduction of potential pathogens. Following proper procedures is essential for ensuring that any challenge is reduced to a minimum. Check labels to make sure that cleaning agents and disinfectants are compatible and mix according to label directions.

Procedures:

1. Clean all moveable equipment and, if necessary, remove it from the barn.
2. Remove manure and litter to the appropriate location. Make sure trailings left behind when the manure was moved are also cleaned up.
3. Blow down the barn, beginning with the highest surfaces and working the debris down to the floor.
4. Sweep out dislodged debris.
5. Thoroughly soak all surfaces with water plus _____ (*detergent or cleaner*) and leave overnight.
6. With a high-pressure sprayer using _____ (*detergent or cleaner*), wash down ceiling, walls, fixed equipment, and then floors.
7. Wash all debris out of the barn.
8. Rinse all surfaces with water.
9. Empty all residual water from feeder trays.
10. Allow all surfaces to dry thoroughly.
11. Spray all surfaces with _____ (*disinfectant*), beginning at the ceiling and spraying down. Make sure the surfaces are thoroughly covered just to the point of run-off.
12. Empty residual disinfectant from feeder trays or any other equipment in which liquid may accumulate.
13. Allow ____ minutes contact time (*refer to disinfectant instructions*) or allow all surfaces to dry thoroughly.
14. If required, rinse disinfected surfaces.
15. Repeat the disinfectant treatment.
16. Allow all surfaces to dry thoroughly.
17. Disinfect equipment belonging in the barn before returning it.
18. Treat the barn as biosecure from this point forward.

STANDARD OPERATING PROCEDURE

FARM NAME: _____

TITLE: **Cleaning and Disinfection of Equipment**

Date: _____

Supersedes: _____

Objective: To describe the procedures for cleaning and disinfecting equipment

Responsibility: *Write in name or position of personnel responsible.*

Introduction:

Vehicles and equipment are common vectors for pathogens contained within organic debris left on their surfaces. Proper routine cleaning and disinfection will help to ensure that organic material does not accumulate and become more difficult to remove. Each piece should be carefully assessed so that care can be taken to prevent damage to sensitive areas. Make sure detergents and disinfectants are compatible and mixed according to label directions.

Procedures:

1. Using a high-pressure sprayer, thoroughly soak all surfaces with _____ (*detergent or cleaner*).
2. Allow the equipment to stand overnight, if possible.
3. Wash the equipment using _____ (*detergent or cleaner*) in a high pressure sprayer. Make sure all organic material is removed.
4. Rinse the equipment thoroughly.
5. If the equipment is in a barn to be cleaned, remove it after rinsing.
6. Allow the equipment to dry.
7. Spray the equipment with _____ (*disinfectant*) thoroughly.
8. If required, rinse the disinfectant after allowing adequate contact time (*refer to disinfectant directions*).
9. Allow the equipment to dry then repeat application of disinfectant.
10. If the equipment is to be returned to a barn, do so only after the barn has been disinfected.

STANDARD OPERATING PROCEDURE

FARM NAME:

TITLE: **Mortality Monitoring for Cage Layers**

Date: _____

Supersedes: _____

Objective: To describe the procedure used to monitor the amount and cause of mortality in the cage layer barn

Responsibility: *Insert name or position of personnel responsible*

Introduction:

The mortality level in the cage layer barn is normally low, but must be monitored closely to identify early an outbreak of disease that might compromise the birds' welfare and production and also be a threat to other birds on the farm or neighbouring farms. This procedure is used to monitor the amount and cause of mortality in the layer barn.

Procedures:

1. Walk the barn at least _____ per day to check for mortalities. Take the time to look in all cages.
2. Collect all sick or dead birds seen.
3. Record the number of sick or dead birds and the mortality categories on the record sheet.
4. Mortality categories are as follows:
 - Culls - Live birds that are removed because of small size or unthriftiness.
 - Other - Sick or dead birds that do not fit the cull category.
5. Place the birds into plastic bags and freeze immediately (or incinerate, or compost).
6. If more than _____% of birds are found dead on each of two or more consecutive days, or more than _____% of birds are found dead on one day, notify the consulting veterinarian and refer to the Mortality Response SOP.

STANDARD OPERATING PROCEDURE

FARM NAME: Costa Lotta Farms

TITLE: Mortality Monitoring for Cage Layers

Date: September 10, 2006

Supersedes: January 15, 2005

Objective: To describe the procedure used to monitor the amount and cause of mortality in the cage layer barn

Responsibility: Barn manager, farm hand

Introduction:

The mortality level in the cage layer barn is normally low, but must be monitored closely to identify early an outbreak of disease that might compromise the birds' welfare and production and also be a threat to other birds on the farm or neighbouring farms. This procedure is used to monitor the amount and cause of mortality in the layer barn.

