

PEQAP OPERATIONS ANNEX

2021

Fly Control Added, Vegetation Clarified

SECTION I

PEQAP Participation

PEQAP Organization

PEQAP Participant Enrollment Form/Conditions for Participation

PEQAP Layer House Initial Evaluation Form

PEQAP ORGANIZATION

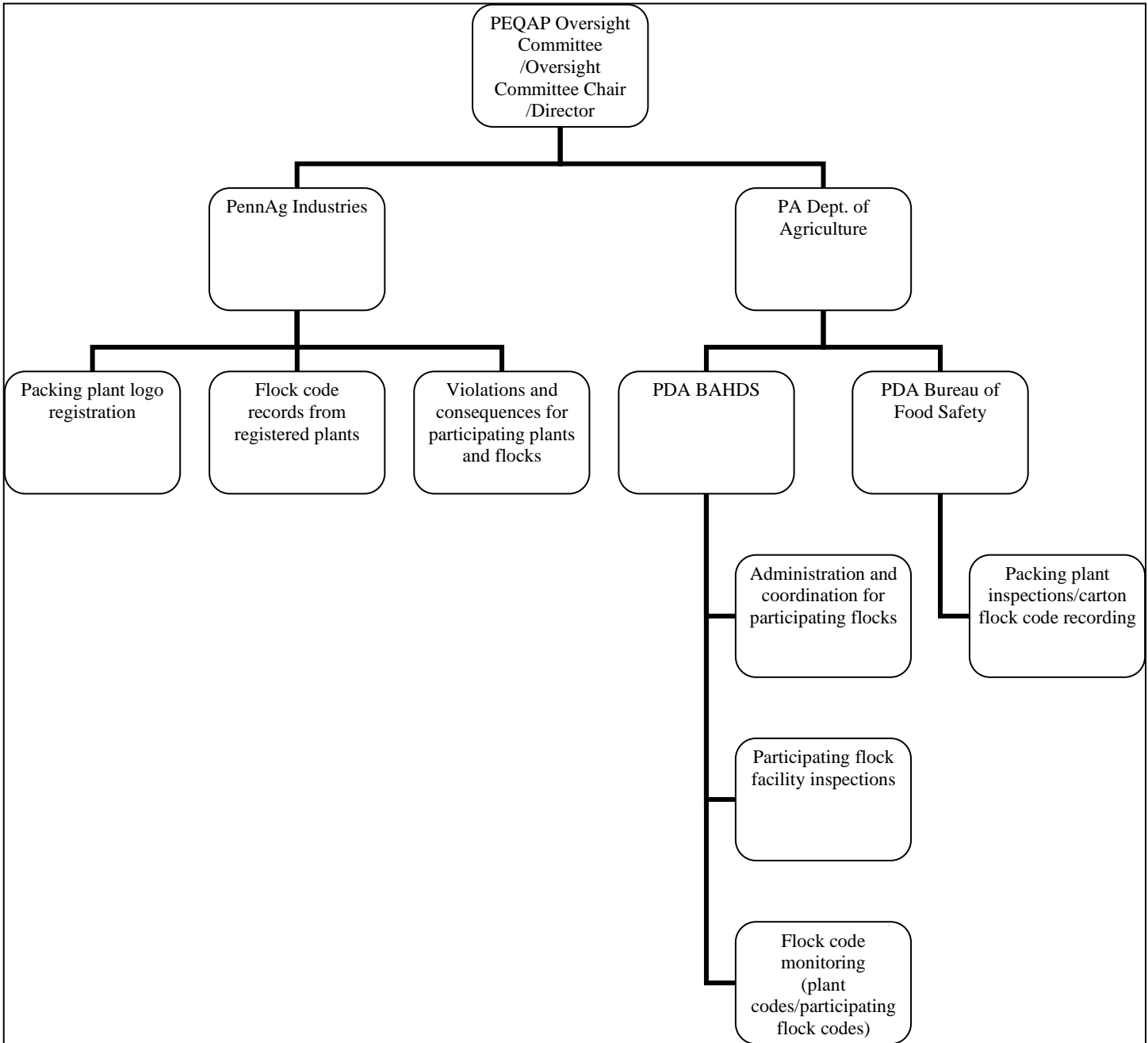


Figure 1: PEQAP Organization

PEQAP PARTICIPANT ENROLLMENT FORM/CONDITIONS FOR PARTICIPATION



PEQAP ORGANIZATION AND CONDITIONS FOR PARTICIPATION

- A. The Oversight Committee for the Program consists of representatives of PennAg Industries Association Poultry Council, the Pennsylvania Department of Agriculture, the Pennsylvania Department of Health, Penn State University, The University of Pennsylvania, and the Pennsylvania Poultry/Egg Industry.
- B. The Program is administered and coordinated by a Program Director, who is appointed by the PennAg Poultry Council.
- C. Any poultry producer in Pennsylvania may participate in the Program. Participation of flocks outside Pennsylvania will be at the discretion of the Oversight Committee, and flocks located outside of PA will be required to pay for testing.
- D. Houses/facilities wishing to participate in PEQAP must pass an inspection by the PDA PEQAP Coordinator before being accepted into the Program and before utilizing the PEQAP logo on egg cartons.
- E. Procedures to be followed are based on specific protocols, as adopted by the Oversight Committee.
- F. The Oversight Committee may modify operating protocols and other basic procedures.
- G. Participation in the Program is voluntary and any participant may withdraw at any time.
- H. Penn Ag Industries may terminate participation in the Program if the participant does not comply with the "Conditions for Participation".
- I. PEQAP participants withdrawing a flock (identified by Q number) from the Program due to non-compliance will be required to pay for testing of the next flock for 1 year when returning to the Program. An environmental test (LY6) is required when returning to the Program. If the premises have been off the Program for more than 2 years, any flock will be treated as a new flock joining the Program and must meet the Program requirements before utilizing the logo (and may ask to defer testing fees).
- J. Essential flock and testing information is considered confidential, but no evidence of SE contamination of the participant flock, premises, or eggs produced thereon shall be withheld from the PEQAP Compliance Committee.

- K. Although the poultry house is the basic unit for Program operations, an entire complex may be required to enter the Program, for biosecurity purposes.
- L. Participation in the Program offers no warranty, expressed or implied that eggs produced under this Program are free of *Salmonella enteritidis*.
- M. Nothing in these conditions shall be or become the basis for a claim for damages of any nature whatsoever against representatives of the Pennsylvania Egg Quality Assurance Program, PennAg Industries Association Poultry Council, the Pennsylvania Department of Agriculture, or the Pennsylvania Department of Health.
- N. Representatives of the Pennsylvania Egg Quality Assurance Program may conduct independent spot-checking of compliance with Program protocols to verify flock status and adequacy of testing.
- O. If a flock of any participant is implicated in a trace-back from an egg-associated SE outbreak, Program testing results will be shared with the responsible government agencies and applicable FDA requirements would supersede those imposed by the Program. Participants may be exempt from trace-back requirements if their flocks have been subjected to similar or equivalent testing protocols in the Program, subject to FDA approval.
- P. Participant Responsibility (Refer to the Operations Annex for Protocols)
 - Participants agree that they or their representatives shall:
 1. Cooperate with the PEQAP Oversight Committee, PDA and PDH in carrying out the prescribed monitoring and prevention procedures, including compliance with on-farm rodent control and sanitation management practices as established by the PEQAP Oversight Committee.
 2. Participate in training sessions on sample collection and SE-prevention procedures.
 3. Conduct sample collection in accordance with program protocols covering testing of chicks, pullets, eggs, and environmental samples. Only trained and certified collectors may collect and submit samples for PEQAP testing.

4. Transport samples to a designated laboratory
5. Estimate the rodent population by rodent indexing at least once each month and maintain a standard rodent log provided by PDA for each flock in the program. Execute an appropriate rodent control program as needed
6. Restrict eggs, through diversion to pasteurization, hard cooking, and other cooking to sell as a processed egg product, or equivalent in accordance with the requirements of this agreement if eggs are positive for SE. The participant must maintain records of diversion for at least six months
7. Clean and disinfect environmentally positive (SE) layer or pullet houses between flock placements according to standards set by the PEQAP Oversight Committee.
8. Contact the PEQAP inspector to schedule a C&D inspection of positive houses that have been wet-washed or dry-cleaned. Failure to schedule an inspection, or failure to pass inspection, will result in the house being out of compliance, and the new flock will be considered to be positive. All testing will be at the flock owner's expense for the life of that flock (non-PEQAP in-state testing fees).
9. Maintain adequate biosecurity and practice good poultry management according to standards set by the PEQAP Oversight Committee.

Please return to:

PA DEPT. OF AGRICULTURE
BAHDS-PEQAP
2301 NORTH CAMERON ST.
HARRISBURG, PA 17110-9408
ATTN: NICK JENNINGS
njennings@pa.gov

Please keep these pages for your information.

These Conditions for Participation in the Pennsylvania Egg Quality Assurance Program have been read and hereby accepted by:

First name: MI: Last name:
 Address: City: Zip code:
 County: Phone: Premise ID:
 Flock or farm name: Flock ID Q#:
 Company responsible for this flock:

How many houses:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
House type:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
# of cage banks:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
# of banks:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

How many houses:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
House type:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
# of cage banks:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
# of banks:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Signature of individual authorized to approve and ensure participation in the Pennsylvania Egg Quality Assurance Program Date

Signature of flock manager Date

Signature of flock owner Date

Signature of Pennsylvania Department of Agriculture authorizing individual Date

PENNSYLVANIA EGG QUALITY ASSURANCE PROGRAM LAYER HOUSE – INITIAL EVALUATION FORM

FLOCK ID # PREMISES ID # DATE:



pennsylvania
DEPARTMENT OF AGRICULTURE
BUREAU OF ANIMAL HEALTH AND DIAGNOSTIC SERVICES

**PENNSYLVANIA EGG QUALITY
ASSURANCE PROGRAM LAYER HOUSE –
INITIAL EVALUATION FORM**

FLOCK INFORMATION:

Number of houses on premises:

Type of houses: High-rise Manure belt system Aviary
 Shallow pit Floor house

Number of cage banks: Number of tiers: Number of frames:

Water source: Water cup Nipples

House capacity: Placement date: Twenty week date:

Non-caged house dimensions: [W] by [L]

Farm Vaccination Program:

None Live SE Killed SE bacterin

What Company?

Farm manager's assessment of rodent activity:

High Moderate Low None

Current rodent control program:

Egg processor receiving eggs:

Approximate age of poultry building/equipment:

Comments:

Date: Inspector name:

SECTION II

PEQAP Inspections

PEQAP On-Farm Inspection Form

Instructions for PEQAP Inspection Form

PEQAP Flock House Inspection Compliance Flow Chart

REV 4-26-21					PEQAP INSPECTION FORM					
Inspector:					Participant Name:					
DATE:										
Is this a Reinspection? No Yes Date of Initial Inspection_____										
Ratings:		S= Satisfactory			U= Unsatisfactory					
					S	REMARKS				
I. Exterior					U					
A. Vegetation and debris cleared/maintained within 3 feet of										
B. Structural exterior rodent exclusion.										
C. Strategically placed exterior and properly maintained										
D. Current Rodent Control Logbook (S or U)										
E. Record last 3 months Rodent Indexes-average for each month if done weekly.										
Date: _____ RI: _____ # of mice caught _____										
Date: _____ RI: _____ # of mice caught _____										
Date: _____ RI: _____ # of mice caught _____										
F. Current Fly Control Logbook (S or U)										
G. Record last 1 month's Fly Index and method										
Date:_____ Method:_____ Fly Index:_____										
II. Egg Storage Area										
A. Sanitation of egg cooler and packing area.										
B. Temperature of egg cooler 45°F or less.					critical					
C. Condition of egg packing supplies.										
Poor	Fair	Good	Provider:							
Materials are (circle): new fiber/ used fiber/ plastic										
Condition of carts/pallets.										
Poor	Fair	Good	Provider:							
Pallets are (circle): wood / plastic; Carts are: metal / other										
III. Interior of Poultry House										
A. Condition of minimum of 12 functioning live rodent traps.										
B. Strategically placed interior and properly maintained covered bait stations.										
C. Structural interior rodent exclusion.										
D. Sanitation within poultry house.										
		PASS (Satisfactory score for II.B. (cooler temp) and 8/10 (80%) of other items)							FAIL	

Areas to improve/comments:

Inspector Signature: _____

Producer Signature: _____

PEQAP

On-Farm Verification of Rodent and Sanitation Management Practices by the Pennsylvania Department of Agriculture

Biosecurity: In addition to observing PDA BAHDS biosecurity protocols, inspectors must comply with a participant's biosecurity requirements, including down time between flocks. If a company service person accompanies the inspector and requests inspections on more than one farm per day within that company, the inspector may comply. If there are no minimum down time requirements, a minimum down time of 24 hours between healthy flocks is required.