Procedures:

1. Walk the barn at least twice per day to check for mortalities. Take the time to look in all cages.
2. Collect all sick or dead birds seen.
3. Record the number of sick or dead birds and the mortality categories on the record sheet.
4. Mortality categories are as follows:
 - Culls - Live birds that are removed because of small size or unthriftiness.
 - Other - Sick or dead birds that do not fit the cull category.
5. Place the birds into plastic bags and freeze immediately in the mortality freezer for later incineration.
6. When there are 10 dead chickens in the freezer, take the carcasses to the incinerator and destroy them immediately.
7. If more than 2 birds in one barn are found dead on each of two or more consecutive days, or more than 5 birds are found dead on one day, notify the consulting veterinarian and refer to the Mortality Response SOP.

STANDARD OPERATING PROCEDURE

FARM NAME:

TITLE: **Mortality Monitoring for Breeder or Table Egg Layer Replacement Birds**

Date: _____

Supersedes: _____

Objective: To describe the procedure used to monitor the number and categories of mortality in broiler breeders or free-run table egg layers

Responsibility: *Write in name or position of personnel responsible*

Introduction:

Growing birds are susceptible to a number of diseases, and close observation and good records of the health of these birds is an essential component of the biosecurity protocol. Good early flock health will also ensure good production during the lay period.

Procedures:

1. Walk the barn at least _____ per day to remove any mortality.
2. Collect any sick or dead birds observed.
3. Record the number of dead or culled birds and the mortality categories.
4. Mortality categories are as follows:
 - Culls - Live birds removed because of small size or unthriftiness.
 - Legs - Live birds removed because of leg problems or dead birds with observable leg problems.
 - Other - Dead birds that do not fit into the previous two categories.
5. Put the mortalities into a plastic bag for storage in the freezer (or into compost, into incinerator)
6. If more than _____% of birds are dead over each of 2 or more consecutive days, or more than _____% are dead on any given day, call the consulting veterinarian and refer to the "Mortality Response" SOP.

STANDARD OPERATING PROCEDURE

FARM NAME: Costa Lotta Farms

TITLE: Mortality Monitoring for Layer Replacement Pullets

Date: September 10, 2006

Supersedes: April 1, 2005

Objective: To describe the procedure used to monitor the number and categories of mortality in broiler breeder or free-run table egg layer replacement birds

Responsibility: Barn manager, Farm hand

Introduction:

Growing birds are susceptible to a number of diseases, and close observation and good records of the health of these birds is an essential component of the biosecurity protocol. Good early flock health will also ensure good production during the lay period.

Procedures:

1. Walk the barn at least twice per day to remove any mortality.
2. Collect any sick or dead birds observed.
3. Record the number of dead or culled birds and the mortality categories.
4. Mortality categories are as follows:
 - Culls - Live birds removed because of small size or unthriftiness.
 - Legs - Live birds removed because of leg problems or dead birds with observable leg problems.
 - Other - Dead birds that do not fit into the previous two categories.
6. Put the mortalities into a plastic bag for storage in the freezer. If more than 15 birds have accumulated, remove them for immediate incineration.
6. If more than 3 birds are dead over each of 2 or more consecutive days, or more than 8 birds are dead on any given day, call the consulting veterinarian and refer to the "Mortality Response" Standard Operating Procedure.

STANDARD OPERATING PROCEDURE

FARM NAME:

TITLE: **Mortality Monitoring for Routine Broiler Grow-outs**

Date: _____

Supersedes: _____

Objective: To describe the procedure for recording and monitoring the categories of broiler mortality during normal grow-out conditions

Responsibility: *Write in name of those directly responsible for gathering and recording mortality*

Introduction:

Removal of mortality from the barn will help to reduce any reservoir of disease-causing organisms that could be a threat to the flock. Keeping a close record of those mortalities will help in the assessment of flock health and alert personnel to the possibility of an impending disease outbreak. The following procedures are followed to monitor mortality during routine broiler grow-outs.

Procedures:

1. Walk the barn and closely observe the flock at least _____ per day. This is done every day that birds are in the barn.
2. Remove birds that are found dead or culled as they are found. Kill culled birds immediately and put all dead birds into the dead bird pail.
3. Keep a count of each mortality category.
4. Record the number of dead birds in each mortality category in the appropriate space and write the total mortality in the center box.
5. Mortality categories are as follows:
 - First Week:
 - a) Culls - Live chicks removed as being small or unthrifty.
 - b) Legs - Live chicks removed because of leg problems or dead chicks with observable leg problems.
 - c) Starve-outs - Dead chicks that are very small and light weight.
 - d) Other - Any mortality that does not fit the previous three categories.
 - Remainder of Grow out:
 - a) Culls - Live birds removed because of small size or unthriftiness.
 - b) Legs - Live birds removed because of leg problems or dead birds with observable leg problems.
 - c) Acute Death Syndrome - Large, healthy-looking birds that are found dead, usually on their back. Birds in this category will have feed in their crops and/or gizzards.
 - d) Other - Dead birds that do not fit into the previous three categories.
6. Place the mortality into a plastic bag and put into the freezer, or take carcasses immediately to incinerator or compost.