Inspection Form Instructions: The critical item (egg cooler temperature of $\leq 45^{\circ}$ F) on the inspection form must be marked "satisfactory" for the poultry house to pass the inspection. Additionally, approximately 80% (7/9) of the other inspection criteria must be marked "satisfactory" for the poultry house to pass inspection. At the inspector's discretion, failed items other than the critical cooler item may be fixed while the inspector is there if the repair can be done quickly.

I-A. Vegetation and debris cleared from outside of building. Satisfactory if:

A minimum three-foot section is cleared of vegetation and is being maintained around the entire perimeter of the poultry building. This perimeter shall contain either crushed stone 1 to 1½ inches deep or maintained grass with a maximum height of six inches. A larger perimeter of residential-height grass (or stone) extending out to ten feet is encouraged. Bare dirt is acceptable but may be undesirable for other reasons. An occasional clump of high vegetation is allowed. Debris (old equipment, wood, pipes, blocks, tires, etc.) should be kept at least three to ten feet away from the building.

Added 11/17/21: Those farms with ornamentals already planted by the egg room door may keep them, but they must be trimmed up off the ground to avoid rodent harborage and must have rocks or other hard substrate underneath and surrounding the plant-no mulch is allowed. New ornamental plantings within the 3 feet around any building may not be added to these farms or other farms on PEQAP.

I-B. Exterior rodent exclusion. Satisfactory if:

Building is structurally secure, preventing or greatly reducing the opportunity for rodent entry. If any holes are present, the item shall be marked "unsatisfactory". Mice may be able to gain entry through holes as small as ¼ inch.

Organic bird access doors which can be closed tightly are satisfactory. If a door is open when the inspection is conducted, the service person or flock manager must demonstrate that the door can be closed tightly.

Pit doors which can be closed tightly are satisfactory. If a door is open when the inspection is conducted, the service person or flock manager must demonstrate that the door can be closed tightly.

Access doors which can be closed tightly are satisfactory.

Buildings with pit doors, access doors and/or organic bird access doors which cannot be closed tightly must have other methods of rodent control in place to target incoming rodents with appropriate numbers and placement of external covered bait stations (refer to I-C). If the required

bait stations are present and maintained properly at doors that cannot be closed tightly, I-B can be marked “satisfactory”.

I-C. Exterior rodent bait stations. Satisfactory if:

- Properly maintained covered exterior bait stations are required near manure belt system areas, ground level fan housing areas (if bottom louvers do not close properly) and wherever there is evidence of external rodent harborage sites near the poultry building.
- Properly maintained covered exterior bait stations are required if door openings (all organic bird access doors, pit doors and other access doors which can't be closed tightly) allow rodents to enter the building.
- At organic bird access doors, properly maintained covered bait stations must be placed as close to each bird access door as possible, but do not have to be placed inside of the bird yard.
- At pit doors and other access doors (not including organic bird access doors) which can't be closed tightly, properly maintained covered bait stations must be placed within three feet of both sides of the door jambs, either inside or outside of the house.
- Required bait stations (as listed above) must contain fresh bait placed within the last month. If paraffin wax bait preparations (blocks) are used in covered bait stations and bait is fresh, every-other-month applications are satisfactory.

I-D. Current rodent control logbook. Satisfactory if:

The rodent control logbook is up-to-date with a minimum of monthly entries. The entries must include dates of bait applications, types of bait used, rodent indexes standardized to a weekly count, dates of live rodent trap servicing, and initials or signatures of individuals responsible for tasks. A minimum of one rodent index (any seven-day evaluation period) must be completed and recorded each month. The log must be maintained on the premises. Comments, noting specific rodent activity at locations within certain areas of the poultry house (including a particular bait station or live rodent trap) are encouraged.

I-E. Record last three months of rodent indexes (RI) (not included in pass/fail criteria).

Determination of rodent index (RI): A two step process that starts with recording the count of rodents captured each period in live traps and adjusting this rodent count for the number of traps and days in which the traps are deployed in the house. The adjusted mouse (rodent) count (AMC) is compared to the scale for a rodent index. Twelve live rodent traps placed for seven days are considered the standard deployment for this indexing method. It is recommended (not required) that approximately one-half ounce of chicken feed is placed in the traps with the traps set in the areas most likely to catch rodents (along walkways and against walls). The traps, which remain in the poultry house for seven days, are checked twice within the seven day period, and any trap that did not catch a rodent at the first check is moved a minimum of 15 feet away from the original location. Traps that caught one or more rodents are placed back in the same location. At the end of seven days, the traps are checked a second time. The captured rodents are killed, and the total count of rodents captured in the seven days is recorded. The following formula is used to determine a rodent index:

$$(\# \text{ Mice caught}) \times \frac{12}{(\# \text{ traps deployed})} \times \frac{7}{(\# \text{ days deployed})} = \text{adjusted mouse count}$$

This formula adjusts for periods of time traps are set which are longer or shorter than seven days and where more than 12 traps may have been used, and standardizes all rodent catches to a one week period using 12 live traps. The rodent indexes are grouped as follows: 0-10 rodents = 1 (low density), 11-25 rodents = 2 (moderate density), and 26 or more rodents = 3 (high density).

A rodent index will be completed by a Pennsylvania Department of Agriculture inspector if in the inspector's opinion the rodent index recorded may not be accurate. Reasons may include improper protocol by the producer, lack of appropriate functioning live rodent traps, external rodent entry sites, or internal rodent harborage areas.

I-F. Current fly control logbook. An integrated pest management plan (IPM) under the PEQAP program is required to include flies as well as rodents.

This plan may follow the same plan the producer employs for the FDA Egg Safety Plan with documented methods, sampling intervals, farm IPM supervisor identification and action points detailed/declared.

Methods for fly monitoring can vary, and there are alternative methods that may be used in addition to or in place of speck cards. Some producers with low fly count numbers may monitor flies up to every fourth week instead of weekly. This is acceptable as long as it is documented in the log.

The fly control logbook is satisfactory if:

- The fly control logbook is up-to-date. The entries must include the following:
 - The method(s) used for monitoring fly indexes;
 - The time interval routinely utilized to monitor fly indexes;
 - The date the fly cards or other monitoring devices were observed for the past one month with no missed observations;
 - Initials or signatures of individuals responsible for the observations;
 - Corrective actions taken when fly levels exceed the action point;
 - A log of pesticide use (similar to a rodent bait log); and
 - The log must be maintained on the premises and must be made available for the inspector to review.

I-G. Record the method used to perform fly indexes and the time interval routinely utilized to monitor fly indexes (not included in the pass/fail criteria).

The fly indexes are as follows:

Fly index 1 = 0-50% of action point

Fly index 2 = 51-100% of action point

Fly index 3 = Levels above action point (immediate corrective action indicated)

II-A. Sanitation of cooler and packing area. Satisfactory if:

The egg packing and cooler areas are food production and storage areas. Sanitation and hygiene standards must be maintained. Egg-packing equipment shall not contain excessive egg materials (dried yolk, egg shells) or organic material, including chicken feathers. Excess egg materials shall not be present under rod conveyors. Rodents must be absent from these areas with appropriate rodent control used as needed.

II-B. Egg cooler temperature of 45° F. or less (CRITICAL ITEM). Satisfactory if:

The temperature of the egg cooler must be 45° F. (7.2°C) or lower at the time of inspection. This applies to coolers for holding eggs located at a PEQAP flock premises and to coolers located at an egg processing/packing facility. At the inspector's discretion, the temperature may be recorded using a temperature recording logbook if it is maintained accurately, or the temperature may be read from a thermometer in the cooler. Please call or email the PEQAP coordinator if the cooler is found to be above 45° F on day of inspection, so the coordinator can notify the PDA Bureau of Food Safety.

II-C. Condition of egg packing supplies (not included in pass/fail criteria). Satisfactory if:

Egg packing and transport supplies (flats/cartons, carts, pallets, and pallet dividers) are to be free of significant organic debris (dried egg material, fecal material, rodent droppings, feathers, etc.) and are rated as described. On the inspection form, circle the appropriate materials used.

Where more than one supply or material is used in any given category, circle each that applies and hand write in an approximate percentage amount of each used. For example, if both new fiber and used fiber flats are used, one might be 60% and the other 40% (all percentages should equal 100%).

**Note condition of supplies categorically:

*Poor - organic matter easily visible and present over many areas and numerous flats/cartons.

*Fair - organic matter is easily visible but only on limited number of flats/cartons.

*Good - organic matter is not present or is visible only on close inspection of flats/cartons.

**Note the condition of carts/pallets categorically using criteria as defined for poor, fair, good. Also describe, with as much detail as possible, the specific problems and specific supplies affected – use the comment area for details.

Record the name of the provider of supplies, carts and pallets.

III-A. Interior-Condition of 12 live rodent traps. Satisfactory if:

Twelve functioning live rodent traps are required in each poultry house for effective rodent monitoring. These 12 live rodent traps must be placed inside the poultry building. If more than 12 live traps are being used, the inspector may choose 12 live traps at random and check these for functionality. At least two traps must be placed in the pit (front entrance acceptable) in a high-rise building. Placement of the other traps should be strategic. Traps do not have to be placed with the birds. Traps must be maintained in a clean condition and checked weekly when the rodent index is determined. Traps containing decomposed rodents are not satisfactory. Adding approximately one half ounce (14 grams) of chicken feed to each trap may improve rodent catches. In certain style houses, particularly those where poultry are reared on slatted floors, traps may be placed directly on the slats away from the scratch area. Alternatively, they may be placed strategically throughout the house in a combination of other areas including the front of the house, egg packing area, and entrance area. In these cases, careful inspection for rodent harborage is very important. High rodent numbers may be evident by this visual inspection and recorded by the Pennsylvania Department of Agriculture Inspector. Where rats are the rodent pests, other quantification methods are applied to assess the rodent index. **12 functioning live traps must be present when inspection begins or the item will be marked unsatisfactory- the participant cannot add more traps while the inspector is there. 12 traps are needed for an accurate rodent index.**

III-B. Interior rodent bait stations. Satisfactory if:

Properly maintained covered bait stations are required inside the poultry houses near any opening which cannot be closed tightly, near manure belt openings, at entry areas between houses sharing common egg-belt conveyor systems, etc.

In situations where the poultry house has no openings as described above, each poultry house is still required to have one bait station. Suggested areas for placement of bait stations include immediately inside door openings, on cage floor walkways, on pit ledges, in the front of houses near feed bins, areas where feed spillage is common, the egg packing room and egg cooler. This applies to organic and/or floor houses. All bait stations present in the poultry house at the time of inspection must be properly maintained for a “satisfactory” rating and may be checked by the inspector.