7. If more than ____% of birds are found dead on each of two or more consecutive days, or more than ____% of birds are found dead on one day, set a sample of typical mortalities aside in a cool place and notify the veterinarian (or submit samples to the veterinarian or diagnostic laboratory). Refer to the SOP on storing or transporting mortalities.
8. If a predominant number of mortalities are in the “Other” category, begin the self-quarantine procedure. Refer to the self-quarantine SOP.

STANDARD OPERATING PROCEDURE

TITLE: Response Protocol for Changes in Mortality in Broiler Chickens

Date: _____

Supersedes: _____

Objective: To describe actions to be taken when a rise in mortality occurs

Responsibility: Write in the name of the persons responsible for taking this action

Introduction:

Any rise in mortality must be addressed quickly and if possible, a tentative diagnosis established and appropriate treatment commenced quickly.

Procedures:

1. Mortality during the first week

Identify the category in which the highest mortality is seen.

If the highest mortality is in the “starve-out” category:

- Check all feeders to make sure there is an adequate feed supply.
- Check all waterers to make sure water is available.
- Check barn temperatures to ensure proper settings.
- Observe the chicks closely for behavior. If they are clustering in areas away from feed or water, check temperature in the vacated areas.
- Adjust temperature, if possible, so that the comfort zone is around the feeders and waterers.
- Contact consulting veterinarian and advise of increased mortality.

If the highest mortality is in the “legs” category:

- Record the number of mortalities daily and indicate a description of the problem.
- Notify the consulting veterinarian of the increased mortality.

If the highest mortality is in the “cull” category:

- Check all feeders to make sure there is an adequate feed supply.
- Check all waterers to make sure water is available.
- Check barn temperatures to ensure proper settings.
- Observe the chicks closely for behavior. If they are clustering in areas away from feed or water, check temperature in the vacated areas.
- Adjust temperature, if possible, so that the comfort zone is around the feeders and waterers.
- Record the number of culls daily.
- Contact consulting veterinarian and advise of increased mortality.

If the highest mortality is in the “other” category:

- Record the predominant observation from the dead birds.
- Notify the consulting veterinarian of the increase in mortality.
- Refrigerate a sample of at least 3 whole, freshly dead birds that show signs typical of the mortalities.
- Freeze up to 6 dead birds for later necropsy.

2. Mortality during the remainder of the grow-out period

Identify the category in which the highest mortality is seen:

If the highest mortality is in the “Acute Death” category:

- Necropsy a sample of birds to ensure they meet the definition of “acute death” or submit a sample of mortalities to the veterinarian or diagnostic laboratory.
- If the “acute death” definition is not met, reclassify the mortalities as “other.”
- If the “acute death” definition is met, record the number of mortalities.
- Notify the consulting veterinarian of the increased mortality.

If the highest mortality is in the “legs” category:

- Record the number of mortalities and a description of the predominant leg problem.
- Notify the consulting veterinarian of the problem.
- Refrigerate and hold a sample of the mortalities for later necropsy.

If the highest mortality is in the “culls” category:

- Record the number of culls and a description of the predominant reason for culling.
- Check all feeders to make sure there is an adequate feed supply.
- Check all waterers to make sure water is available.
- Check barn temperatures to ensure proper settings.
- Observe the birds closely for behavior. If they are clustering in areas away from feed or water, check temperature in the vacated areas.
- Notify the consulting veterinarian of the problem.
- Refrigerate a representative sample of the culled birds for later necropsy.

If the highest mortality is in the “other” category:

- Record the number of mortalities and the predominant observations from the dead birds.
- Notify the consulting veterinarian of the increased mortality.
- Label and refrigerate a representative sample (at least 3 birds) showing signs typical of the mortality.
- Freeze up to six whole freshly dead birds, if available, that show signs typical of the mortalities.

STANDARD OPERATING PROCEDURE

FARM NAME:

TITLE: **Self-quarantine**

Date: _____

Supersedes: _____

Objective: To provide the steps required imposing a self-quarantine if an infectious disease is suspected

Responsibility: *Write in name or position of personnel responsible.*

Introduction:

On the suspicion of an infectious disease, characterized by a rise in the number of sick or dead birds, it is important to take all possible measures to limit the spread of the infecting organism. These measures will help to protect other birds on your farm that are not yet affected and other poultry operations in your area.