Bait stations should contain fresh bait placed within the last month. If paraffin wax bait preparations (blocks) are used in covered bait stations and bait is fresh, up to bimonthly applications are satisfactory. If no bait stations are present, and/or the bait stations are not maintained properly, the inspection sheet should be marked “unsatisfactory”. There is an approved bait for use with organic flocks, and the bait station requirement applies to organic flocks.

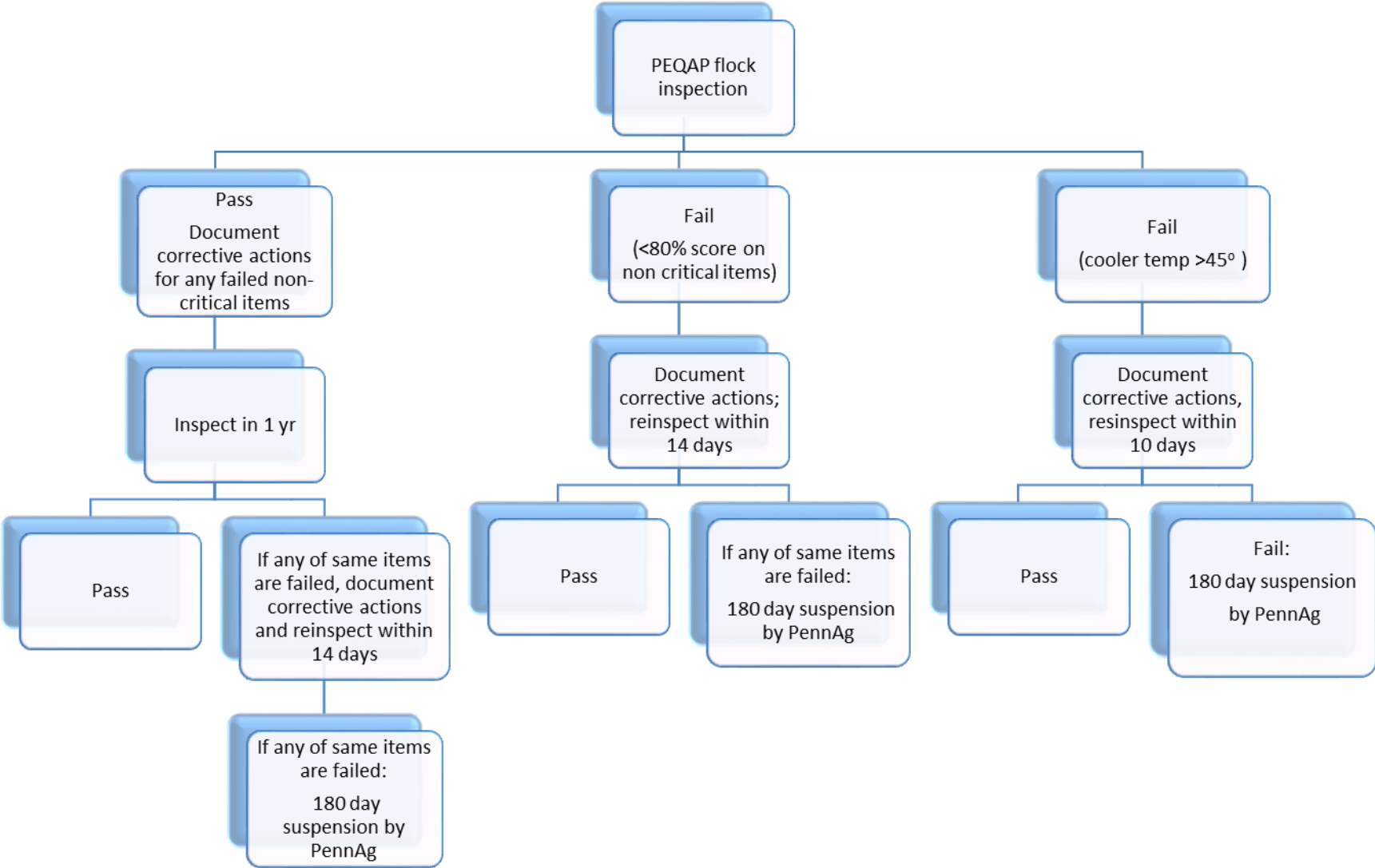
III-C. Structural interior rodent exclusion. Satisfactory if:

The building is structurally secure preventing or greatly reducing the opportunity for rodent harborage in walls, ceilings, and other areas. If any rodent holes are present, the item shall be marked “unsatisfactory”. Pit doors and organic access doors are discussed under I-B).

III-D. Sanitation in poultry house. Satisfactory if:

A proper disposal plan shall be utilized for removing dead poultry. Dead birds must be disposed of within 48 hours. Approved methods include burial, rendering, incineration and composting. Discarding of birds in the pit is not permitted, except with prior PDA approval. Egg belts shall be clean, without build-up of egg materials. Feed spillage areas shall be minimal and any spilled feed shall be routinely removed from pit areas or building exterior to avoid attracting rodents. Eggshells shall be discarded in a manner not to attract rodents. Broken eggs must not be dumped in the pit. The header system and rod conveyor areas shall contain minimal amounts of eggshells and feed spillage. Manure on cage support beams must be no higher than eight inches.

PEQAP Flock House Inspection Compliance Flow Chart



SECTION III

PEQAP Sample Collection and Submission

PEQAP Sample Code List for Testing Layers

PEQAP Sample Submission Form

PEQAP Protocol for Sampling Chick Box Papers

PEQAP Protocol for Collecting Manure Samples

PEQAP Protocol for Nest Run Egg Sample Collection

PEQAP Protocol for Handling of Environmental and Egg
Samples after Collection

PEQAP SAMPLE CODE LIST FOR TESTING LAYERS

- PS1** Day old, chick paper swabbing (**recommended**)
- PS2** 14-16 weeks of age, pullet environmental manure swabbing (**required**)
- LY5** 7-14 day post housing, layer house environmental manure swabbing, **required when PS2 test is missed, or if a PS2 is positive**
- LY1** 29-31 -week layer house, environmental manure swabbing (**required**)
- LY2** 40-45-week layer house, environmental manure swabbing (**required**)
- LY3** Layer house, environmental manure swabbing, taken 4 – 6 weeks after return to 50% production (**required if flock is molted**)
- LY4** Layer house, environmental manure swabbing, taken 4 - 6 weeks post SECOND MOLT (**required if flock is double molted**)
- LY7** End of lay environmental manure swabbing, optional test conducted at the bird owners or integrators discretion

Egg belt testing is permitted when manure pits are unsuitable for drag swabbing.

Environmentally positive flocks from which eggs are being tested are not required to do additional environmental testing unless involved in a traceback.

EGG TESTING

*Any of the above layer house environmental swabs yielding an SE- positive sample requires immediate egg testing.

EGG Four sets of 1,080 eggs each (1,000 plus 80 extra for breakage) submitted every two weeks. If four sets of eggs test negative, quarterly egg testing begins and requires one set of 1,000 eggs each quarter for the life of the flock.

Egg restriction (diversion) is required when an SE-positive egg pool is reported. The diversion form must be received by the PDA PEQAP coordinator on the date diversion begins.

A participant may choose to retain or divert eggs at his/her discretion to avoid egg testing.

Egg restriction remains in place until a new egg testing series is completed, and all 4,000 eggs test negative (1,000 eggs, tested four times, at two-week intervals.)

Egg testing must continue at 1,000 eggs per quarter or until another SE positive egg pool is found. Eggs must be retained or diverted for the life of the flock after three SE-positive egg tests. No further testing is required, and if the bird owner requests further testing, it will be at the bird owner's expense (owner will be charged non-PEQAP in-state testing fees).

OTHER PEQAP TESTING CODES

- LY6** Layer house, environmental manure swabbing, taken when a new flock joins PEQAP or after a missed layer test
- LY8** Environmental test requested by the Compliance Committee
- LCD** Layer house cleaning and disinfection swabbing (C&D); environmental swabbing taken from different areas of the house after SE-positive houses have been cleaned and disinfected
- PCD** Pullet house cleaning and disinfection swabbing (C&D); environmental swabbing taken from different areas of the house after SE-positive houses
- LYT** Layer house environmental test for SE traceback.
- EGT** Egg test sample for SE trace-back
- QC** Quality Control sample, collected by a PDA technician
- S13** Rodent tissues
- S23** Poultry tissues

Avian Sample Submission Form



Pennsylvania Animal Diagnostic Laboratory System Avian Sample Submission Form

University of Pennsylvania
New Bolton Center
382 West Street Road
Kennett Square, PA 19348
(610) 925-6725

Pennsylvania State University
Animal Diagnostic Laboratory
Wiley Lane
University Park, PA 16802
(814) 863-0837

Pennsylvania Department of
Agriculture
Pennsylvania Veterinary
Laboratory
2305 North Cameron Street
Harrisburg, PA 17110-9408
(717) 787-8808

Billing and Reporting Preferences

Report to by:
Bill to: Fax: Email: US Mail:

Sample Collector _____
Owner/Company _____
Premise Owner _____

Accession # _____

<p style="text-align: center;">Sample Collector</p> <p>Certified Poultry Tech ID Number _____</p> <p>Name _____</p> <p>Address _____</p> <p>City, State, Zip _____</p> <p>Phone _____ Fax _____</p> <p>Email _____</p> <p>Signature _____</p>	<p style="text-align: center;">Owner/Company</p> <p>Owner _____</p> <p>Company _____</p> <p>Address _____</p> <p>City, State, Zip _____</p> <p>Phone _____ Fax _____</p> <p>Email _____</p> <p style="font-size: small;">See back of form if submitting multiple premises</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">MP# _____</td> <td style="width: 33%;">Premises _____</td> <td style="width: 33%;">NPIP# _____</td> </tr> <tr> <td colspan="3">Premises Identification Number _____</td> </tr> <tr> <td colspan="3">Flock ID/Name/House #/Floor #/Pen # or Q # _____</td> </tr> <tr> <td colspan="3">Address _____</td> </tr> <tr> <td colspan="3">City, State, Zip _____</td> </tr> <tr> <td colspan="3">Phone _____ Fax _____</td> </tr> <tr> <td colspan="3">Email _____</td> </tr> </table>	MP# _____	Premises _____	NPIP# _____	Premises Identification Number _____			Flock ID/Name/House #/Floor #/Pen # or Q # _____			Address _____			City, State, Zip _____			Phone _____ Fax _____			Email _____		
MP# _____	Premises _____	NPIP# _____																					
Premises Identification Number _____																							
Flock ID/Name/House #/Floor #/Pen # or Q # _____																							
Address _____																							
City, State, Zip _____																							
Phone _____ Fax _____																							
Email _____																							

For a report sent to other than above. Name: _____ Fax/E-mail: _____

Date Collected: _____ Date Submitted: _____ Age of flock: _____ Years _____ Weeks _____ Days

Blood: _____ # Eggs: _____ # Swabs: _____ Swab Source: _____

Chicken Duck Guinea Turkey Other: _____ Breed: _____ Production type: _____

Description (color / distinctive markings): _____

(If submitting multiple species, flocks, or sample types, see back of form to identify samples)

Number of Birds on Premises: _____ Comments/History: _____

Hatchery name where birds originated: _____ If Breeders, hatchery name to incubate eggs: _____

PROGRAM TESTING (Purpose of test): (Check all that apply for this submission) – If applicable, enter individual bird/flock IDs on back.