Procedures:

1. Lock the gate to the Controlled Access Zone.
2. Begin enhanced biosecurity procedures:
 - Restrict access to the affected barn. If possible assign 1 person to that barn only.
 - Service unaffected barns first.
 - Full clothing change after servicing affected barn(s).
 - Restrict any movement by non-essential personnel between residential area and controlled access zone.
3. Postpone any non-essential farm visits.
4. Notify essential farm visitors (e.g. feed delivery) of the situation and request they make delivery to your farm the last of the day.
5. Postpone any vaccinations.
6. Postpone any bird movement on or off of the farm.
7. Dispose of all carcasses on-farm (protected compost or incineration).
8. Clean and disinfect any vehicle leaving the farm (including personal vehicle).
9. Change into non-farm clothing when leaving the farm.

STANDARD OPERATING PROCEDURE

FARM NAME:

TITLE: **Rodent Control Program**

Date: _____

Supersedes: _____

Objective: To document the procedures, including trapping or baiting, for maintaining rodent control

Responsibility: *Write in name or position of personnel responsible.*

Introduction:

Rodent control is an essential element of biosecurity. A specific control program will help to reduce or eliminate a rodent population.

Procedures:

1. General Control

- a) Daily: Clean up any spilled feed.
- b) Weekly: Remove any clutter or debris inside or outside the barn that may provide cover for rodents.
- c) Weekly: Cut grass and vegetation around each barn for a distance of 15 metres.
- d) At cleanout: Inspect inside and outside perimeter for openings and defects and repair immediately.

2. Baiting Procedures

- a) Place bait stations at _____ metre intervals around each barn.
- b) Place a second, outside line of bait stations at _____ metre intervals around all barns.
- c) Weekly: Check all bait stations and record number of dead rodents.
- d) Weekly: Remove and dispose of all dead rodents.
- e) Weekly: Replace any consumed bait at each station.
- f) Quarterly: Review bait usage and replace all bait at all stations with a different class of rodenticide.

INSTRUCTIONS FOR FILLING OUT A STANDARD OPERATING PROCEDURE TEMPLATE

Standard Operating Procedures are fundamentally “recipes” that describe how you wish a procedure to be done on your farm. For some Standard Operating Procedures, the steps may be identical for all farms; others will vary widely. For that reason, these documents must be prepared uniquely for each farm. The attached electronic template is designed to allow you to build your own Standard Operating Procedures quickly and easily.

The Standard Operating Procedures presented in Appendix 5 of the Biosecurity Reference Manual are examples only, but they may be used if they reflect the practices of the farm accurately. The electronic template may be used to produce farm Standard Operating Procedures either from scratch or by cutting and pasting from the example documents. Electronic versions of the documents can be provided if you choose to follow this route.

When the template is opened, you will be asked if you wish to open it as a “Read-Only” document. By answering “yes”, it will open and allow you to make all the changes that you want, but then prompt you for a file name when you save it. This way, the template will remain intact for repeated use.

The following page gives directions for filling out each field in the template.

STANDARD OPERATION PROCEDURE
Template Instructions

FARM NAME: Type in your farm name

Title: Give the SOP a title (e.g. “Anteroom Maintenance”)

Date: Enter the date this SOP was written

Supersedes: If this is a new SOP, enter “New” or “N/A”; if a revised SOP, enter the date of the previous one.

Responsibilities: Type in the name or position of the people who will be responsible for carrying out these procedures. Giving each employee a position or “title” then using that “title” here means that you don’t have to change the SOP every time someone leaves your employment.

Objective of This SOP:

Employees responsible for carrying out the SOP will have a much better understanding and will do a much better job of the tasks if they understand the reasons for doing it. This also keeps the document focussed on the specific purpose, rather than growing into something too complicated as time goes on and revisions are made.

Procedures:

Enter the procedures in a step-by-step manner, like writing a recipe. This makes the procedure clear and concise, improving compliance. Write the procedures in the simplest terms, without compromising the spirit of the objective. Also, make sure each step put in this section meets with the objective.

STANDARD OPERATION PROCEDURE

FARM NAME: [Click here and type Farm Name]

Title: [Click here and type title of SOP]

Date: [Type date of this document]

Supersedes: [Enter date of previous version]

Responsibilities: [Click here and enter name or position of personnel responsible]

Objective of This SOP:

[Click here and type a description of the purpose of this SOP]

Procedures:

[Click here and enter step-by-step procedures]