- **Live Bird Market System (Avian Influenza)**
 - Auction/Swap Meet/Small Sale Backyard Dealer
 - Feed Store Hauler Live Bird Market (At Market)
 - Passive Surveillance Truck/Crate Wash Wholesaler
 - Production Unit (On Farm) – Moving to state of _____
- Pennsylvania Avian Influenza Monitored Flock Program**
- Export/Movement To:** _____
- **National Poultry Improvement Plan (NPIP)**
 - US AI Clean (Breeders)
 - US H5/H7 LPAI Monitored: (Non-Breeders)
 - US MG Clean: Routine Program Test Suspect Retest
 - US MS Clean: Routine Program Test Suspect Retest
 - US MM Clean: Routine Program Test Suspect Retest
 - US Pullorum-Typhoid Clean: Routine Program Test Reactor Retest Bird Culture
 - US Salmonella Monitored
 - US Sanitation Monitored
 - US SE Clean: Routine Program Test Bird Culture SE Monitored
- Related accession number for retests: _____
- Exhibition/Show:**
 - AI/Pullorum AI Only Pullorum Only Reactor Retest
- **Pennsylvania Pullorum Equivalent:**
 - Routine Program Testing Reactor Retest
- Related accession number for retests: _____
- **FDA SE Egg Safety Registration Number:** _____
 - Eggs Environmental- Layer
 - Environmental- Post-Molt Environmental- Pullet
- **Pennsylvania Egg Quality Assurance Program (PEQAP)**
 - PS1 PS2 LY1 LY2 LY3 LY4 LY5
 - LY6 LY7 LY8 LCD EGG QC
 - Other _____
- Pullet House Name _____
- Layer House Destination _____
- **Regulatory Investigation / Disease**
 - Association Unknown Circle Testing Epidemiology Linked
 - Index Trace Back Trace Forward Quarantine Release
 - Other _____

Diagnostic Test Requests: Enter the number of each type of test requested. (If applicable, enter individual bird IDs on back)

If chicken ELISA testing is requested, please indicate a preference of ELISA test system: IDEXX (ADL) BioChek (NBC)

_____ MG Plate	_____ NDV ELISA	_____ MG ELISA	_____ Pullorum –Typhoid Plate
_____ MS Plate	_____ IBV ELISA	_____ MS ELISA	_____ Pullorum –Typhoid Tube
_____ MM Plate	_____ IBD ELISA	_____ HEV ELISA	_____ Aerobic Culture
_____ AI AGID	_____ REO ELISA	_____ BA ELISA	_____ Salmonella Culture
_____ IBD AGID	_____ AE ELISA	_____ PCR	_____ SE Culture Only
_____ Other _____	_____ SE PCR Only	_____ RapidChek SE Test Only	

AI Virus Detection

_____ Virus Isolation

_____ RRT-PCR

Lab Use Only

Grant(s) _____

Please use the avian necropsy submission form if for diagnostic necropsy/analysis on birds or tissues

Blood Tube Identification*

Box # _____ Pen/House # _____ Species _____

Box # _____ Pen/House # _____ Species _____

*Please write band number (sample #) in space corresponding to sample location in box.

Multiple Flock Submission Information/ Swab Identification (only one accession will be created per form)

Sample source: T-Tracheal Swab, O-Oropharyngeal Swab, C-Cloacal Swab, E-Environmental Swab, Blood, Eggs, Birds

Date Collected	Tube # / Lot #	Species/Breed	Sample Source (Include # of samples)	Flock ID, Description and/or Comments	Age	Location Number

PADLS reserves the right to perform tests for any of the diseases regulated by the Pennsylvania Department of Agriculture on any specimen it receives. PADLS reserves the right to perform any tests on animals or birds submitted for necropsy that the case coordinator deems necessary for obtaining a diagnosis. Your submission of specimens for diagnostic purposes constitutes your acknowledgement that some tests may be performed at other laboratories.

PEQAP

Protocol for Sampling Chick Box Papers

Purpose

This protocol is to be used as a guideline for collecting samples of manure from chick box papers for testing for *Salmonella enteritidis*.

General

Obtaining a representative sample and culture of chick box papers is a sensitive method for detecting the presence of *Salmonellae* in chicks. These first chick droppings or meconium give a good indication of prior bacterial contamination. Papers should be collected and/or swabbed so that no potential exists for contamination by the environment or personnel.

Equipment

1. Gloves
2. 4 X 4 gauze swabs (sponges)
3. Can of evaporated skimmed milk
4. Whirl Pak bags
5. Marker pen

Procedure

Swabbing of Papers –

1. Collect one chick box paper for each 10 boxes of chicks placed.
2. Lay the chick papers on a clean surface.
3. Separate papers by source breeder flock(s).
4. With latex-gloved hands take a sterile 4”x 4”, 8 or 12-ply gauze swab saturated with canned evaporated skimmed milk, and rub vigorously across the surface of the chick paper, covering at least 75% of the area.
5. Use sufficient pressure to rub any dry meconium off the papers.
6. Pouring a small amount of milk (1 to 2 tablespoons) on each paper will improve sample collection.
7. Swab 5 chick papers per swab.
8. Place either 2 or 4 swabs (10 or 20 combined swabbed papers) into an 18 oz Whirl-Pak bag, and add 1 to 4 tablespoons of skimmed milk.
9. Gloves should be changed between each Whirl-Pak sample (each 10 papers), and at any time a glove is torn.
10. Number Whirl-Pak bags and correlate proper breeder flock with Whirl-Pak number on sample submission form.
11. Hands should be clean prior to swabbing, and disinfectant should not be applied to the gloves.

Transporting Samples –

1. Transport samples on ice packs to the laboratory within 48 hours of collection.

2. A sample submission form must be included with each sample and must include the following information:
- Pullet flock identification and location of the pullet flock,
 - Designated layer flock(s),
 - Owner,
 - Collection date,
 - Sample collector,
 - Source breeder flock(s),
 - Hatchery, and
 - Strain of birds.

****PLEASE NOTE THAT ONE BAG EQUALS ONE SAMPLE, REGARDLESS OF THE NUMBER OF SWABS IN THE BAG. PLEASE MARK THE NUMBER OF BAGS ON THE LAB SUBMISSION FORM.**

PEQAP
PROTOCOL FOR COLLECTING MANURE SAMPLES (Revised 9-12-2008)

Purpose

This protocol was developed to provide guidelines for collection of representative manure samples in pullet and layer houses to determine if manure contamination with *Salmonella enteritidis* exists.

General

Two manure swab samples from each manure pile beneath a row of cages are required (**minimum of 6 swabs/house requirement**). These swab samples must be representative of all the birds in the house.

OSHA ADVISES CAUTION ON ENTERING DEEP PITS

Hydrogen sulfide, ammonia and methane gases can reach dangerous levels in deep pit storage areas. Hydrogen sulfide is a poisonous gas. Additionally, it can displace oxygen and cause asphyxiation. Beware of breaking through the surface crust layer of the manure in the pit.

Equipment

1. Standard biosecurity equipment
2. Small cooler with three frozen ice packs
3. Large garbage bag to serve as a tablecloth
4. Scissors
5. Can opener
6. Waterproof permanent marker
7. Manure drag pole (recommendation of constructing one from a 3/8" by 42" solid aluminum rod with a 1/4" hole drilled 1/2" from one end, or from a 1/2" by 36" conduit with a 1/4" hole drilled 1/2" from one end - the solid aluminum rods are easier to clean and disinfect).
8. PEQAP drag swab kit from Penn State Animal Diagnostic Laboratory or New Bolton Center; kit contains:
 - a) PEQAP submission form
 - b) 12 Whirl-Pak bags (18-ounce size)
 - c) Two packs (6 drag swabs each) autoclaved (sterile) 4in. x 4in.-12 ply gauze pads
 - d) 1 gallon size, sealable bag to place drag swab samples in after collection and another smaller sealable bag to hold the completed PEQAP submission form
 - e) 3 pairs of disposable laboratory exam gloves
 - f) Alcohol swabs (to disinfect top of milk can and can opener)
9. One can of evaporated milk, canned skim (fat free) evaporated milk, or canned low-fat evaporated milk
10. Disinfecting solution (either a phenol, such as Environ 1 Stroke or a quaternary ammonium (quats) product) and a brush for disinfecting equipment

11. Roll of paper towels to wipe off excess disinfectant from gloved hands, can opener, and scissors
12. Extra box of gloves; will be needed for hand swabbing and alternate methods of collection

Procedures

A. High-rise house drag swabbing

1. Timing of swabbing –
 - a. Compost Cats (manure pile turning equipment) – If Compost Cats are used to turn and aerate manure piles in the pit, time the swabbing of manure piles at least 48 hours after the last use of the Compost Cat to allow a build-up of fresh manure.
 - b. Limed pits – If pits have been limed, do not sample manure from the pit for at least 48 hours after liming to allow a build up of fresh manure.
 - c. After pit cleanout – Allow at least 48 hours after a pit or a row of manure is cleaned out to sample manure to allow a build-up of fresh manure.
2. Sample collection –
 - a. Prior to dragging the manure piles, label all bags with the permanent marker following the PEQAP protocol for handling samples.
 - b. Whirl-Pak bags must be marked clearly with sample numbers #1, #2, #3. Samples 1 and 2 are the swabs from the first manure pile (numbered left to right when looking from the front of the house) and samples 3 and 4 are from the second manure pile, etc.
 - c. Label the Gallon size bag for the Whirl-Paks with:
 - “Q” Number
 - Flock name (optional)
 - Sample code description (LY1, LY2...), and
 - Collection date.
3. Suit up with protective clothing and disinfect boots and swabbing equipment before entering the house in accordance with standard biosecurity practices.
4. Bring all materials to the bottom floor of the house. Use the bottom utility area if the house has one. Bring a bucket filled with a disinfecting solution.
5. Spread out the large garbage bag and arrange the sampling materials on top of the bag. Number the Whirl-Pak bags with the correct information if they have not been pre-numbered.
6. Place on a pair of disposable exam gloves.
7. Open the alcohol swab and wipe the top of the can of evaporated milk and the can opener. Wipe excess alcohol from the can and can opener with a clean paper towel before opening the can to minimize contamination of the milk with alcohol.

8. Disinfect the scissors with the disinfecting solution in your bucket. Wipe excess disinfectant off the scissors with a clean paper towel.
9. Use disinfected scissors to cut open the autoclave pack of swabs near the top of the pack.
10. Shake the can of evaporated milk and moisten the swabs in the pack by pouring a small amount of evaporated milk into the pack and massaging the outside of the pack. Lay the pack on the garbage bag.

Be sure to clean and sanitize gloved hands after touching non-sterile items and before taking samples with sterile swabs. Wipe excess disinfectant from gloved hands with a clean paper towel.

11. Tear the top off two Whirl-Pak bags for each manure pile.
12. Tie two swabs to the pole for each manure pile. Tie one swab slightly ahead of the other to allow maximum surface area coverage.
13. Sample the manure piles from left to right.
14. Walk the length of the house, dragging the two swabs along the length of the manure pile. Swabs must be dragged along each manure pile for the entire length of the house. Repeat this procedure on all manure piles in the house. To help ensure valid results, maintain as much consistency as possible when collecting samples.
15. Place the 2 swabs into separate Whirl-Pak bags *without touching the swabs* (1 swab per bag). Cut attaching strings with the scissors and disinfect the scissors in between each sample; wipe excess disinfectant from the scissors with a clean paper towel.
16. Add approximately 5 ml (1 teaspoon) of evaporated milk to each Whirl-Pak bag, close each bag, and place both bags into the gallon-size plastic bag.

Note- Adding too much evaporated milk can affect test results.

17. Use the bucket and brush or a spray bottle filled with disinfectant to disinfect the pole between each two samples and wipe excess disinfectant from the pole with a clean paper towel.
18. After all the manure piles are dragged, place the Whirl-Pak bags (with samples) into the gallon-size bag, seal tightly, and place in the cooler with the frozen icepacks.
19. Put all discarded material into the garbage bag and dispose of properly.
20. Place the cooler outside the house; clean and disinfect it; then load it into your vehicle.

21. Follow standard biosecurity procedures when leaving.
22. Transport samples to a processing facility within 24 hours, if possible, 48 hours maximum. Delayed processing may alter test results and may result in additional testing requirements.

B. Collection Adaptations

Variations in poultry house design and / or unsuitable manure pit conditions will require appropriate adaptations for collecting representative environmental manure samples. Unsuitable manure conditions include situations where manure is piled very high, or is liquid or semi-liquid.

Be sure to disinfect scissors, can opener and gloved hands before handling swabs to prevent contamination. It is important to wipe off excess disinfectant with a clean paper towel.

- 1) **Shallow Pit:** Shallow pit operations all have some type of manure scraper. Some have scrapers under each tier; some have a floor scraper only; and some have a combination of both. Each scraper blade must be swabbed. Sample only the solid manure on the scrapers (ammonia in the pit liquid may inhibit Salmonella growth).
 - a. Use two swabs to hand-swab the solid manure on all scraper blades on each bank and place into separate appropriately marked Whirl-Pak bags (1 swab per bag).
 - b. If the shallow pit has a narrow walkway beneath it, use a drag pole to take swab samples underneath the row of cages, and place swabs into appropriately marked Whirl-Pak bags.

OR

If the farm manager is available to run the equipment;

- a. Attach two drag swabs to the manure scraper assembly and run the scraper to the opposite end of the house.
 - b. Remove the swabs and place them into appropriately labeled Whirl-Pak bags (1 swab per bag).
- 2) **Pullet or Layer Cage Manure Belt System:**
 - a. Pre-label Whirl-Paks and the gallon-size bag as with high-rise housing. Lay out materials on a clean plastic garbage bag placed on the floor or a suitable surface.
 - b. Samples must be taken from manure belts and scrapers *on each cage level* at the end of each cage row.
 - c. Samples should be labeled 1, 2, 3, 4, etc. from right to left when in the back of the house facing the front of the house (opposite of technique used in a high-rise house, but maintains the same row designation).
 - d. Starting with the first row to the right, all right-side belt/scraper tiers in the same cage row will be swabbed with one swab (labeled "1") and all left-side belt/scraper tiers in that row will be swabbed with a second swab (labeled "2"). The second row right side tier swab will be labeled "3" and the second row left side tier swab will be labeled "4" and so forth.

- e. To swab manure belts –
 - I. Put on a fresh pair of disposable gloves before handling gauze pads and swabbing between each row. 6 pairs of gloves will be required for belt houses without walkways and 12 pairs will be needed if a walkway is present.
 - ii. Moisten a package of the 4 in. x 4 in.-12 ply gauze pads with evaporated milk as explained on page 3 of this protocol.
 - iii. Remove one moistened swab and swab the manure belt surface as far as you can reach, and also swab the belt scraper on each tier.
 - iv. Once all tiers of a row have been swabbed with that swab, place the swab into the appropriately labeled Whirl-Pak bag, add 5 ml of milk, and close tightly.
 - v. Use a second moistened gauze pad to swab the other side of the row and place that swab into the appropriately labeled Whirl-Pak bag, add 5 ml of milk, and close tightly.
 - vi. Change to a fresh pair of disposable gloves before swabbing the next row.
 - vii. Continue sampling the belts/scrapers for the other rows in the house.
 - viii. If a belt house is separated with a walkway, obtain one swab sample from the lower tiers of belts from a row (swab both sides of each tier) and obtain a second swab for the upper tiers a row. Label by row and either downstairs (D) or upper (U) floor. Change gloves between swabbing each row downstairs and each row upstairs.
 - ix. When finished, you should have 2 swabs per row.

3) ***Manure Pits Unsuitable for Drag Swabbing:*** A combination of egg belt and walkway swabbing should be utilized to obtain 12 swabs/samples from a 6-row house to sample fecal dust and feces on belts and walkways. Pre-label Whirl-Paks sequentially 1-12 to correspond with E1, E2, E3, E4, E5, and E6 for the egg belt swabs and W1, W2, W3, W4, W5, and W6 for the walkway swabs.

a. ***Egg Belts:***

- i. Hand-swab the egg belts (swab approximately 10 to 12 feet per belt on each cage level) and the de-escalators on each level for each bank of cages.
- ii. Use 1 swab for all left bank egg belts, (include belts and de-escalators from each cage level), and another swab for all right bank egg belts (include each cage level).
- iii. Place 2 swabs (1 from the left bank and 1 from the right bank for each row of cages) into 1 Whirl-Pak bag (left and right side swabs for each cage row equals 1 *sample* and should be placed in the same bag). Add 10 ml evaporated milk prior to closing.
- iv. Continue with this from left to right for all cage rows, changing gloves between rows.

Example:

- A house has 6 cage rows, with 5 levels of cages.

- Row 1; one swab, taken from left side egg belts for all 5 cages levels and de-escalators, is placed in a Whirl-Pak bag with the swab from the right side egg belts, all 5-cage levels and de-escalators (Whirl-Pak E1).
- Swabbing is continued across the remaining 5 cage rows from left to right.
- 2 swabs for each cage row (left and right sides) are placed into 1 Whirl-Pak bag, for a total of 6 Whirl-Paks. A total of 12 swabs to make 6 samples are required.

b. Walkways:

- Place 2 milk-moistened drag swabs on 1 drag pole and drag 2 walkways, walkway 1 on the trip to the back of the house and walkway 2 on the way back to the front. Walkways are numbered from left to right facing the cages from the front of the house.
- Place each swab into a separate Whirl-Pak for a total of 2 samples from 2 walkways. Add 5 ml evaporated milk prior to closing the bags.
- Change gloves and attach 2 more drag swabs to the poles, and swab walkways 3 and 4 in the same manner.

4) Floor Laying (Cage-free or Non-cage) Operation:

- The number of swabs collected in a house depends upon the house width according to the following protocol:

55 feet wide or wider – 12 swabs

46 to 54 feet wide – 10 swabs

37 to 45 feet wide – 8 swabs

28 to 36 feet wide – 6 swabs

- Use drag swab poles with multiple drag swabs on a pole. Divide the house into halves, right and left. Example: if a house is to have 10 swabs collected, drag 5 swabs over the right half (swab down and back, litter and slat area, to the front of the house) then swab the left half with the remaining 5 swabs. Place a maximum of 3 drag swabs on a pole at one time.
- If a house has multiple floors, divide the swabs evenly to cover each floor equally.
- Put 1 swab per WhirlPak bag to make 1 sample. Add 5 ml. of evaporated milk to each bag after collection.

Please Note: If the house does not fit into any of the categories listed above, please contact the PEQAP Program Director at PennAg for recommended sample collection protocols.

Summary of sampling:

High-rise houses – 2 swabs/samples per row of cages

High-rise houses with manure pits unsuitable for walking – 2 swabs/samples per row of cages

Manure belt houses – 2 swabs/samples per row of cages

Cage-free houses – 55 feet wide or more – 12 swabs/samples

46 to 54 feet wide – 10 swabs/samples

37 to 45 feet wide – 8 swabs/samples

28 to 36 feet wide – 6 swabs/samples

Glossary for the purpose of this protocol:

- *Row* – group of cages that runs the length of the house
- *Bank* – ½ of a cage row (1 side of a row)
- *Tier* – level of cages in each row

Examples: A row of cages, stacked 3 high, has 3 tiers. Six rows equal 12 banks.

PEQAP

Protocol for Nest Run Egg Sample Collection (revised 5-14-2008)

Purpose

This protocol is to be used as a guideline for collecting representative samples of nest run eggs from layer houses. It is designed to make collection as easy as possible while providing a random sample of eggs. This protocol explains the following methods of collecting eggs:

1. Cage House collection – Walking house, collect from each frame
2. Cage House collection – Off all egg belts at front of house
3. Cage House collection – Farm packer
4. Cage-free House Collection – Hand-gathered nests
5. Cage-free House Collection - Egg belts and farm packer
6. Cage-free House Collection - Egg belts and hand-gathered off collection tables

General

1. The Pennsylvania Egg Quality Assurance Program (PEQAP) calls for a sample size of 1,000 clean eggs for testing from manure sample positive houses (1,080 eggs or thirty-six flats are actually collected to allow for breakage and discarding of excessively dirty eggs).
2. The Program also calls for a sample size of 1,000 clean eggs from those houses that have had culture positive eggs and wish to resume table egg production (1,080 eggs or thirty-six flats are collected).
3. It is important to obtain a representative sample of eggs. Eggs must be collected from all areas of the house.
4. It is possible to obtain a representative sample by walking through the house and collecting eggs, or by systematically collecting eggs during packing.
5. Cases of eggs that have already been packed are not a representative sample because all of the eggs are probably from the same area of the house.
6. Submit all cases accompanied by a PADLS Sample Submission Form.
7. Label all cases appropriately and legibly –
 - a. Q number
 - b. Collection Date
 - c. Flock name (optional)
 - d. Number of cases in the shipment (1 of 2, 2 of 2, etc.)

Equipment

To collect 1,080 eggs:

- a. Three new egg cases with short dividers.
- b. Forty-two new egg flats; thirty-six for the eggs and six to cover the top layer of eggs in the cases.

Procedures

Choose one of the following methods for egg collection:

1. Cage House Collection – Walking House, collect from each frame
 - a. Plan to collect eggs when the belts are not moving.
 - b. Determine the number of eggs required per frame.
Examples:
 - 1,080 eggs required from a five-row house, 500 feet long with 8 foot long frames:
 - i. $5 \times 2 \times 500 \div 8 = 625$ frames
 - ii. $1080 \div 625 = 1.7$ eggs per frame
 - iii. Collect 2 eggs from most all frames
 - c. Collect the first egg from the first tier of cages, second egg from the second tier, and so on to the bottom tier.
 - d. When during collection of the last row the last case should be nearly filled.
 - i. If there is a deficit of more than twelve eggs, go back to the first row and collect enough eggs from each row to make up the difference. Make a note on the collection sheet of how many eggs were short initially.
 - ii. If all eggs are collected before reaching the last 6 sections of the last bank make a note on the collection sheet of how many sections were skipped at the end.
2. Cage House Collection – Off all egg belts at front of house
 - a. Obtain $\frac{1}{2}$ of the total eggs needed (540 or 1.5 cases) during the mid-morning egg collection, while belts are running, off the egg belts from each tier and each row from the house to be sampled.
 - b. Divide the total number of eggs needed (540 eggs) by the total number of egg belts (in a 6-row, 4-tier house, this would be 48 belts) to obtain the number of eggs needed per belt ($11 \frac{1}{4}$ - 11 from $\frac{3}{4}$ of belts and 12 from $\frac{1}{4}$ of the belts in the example).
 - c. Collect the number of eggs from each belt, place on fiber flats, and place in the egg case.
 - d. Wait one (1) hour.
 - e. Collect the second half of eggs needed as in the procedure above.
3. Cage House Collection – Farm Packer
 - a. Ensure that only one house is included in a run. Collection during nest run packing is not appropriate if eggs are being blended from multiple houses.
 - b. Obtain $\frac{1}{2}$ of the total eggs needed (540 eggs or 18 flats) during mid-morning egg collection using the packer. Substitute fiber flats for plastic if plastic flats are normally used to hold eggs.
 - c. Place the full eggs flats into the transport case.
 - d. Wait one (1) hour.
 - e. Obtain the other $\frac{1}{2}$ of eggs needed in the manner as presented above.

4. Cage-free House Collection - Hand-Gathered Nests

Option 1 -

- a. Have the egg producer set aside one day's egg production, uncased.
- b. Determine the total number of flats collected that day.
- c. Divide the number of total flats collected by the number of flats needed (36). This is the number of flats between each selected flat.
- d. Example: $576 \text{ flats produced} \div 36 = 16$. Select each 16th flat collected.

Option 2 –

- a. Collect the total 1080 eggs needed during the morning collection obtaining eggs from all sections of the house.
- b. Calculate number of eggs needed from each nest.
 - 1) Example – 10,000 bird house with 200, 10-hole nests.
 - 2) $1080 \text{ eggs} \div 200 = 5.4$ eggs from each nest.
 - 3) Collect 5 from half of nests and 6 from other half of nests.

5. Cage-free House Collection – Egg Belts and Farm Packer

Option 1 -

- a. Same as in number 4 option 1.

Option 2 –

- a. Collect the 1080 eggs from the first or second collection of the day.
- b. From prior records, determine how much time is required for the first or second collection.
- c. Divide the 1080 eggs into three subsets of 360 (1 case). Collect one case at the beginning of the collection, 1 case from the middle of the collection, and the third case at the end of the collection.
- d. If a farm packer is in use using plastic flats, substitute 18 fiber flats for plastic when collecting the PEQAP eggs.

6. Cage-free House Collection – Egg belts and hand-gathered off collection tables

- a. Collect the 1080 eggs from the first or second collection of the day.
- b. From prior records, determine how much time is required for the first or second collection.
- c. Divide the 1080 eggs into three subsets of 360 (1 case). Collect one case at the beginning of the collection, 1 case from the middle of the collection, and the third case at the end of the collection.
- d. Divide the collection among all the tables used.

Alternative procedures

Producers may develop their own protocols for collecting representative samples of eggs from their houses. These protocols shall be submitted to the PEQAP Program Director at PennAg and the PDA PEQAP coordinator for approval. Approved protocols will be kept on file.

Glossary for the purpose of this protocol

- *Row* – group of cages that runs the length of the house
- *Tier* – level of cages in each row
- *Frame* – section of a cage unit, all tiers, on one side of a row

Example: A row of cages, stacked 3 high, has 3 tiers. Six rows equal 12 banks. In a floor house, 3 groups of next boxes equal 3 sections.

PEQAP

Protocol for Handling of Environmental and Egg Samples after Collection

Purpose

The purpose of this protocol is to provide guidance for handling of PEQAP samples after collection.

General

Test results can be affected by the condition of the samples tested. Therefore, it is imperative that any samples submitted for laboratory testing are handled properly to assure sample integrity and allow for accurate test results.

Equipment

1. Cooler
2. Ice packs
3. Whirlpak and Ziploc Bags
4. Waterproof permanent marker

Procedure

- 1) Environmental samples are to be collected on the farm and put immediately in a cooler with frozen ice packs or placed into a refrigerator.
- 2) Environmental samples should be kept cool with ice packs or refrigerated and shipped to the laboratory within 48 hours of collection. It is imperative that these samples remain cool by either refrigeration or frozen ice packs during transport. If not shipped within 48 hours, the pH of the samples will change and may alter the test results, requiring additional sample collection.
- 3) Environmental samples should not be refrigerated for more than 72 hours prior to shipping to a lab. If not shipped within this time period, test results may be altered, requiring additional sample collection.
- 4) Results of egg testing must be received by the PEQAP coordinator within 10 business days of the laboratory notification of the flock manager or participant of a **SE**- positive environmental test.
- 5) All samples can be dropped off at one of the following locations:
 - New Bolton Center PEQAP Lab, Kennett Square, Mon-Fri 8am-3pm, 610-925-6154.
 - Penn State Animal Diagnostic Laboratory, University Park, Mon-Fri 8am - 5pm, 814-863-0837.

- PA Vet Lab, Harrisburg, Mon-Wed 8am - 4pm, Thurs 8am - noon, 717-787-8808. Samples should be delivered ready for shipment at the receiving dock. Samples may be placed in the cooler outside the laboratory or may be given to a laboratory employee.
 - RJE Poultry Field Office, 788 North Penryn Road, Manheim 717-665-1553, (unlocked drop area available 24/7).
- 6) Samples must be labeled appropriately on the outside of the bags or egg cases with a waterproof marker and must include the following:
- a. Whirlpak bags must be marked clearly with the sample Number: #1, #2, #3, etc.
 - b. Gallon ziploc bag containing the Whirlpaks and the PADLS Avian Sample Submission Form (form is first placed in the smaller ziploc bag), must be clearly marked with the:
 - “Q” Number
 - Flock name(optional)
 - Sample code description (LY1, LY2...)
 - Collection date
 - c. ***PADLS Avian Sample Submission Form*** that must be placed in the smaller ziploc bag must be clearly marked with the:
 - Sample Collector information
 - Owner/Company information
 - Premise information including “Q” Number; & Premise ID# (if available)
 - Date collected & submitted
 - Number of samples
 - Sample code description (LY1, LY2, Egg, etc...)
 - Pullet & Layer house name and origin if out of state
 - Indicate who is to receive the report
 - d. Egg sample cases must be clearly marked on outside of each box:
 - “Q” Number
 - Flock name(optional)
 - Collection date
 - Number of cases in the shipment (1 of 2, 2 of 2, etc...)
 - e. A ***PADLS Avian Sample Submission Form*** that is to be placed in a ziploc bag must be included in one of the egg cases, and that egg case must be marked that the form is inside.
- 7) When the samples are received at the laboratory which will conduct the testing, a lab accession number will be assigned and recorded on the submission form.

SECTION IV

PEQAP Rodent Requirements

PEQAP Rodent Log

RODENT CONTROL LOG

DATE TRAPS SET	# TRAPS	DATE TRAPS CHECKED	# MICE	DATE BAIT STATIONS SET	TYPE BAIT	INITIALS	COMMENTS

SECTION V

Egg Diversion

PEQAP Agreement to Divert Eggs

**PENNSYLVANIA EGG QUALITY ASSURANCE PROGRAM:
AGREEMENT TO DIVERT EGGS**

NOTE TWO OPTIONS EXIST; Selecting option # 1 indicates diversion of eggs produced by a flock which has had egg samples test positive for *Salmonella enteritidis* until further testing of sampled eggs, according to PEQAP requirements, yields negative results for SE. Selecting option # 2 indicates egg diversion for the life of a flock.

OPTION # 1

I _____ of _____ and having the authority to commit the flock known as Q _____
Farm name _____ do agree that eggs from this flock will be diverted to a breaker plant for pasteurization or to a hard cooking plant to be used as boiled eggs or fully cooked product. This diversion will commence upon notification of a *Salmonella enteritidis* isolation in an egg(s) from a random collection of nest run eggs. Diversion remains in place until a new egg testing series is completed, and all 4,000 eggs test negative (1,000 eggs, tested 4 times, at 2-week intervals).

I understand that records to verify the diversions must be maintained and may be monitored. A copy of the diversion form must be received by the PDA PEQAP coordinator on the date diversion begins.

OPTION #2

I _____ of _____ and having the authority to commit the flock known as Q _____
Farm name _____ do agree that eggs from this flock will be diverted to a breaker plant for pasteurization or to a hard-cooking plant to be used as boiled eggs or fully cooked product. This diversion has commenced upon notification of a *Salmonella enteritidis* isolation in an egg (eggs) from a random collection of nest run eggs, or for other reasons at the discretion of the owner. Diversion will continue for the life of the flock and therefore no further egg testing will be required. I understand that records to verify the diversions must be maintained and may be monitored. A copy of the diversion form must be received by the PDA PEQAP coordinator on the date diversion begins.

If you have any questions you may contact Brad Tobin (PEQAP coordinator) at 717-787-5101 or 717-783-6677.

Authorized Agent

Date

Should you select the temporary diversion of eggs and later decide to divert eggs for the life of the flock, complete a new agreement and forward this to our office.

PLEASE SIGN THE AGREEMENT TO DIVERT EGGS AND RETURN TO:

ATTENTION: Brad Tobin
PDA/BAHDS
2301 N. Cameron Street, Harrisburg, PA 17110-9408
Fax (717) 787-1868

SECTION VI

PEQAP Cleaning and Disinfection Information

PEQAP Cleaning and Disinfection Evaluation Form

Programs for Cleaning and Disinfection (C&D) of Houses between
Flocks Protocol

PEQAP Dry Cleaning Checklist

PEQAP C&D Evaluation Form

Section I: Identification

1. Flock ID:		Premise ID:	
Farm Address:		2. Date:	
Type of House			

Section II: Procedures

1. Which of the following cleaning and disinfection procedures were used?

a. Dry cleaning only		d. Disinfection after washdown	
b. Washdown without disinfectant		e. Disinfection after wash & dry	
c. Washdown disinfectant		f. Unknown	

2. Was the house fumigated? Yes No Unknown

Section III: Results

How much organic matter was present on the following surfaces? (Organic matter includes manure, feathers, eggs, that should be removed during cleaning & disinfection.)

		None or				Not		Definition
		slight	Moderate	Excessive	NA	Cleaned		
1.	Cages/Nestboxes							
2.	Nipples/watercups							
3.	Feeders							<i>None/slight-matter present or a thin layer of dust present in many areas.</i>
4.	Eggbelts/elevators							
5.	Drop boards/Curtains							
6.	Manure scrapers							<i>Moderate-matter easily visible but present only in isolated areas.</i>
7.	Ceilings/walls							
8.	Walkways/stairs							
9.	Fans & louvers							<i>Excessive-large amounts of matter visible throughout house.</i>
10.	Air inlets/curtains							
11.	Pit floor/under slats							
12.	Pit ledges/walls /slats							NA-equipment is not present.
13.	Pit support beams							
14.	Pit Basement/Utility							<i>Not Cleaned - organic debris not removed.</i>
15.	Egg packing area							

PASS **FAIL**

Comments:	

PEQAP PROGRAMS FOR CLEANING AND DISINFECTION (C&D) OF HOUSES BETWEEN FLOCKS

Cleaning and Disinfection (C&D) of houses between flocks is required for any houses that contained flocks that tested positive for *Salmonella enteritidis* (SE) by either the manure swab or egg test procedures. The goal of C&D of houses between flocks is to reduce the risk of SE infection in the new flock from residual SE found in the organic material left behind from the previous flock.

Two options are available for producers, 1) use a standard wet wash C&D program, or 2) use the PEQAP Dry Clean Program. The Dry Clean Program has been offered since March of 2003 to producers who do not wish to use water for their between-flock C&D. Both programs are described below:

Standard Wet Wash Cleaning and Disinfection Protocol

The entire process is divided into five different sections, 1) Planning, 2) Dry Cleaning, 3) Wash, 4) Disinfection, and 5) Monitoring. The details of these five steps are as follows:

PLANNING

Proper C&D requires planning for labor, time, equipment, and materials to be used. The time required for each house will be different but normally requires at least two weeks from the time birds are removed and when replacement birds can be placed. Planning for proper disposal of manure is also important. The best means of manure disposal is to compost the manure in piles before use as fertilizer to eliminate the potential for spread of any pathogens that may be in the manure.

Enough time should be allowed for three to seven days after C&D for "down" time to allow for die off of pathogens.

DRY CLEANING

- 1) Remove all dead and live chickens, eggs, and other animals (cats, free-flying birds, rodents, etc.).
- 2) Place fresh rodent bait and leave out until just prior to wet washing. Apply appropriate insecticides at this point as well.
- 3) Physically remove as much feed from troughs, hoppers, and feed bins as possible. The removal of feed from the troughs and hoppers is very important for rodent control.
- 4) Use scraping, scooping, sweeping, compressed air, etc. to dry-clean the upper part of the house starting with the air inlets (from the inside and out) and working downward. Attempt to move the organic material into the pit for eventual removal. Be sure to blow out any remaining feed in the troughs so that rodents do not have a source of feed.

- 5) Physically clean the manure dropping boards or cage curtains.
- 6) Remove manure off cage cross members, floor joists and if floor house, slats.
- 7) Dry clean the fans, housing, brush blades, and louvers thoroughly.
- 8) Remove all manure and organic material from the pit; follow-up the gross cleaning with scraping, scooping, and sweeping.
- 9) Move all removable equipment from the house, nesting boxes, etc. from floor houses, egg room, and workroom to allow thorough cleaning;
- 10) Waterproof electric motors and any equipment sensitive to water with plastic or other sealing method.
- 11) Inspect all areas for cleanliness and apply more labor if not satisfactory.

WASHING

- 1) Wet wash from the top down starting with the air inlets and working downward. For optimum cleaning, ideally use equipment that can supply high pressure (1500 psi +), hot water (180 F +), and detergent in the wash water. This equipment can be rented.
- 2) Give special attention to the air inlets as they are one of the hardest areas to clean and may harbor SE.
- 3) Wet down areas of high organic matter that was not removed during the dry cleaning process for easier removal.
- 4) Add heat to the house during cold weather. The warmer the better.
- 5) Run feeders each day after done washing and before washing the floor.
- 6) Push out water from the pit each day after washing.
- 7) After the wash step has been completed, evaluate the wash and rewash, if necessary, prior to disinfection.
- 8) Allow house to dry thoroughly before the disinfection step. Use heaters and fans to promote drying where needed.

DISINFECTION

- 1) Choose a disinfectant that has action against Salmonellae. Usually, phenolic disinfectants are preferred as they work better than quaternary or halogen type disinfectants in the presence of organic material. A partial list of disinfectants can be found in the appendix.
- 2) Apply the disinfectant to all surfaces in an effort to kill any remaining SE that may be found on these surfaces. Apply as a spray, foam, or fog.

- a) Low pressure spray - Low pressure (600 to 800 psi) can be used to wet surfaces to the point of runoff.
 - b) Foam - Commercial foaming applicators are available and allow a greater contact time with the disinfectant.
 - c) Fog - Thermal foggers for water-based materials can be used to apply disinfectants by placing them in the house and allowing them to run until empty. Usually, the fogger must be run at both ends of the house as the effective fogging distance is only 200 to 250 feet.
- 3) Apply disinfectant solution to a 10-foot perimeter area outside the house as well.
 - 4) After the disinfectant has been applied, hand-clean plastic covered equipment with disinfectant solution. Also, apply disinfectant solution by hand to the egg room, egg packer, egg cooler, office, bathroom, tool storage area, stairs, and walkways to the house.
 - 5) After the house has been disinfected, no persons should enter without clean coveralls, boots, and headwear. No contaminated equipment is to be allowed entry.
 - 6) Schedule an inspection visit with the PEQAP inspector after cleanout but prior to fumigation.

PROVISIONS FOR CAGE-FREE HOUSES * PDA inspector must inspect prior to slats being placed

- 1) The basic procedures are the same as for caged layer or pullet houses.
- 2) Dirt floors require thorough removal of litter and manure using scooping, scraping, and sweeping.
- 3) Remove slats from houses for proper cleaning and disinfecting.
- 4) If wet disinfection is performed, apply the disinfectant solution to the floors as well.
- 5) In organic houses, use an organic approved disinfectant product applied as directed.
- 6) Heat treating of dirt floors using a propane flame sanitizer may be a good alternative to chemical-based disinfectants.

PEQAP Dry Clean Protocol

Purpose

The following procedures were developed to outline the PEQAP requirements that must be met to qualify for dry-cleaning (waterless cleaning) between flocks in a pullet or layer house that was determined to be positive for *Salmonella enteritidis* (SE).

General

Requirements:

- A. Requirements for Qualification for Dry-Cleaning
 1. Must agree to allow a 10-day downtime period between flock placements for C&D.
 2. Schedule SE vaccination required for incoming pullets
 - a. Killed SE bacterin (usually given at 12 to 18 weeks of age)
 - b. Live vaccine (normally 3 doses during grow, use program according to vaccine manufacturer's recommendations)
 - c. Both killed bacterin and live vaccine
 - d. Schedule an inspection visit with the PDA inspector during cleanout; the inspection must be done after dry-cleaning but before fumigation.
- B. Requirements for Sanitation Between Flocks (refer to the *Procedures used for cleaning houses for the PEQAP Dry Clean Program* to follow)
 1. Commitment to control rodents during cleanout
 - a. Baiting.
 - b. Plugging entrances.
 - c. Reducing rodent-harboring habitat.
 - d. Obtain professional assistance if needed.
 2. Complete removal of all manure, feed, eggs, birds, dust, etc. from house (air inlets, fans, cross beams, dropping boards, walkways, feed troughs, pit, etc.).
 3. A minimum of 10 days downtime scheduled (time from no live birds in house to housing of point-of-lay pullets).
 4. Dry-cleaning finished at least 3 days before housing point-of-lay pullets.
 5. Fumigation with formalin at least 24 hours prior to placement of pullets.

Procedures Used for Cleaning Houses for the PEQAP Dry Clean Program:

The entire process is divided into four different sections:

- 1) Planning,
- 2) Dry-cleaning,
- 3) Fumigation ("Disinfection"), and
- 4) Monitoring

The details of these four steps are as follows:

1. PLANNING

- a. Schedule a dry-cleaning inspection with the PEQAP inspector; if floor house with slats, schedule the inspection prior to placement of slats.
- b. Proper C&D requires planning for labor, time, equipment, and materials to be used. The time required for each house will vary, but normally requires at least 10 days from the time birds are removed and the time replacement birds are housed.
- c. Planning for proper disposal of manure is also important. The best means of manure disposal is to compost the manure in piles before it is used as fertilizer, to eliminate the potential for spread of any pathogens that may be in the manure.
- d. Plan for the house to be empty for three to seven days after C&D to allow time for any pathogens to die off.

2. DRY-CLEANING

- a. Remove all dead and live chickens, eggs, and other animals (cats, free-flying birds, rodents, etc.).
- b. Aggressively place fresh rodent bait and leave out until just prior to cleaning. Be sure to include baiting of the attic.
- c. Complete physical repairs of rodent entry sites.
- d. Apply appropriate insecticides.
- e. Remove all feed from troughs, hoppers, and feed bins. The removal of feed from the troughs and hoppers is very important for rodent control. Removal of caked feed on the feed troughs by scraping is an added benefit and should be done if possible.
- f. Use scraping, scooping, sweeping, compressed air, etc. to dry-clean the upper part of the house, starting with the air inlets (inside and outside) and working downward.
 - i. Attempt to move the organic material into the pit for eventual removal.
 - ii. Be sure to blow out any remaining feed in the troughs so that rodents do not have a source of feed.
- g. Physically clean the manure dropping boards or cage curtains. No large, visible clumps of manure should remain.
- h. Remove manure off cage cross members and floor joints. No large, visible clumps of manure should remain.
- i. Dry clean the fans, housing, brush blades and louvers thoroughly.
- j. Remove all manure and organic material from the pit.
- k. Follow-up the gross cleaning with scraping, scooping, and sweeping.
- l. Move all removable equipment from the house, egg room, and workroom to allow thorough cleaning.
- m. Inspect all areas for cleanliness, and re-clean if not satisfactory.
- n. Water line sanitation is highly recommended as part of the dry-cleaning:
 - i. Water line sanitation should be done 2 to 3 days prior to new pullet placement.
 - ii. Fill water lines with a solution of citric acid; 2 lbs. per gallon of stock metered at 1 ounce per gallon of water.
 - iii. Allow to set for about 2 hours.
 - iv. Flush lines thoroughly with water to remove citric acid solution.

- v. Fill water lines with a high concentration of chlorine; 20 ppm, using 13 ounces of Clorox (5.25 % sodium hypochlorite) per gallon of stock metered at one ounce per gallon of water.
- vi. Leave the Clorox in lines for about 2 hours.
- vii. Flush lines until no smell of chlorine remains.

3. FUMIGATION (Inspection with the PDA inspector must be scheduled prior to fumigation).

- a. Fumigation is done after the post dry-cleaning inspection is passed. Two fumigation methods are available:
 - i. Thermal fogging – 1 gallon 37 % formaldehyde solution per 16,500 cubic feet.
 - ii. Spraying – 60 ounces of a 1:4 dilution of 37 % formaldehyde solution for each 1000 cubic feet.
- b. After fumigation, replace rodent bait stations after the fumigant level is safe for persons to enter house.

4. MONITORING

- a. Designate one person to monitor and maintain records of the C&D program.
- b. Use the PEQAP Cleaning and Disinfection Evaluation Form and the PEQAP Dry-Cleaning Checklist for Layer Houses in Preparation for New Birds for guidance.
 - 1) Re-clean and fumigate any areas found to be contaminated prior to placement of the new flock.

A checklist has been developed for use for the PEQAP Dry Clean Program and is found in Annex VI-B “PEQAP Dry Clean Program Checklist”.

Eric Gingerich, DVM

15Dec04 – Revised Sept. 2008/Revised Nov. 2008

Waterless (Dry) Cleaning Checklist for Layer Houses In Preparation for New Birds Before Birds Are Out

- ___ Schedule a C&D inspection with the PDA inspector; the inspection must be done after dry-cleaning but before fumigation and if floor house with slats, prior to slats being down.
- ___ Schedule at least 10 days for cleanout between flocks (all birds out to new pullets in)
- ___ Vaccinate incoming pullets.
- ___ Remove all moveable objects in house (including fire extinguishers)
- ___ Clean/brush down all fans and housings
- ___ Remove all dead birds
- ___ Pickup live rodent traps (Tin Cats) and bait stations
- ___ Blow down walkways/house
- ___ Remove as much manure as possible from house prior to bird removal

After Birds Are Out

- ___ Remove all feed from feed trough and hoppers.
- ___ Run scrapers (if applicable)
- ___ Scrape beams
- ___ Remove all dead birds and eggs from cages
- ___ Blow out air inlets and blow off inlet boards
- ___ Blow down walkways
- ___ Place rodent tracking powder on ledges, beams, etc. where rodents track
- ___ Take de-escalator shields off (if applicable)
- ___ Pressure wash items removed from the house (slats, shields, buggy, medicator buckets, bait stations, live traps, etc.)
- ___ Blow down curtains and repair (if applicable)
- ___ Remove all manure from pit

After Manure Removed

- ___ Clean curbs
- ___ Blow down pit area
- ___ Vacuum fan housings
- ___ Check for rodent holes and plug with rodent-proof materials

After Dry Cleaning

- ___ Hand wash light globes (if applicable)
- ___ Lime pit hydrated lime (optional)
- ___ Replace de-escalator shields (if applicable)
- ___ Spray insecticide if necessary
- ___ Sanitize water lines – citric acid followed by chlorine (highly recommended)
- ___ Fumigate with formalin

After Birds Are In

- ___ Replace live traps and bait stations

Extras

- ___ Scrape and remove hard caked feed from feeder troughs if possible (optional)

SECTION VII

PEQAP Egg Processing Plant Information

PEQAP Egg Processing Plant Requirements

PEQAP Plant Sanitation Compliance – Critical and Non-critical areas

PEQAP Egg Processing Plant Sanitation and Inspection Form

PEQAP

Egg Processing Plant Requirements

1. Premises and shell egg processing equipment should be kept in good repair and shall be cleaned after each day's use, or more frequently, if necessary.
2. Eggs shall be packaged only in new fiber flats, cartons, or fiber cases; or, if using plastic flats; plastic flats must be washed and sanitized before each use.
3. Before processing, eggs shall be stored at an ambient temperature not to exceed 45 degrees F. After processing, eggs shall be held at an ambient temperature not to exceed 45 degrees F. Eggs shall be transported in a unit with a temperature not to exceed 45 degrees F.
4. The PEQAP logo cannot be used on cartons and cases containing eggs not produced and/or processed under the requirements of PEQAP.
5. Eggs identified with the PEQAP logo may not be returned and repackaged as PEQAP eggs once they have left the packing facility and have entered commercial marketing channels.
6. Shell egg processing requirements are as follows:
 - a. The temperature of the wash water shall be maintained at 90 degrees F or higher, and shall be at least 20 degrees F warmer than the temperature of the eggs to be washed. These temperatures shall be maintained throughout the cleaning cycle and monitored at least twice per eight- hour shift.
 - b. Only cleaning and sanitizing agents meeting USDA requirements shall be used in the processing of eggs.
 - c. Wash water shall be changed approximately every 4 hours or more often if needed to maintain sanitary conditions, and at the end of each shift. Remedial measures shall be taken to prevent excess foaming during the egg washing operation.
 - d. Wash water must be potable. If well water is used, a water test is required every 6 months. If municipal water is used, an annual test is required.
 - e. Wash water must have iron content of less than 2 ppm. A new test is required when the water source is changed.
 - f. The pH of wash water shall be 10 or higher. The pH levels shall be monitored at least twice per eight-hour shift.
 - g. Waste water from the egg washing operation shall be piped directly to drains.

- h. The washing and drying operation shall be continuous and shall be completed as rapidly as possible. Eggs shall not be allowed to stand or soak in water. Immersion-type washers shall not be used.
 - i. Pre-wetting shell eggs prior to washing may be accomplished by spraying a continuous flow of water over the eggs in a manner which permits the water to drain away.
 - j. The temperature of the water used to spray-rinse washed eggs shall be equal to, or warmer than, the temperature of the wash water and shall contain an approved sanitizer of not less than 50 ppm nor more than 200 ppm of chlorine or its equivalent. The wash water temperature and concentration of sanitizer shall be monitored at least twice per eight-hour shift.
7. Eggs shall meet all applicable Federal and State laws.
8. PEQAP participating plants must pack all eggs, including non-PEQAP eggs, under PEQAP program requirements.
9. The following records shall be maintained for a minimum of six months: pH, water temperatures, sanitizer levels, cooler temperatures and washer water tests for iron and potability.

PEQAP Plant Sanitation Compliance

Critical Areas:

When an unsatisfactory rating is issued, the participating plant will be required to take corrective action within twenty four hours. An unannounced reinspection will occur within 1-10 days to verify that corrective action has been taken.

- ***1-10 day Reinspection:*** If the initial unsatisfactory rating is not up graded to satisfactory, this will be reported as a violation to Penn Ag.
- ***Recurring Unsatisfactory Ratings:*** If the same unsatisfactory rating is scored two times within a twelve month period, this will be reported as a violation to Penn Ag.
- ***Multiple Category Unsatisfactory Ratings:*** If more than three unsatisfactory ratings are received within a twelve month period, this will be reported as a violation to Penn Ag.

Non Critical Areas:

When an unsatisfactory rating is issued, the participating plant will be required to take corrective action by the time of the next inspection. The next inspection will occur within 1-30 days from the initial inspection when the unsatisfactory rating was issued.

- ***1-30 Day Reinspection:*** If the initial unsatisfactory rating is not upgraded to satisfactory, this will be reported as a violation to Penn Ag.
- ***Recurring Unsatisfactory Ratings:*** If the same unsatisfactory rating is scored four times within a twenty four month period, this will be reported as a violation to Penn Ag.
- ***Multiple Category Unsatisfactory Ratings:*** If more than six unsatisfactory ratings are received within a twenty four month period, this will be reported as a violation to Penn Ag.

Water Tests:

When a participant fails to submit water tests on time, this will be reported as a violation to Penn Ag.

Water Requirements:

When water is found to be out of the required ranges for temperature, Ph, and sanitizer requirements, the participant will be required to take action immediately while the inspector is present. Water readings will be rechecked before the inspector completes the inspection to verify compliance.

If water readings are not corrected before the inspector completes the inspection, this will be reported as a violation to Penn Ag. If proper verification of corrective action can be obtained by the inspector, no violation will be reported.

Water should be monitored twice per eight hour shift by the participant, if monitored properly there should not be any water problems when the inspector arrives to conduct PEQAP.

When non compliant readings are recorded in a category for the third time in a twelve month period, this will be reported as a violation to Penn Ag.

Needs Improvement Rating (NI):

The most “NI” ratings a participant may receive in one category are two. After two consecutive ratings of “NI” the condition will be rated as “Unsatisfactory”.

Any “NI” ratings will be changed to “unsatisfactory” ratings if conditions worsen before two consecutive “NI” ratings are received.

Temperature:

PEQAP standards follow all State and Federal requirements for cooler temperature. Compliance issues will be handled by the Department of Agriculture with the enforcement of the Egg Refrigeration Law, up to and including fines and seizures of eggs.

PEQAP PLANT SANITATION EVALUATION

Inspector _____ Plant Name _____
 DATE _____ Plant # _____
 Is this a Reinspection? No Yes Date of Initial Inspection _____

Ratings S= Satisfactory NI= Needs Improvement U= Unsatisfactory

	Critical	Non Critical	S NI U	REMARKS
I. Shell Egg Washing, Grading, and Packaging Operations and Equipment.				
A. Loaders, conveyors, and orientors clean and sanitary.		X		
B. Washers, nozzles, brushes, and compartments clean and sanitary.	X			
C. Egg drying equipment clean, sanitary, and filters regularly changed or cleaned.	X			
D. Mass scanning, scales, and packaging equipment conveyors clean and sanitary.	X			
E. Egg oiling equipment clean and sanitary and oil free of off odors or obvious contamination.	X			
F. Plastic flat washers and dryers clean and sanitary.		X		
G. Washing, grading and packing equipment non-contact surfaces clean and sanitary.		X		
II. Processing room				
A. Walls, ceilings, and floors clean.		X		
B. Packaging and packaging materials clean and free of mold, mustiness, and off odors.	X			
C. Benches, shelves, and packing tables and conveyors clean and sanitary.		X		

D. Fixtures over packing and packaging areas are free of dust, dirt, and condensation.		X		
III. Cooler and Storage Areas				
A. Unprocessed egg coolers clean and free from odors and mold.	X			
B. Processed egg coolers clean and free from odors and mold.	X			
C. Packaging and packaging storage areas clean and dry.		X		
D. Chemical compound storage areas clean.		X		

PAGE 2			S NI U	
	Critical	Non Critical		REMARKS
IV. Buildings, Premises, and Refuse Handling Areas				
A. Building in good repair.		X		
B. Outside premises, shipping, and receiving areas clean, well maintained, and properly drained.		X		
C. Outside premises free of trash, rubbish, weeds, and surplus equipment.		X		
D. Refuse removed and stored in designated area that is maintained in a clean and sanitary manner.		X		
E. Restrooms and lunchrooms clean and sanitary.		X		
F. Inspection of premises indicates rodent and pest control program is effective.		X		
V. Plant Records Maintained				
A. Records current and maintained for pH, water temperature, sanitizer, and cooler temperature.		X		

Machine #1	Initial Reading	Adjusted Reading	Machine #2	Initial Reading	Adjusted Reading
Time Wash Water Changed (every 4-5 hours)			Time Wash Water Changed (every 4-5 hours)		
Wash Water Ph 10			Wash Water Ph 10		
Wash Water Temperature min 90 F or 20 F warmer than egg temp			Wash Water Temperature min 90 F or 20 F warmer than egg temp		
Sanitizer 50-200 ppm			Sanitizer 50-200 ppm		
Sanitizer Temperature equal/greater than wash water temp			Sanitizer Temperature equal/greater than wash water temp		

Temperatures	Initial Reading	Adjusted Reading
Cooler #1 45 F		
Cooler #2 45F		
Cooler #3 45F		
Unprocessed 45F		

INSPECTOR SIGNATURE _____ DATE _____

PLANT MANAGEMENT SIGNATURE _____

Water Test Current? Yes No Due
By: _____

SECTION VIII

PEQAP Committee Operating Protocols

PEQAP Oversight Committee and Compliance Committee Operating Protocols

Operating Protocols for PEQAP Committees

1. PEQAP Oversight Committee Operating Protocol

- a. PEQAP is supervised by an Oversight Committee.
- b. The PEQAP Oversight Committee consists of representatives of PennAg, PDA, PDH, the Poultry/Egg Industry, Penn State University, and the University of Pennsylvania.
- c. PEQAP is administered and coordinated by a Program Director, who is the chairperson of the PEQAP Oversight Committee.
- d. The PEQAP Oversight Committee shall meet as frequently as needed, but at least twice each year.
- e. Procedures, operating protocols, and program standards are established by the PEQAP Oversight Committee.
- f. Oversight Committee member seats get one vote each, except for the non-voting members which are the Pennsylvania Department of Agriculture and the Pennsylvania Department of Health.

2. PEQAP Compliance Committee Operating Protocol

The Compliance Committee consists of representatives of PennAg, Penn State University, the University of Pennsylvania, and three representatives of the Poultry/Egg Industry as approved by the Oversight Committee. The Compliance Committee shall be involved in dispute arbitration if there is a lack of evidence of violation.

SECTION IX

Communications with PADLS Laboratories

PDA and PADLS PEQAP Procedures

Obtaining PEQAP Sampling Supplies

PDA and PADLS Procedures for PEQAP

Purpose

The purpose of this document is to promote rapid and accurate flow of information between PDA and PADLS laboratories.

General

PDA and PADLS cooperate to report and respond to test results for PEQAP participants. Protocols have been developed for efficient information exchange.

Procedures/Protocols

1. Test Results
 - a. PDA will be notified of any preliminary and final positive test results by the laboratories. This includes organ isolates.
 - b. All SE-positive isolates will be forwarded from PADLS laboratories to New Bolton Center or other approved laboratory within 24 hours of identification, for final confirmation of *Salmonella enteritidis*. (Changed from NVSL to NBC after sent out to committee per Dr. Kelley).
2. Participant Information

PDA will provide updated participant information from USAHERDS to the testing PADLS laboratories on a routine basis.
3. Participant Paying for Testing

When testing fees for a PEQAP participant are to be changed, the appropriate PADLS Laboratory will be notified by the PEQAP coordinator.

PEQAP

Procedure for Obtaining Sampling Supplies

1. Call the laboratory and place an order for sampling supplies.
2. Keep the laboratory informed as to dates samples will be shipped for testing. This will allow the laboratory to plan workload and keep adequate sampling and testing supplies on hand.
3. Contact information:

NEW BOLTON CENTER
PEQAP
382 WEST STREET ROAD
KENNETT SQUARE, PA 19348
(610) 925-6154
FAX (610) 925-6770

PENN STATE ANIMAL DIAGNOSTIC LABORATORY
SALMONELLA LAB
100 ORCHARD ROAD
UNIVERSITY PARK, PA 16802
(814) 865-5792 LAB PHONE AND RECORDER
FRONT DESK (814) 865-0838
FAX (814) 865-3907

PENNSYLVANIA VETERINARY LABORATORY (HARRISBURG)
2301 N. CAMERON ST
HARRISBURG, PA 17110
(717) 787-8808
AVIAN: EXTENSION 235
SHIPPING: EXTENSION 218