

UNITED STATES DEPARTMENT OF AGRICULTURE
FOOD SAFETY AND INSPECTION SERVICE
WASHINGTON, DC

FSIS NOTICE	03-09	1/6/09
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**NATIONWIDE MARKET HOGS MICROBIOLOGICAL BASELINE
DATA COLLECTION PROGRAM - SHAKEDOWN**

NOTE: This Notice only applies to inspection program personnel at the establishments that are included during the Shakedown period as part of the FSIS Nationwide Market Hogs Microbiological Baseline Data Collection Program.

I. PURPOSE

This notice provides information to inspection program personnel at selected establishments on the trial run or “Shakedown” portion of the FSIS Nationwide Market Hogs Microbiological Baseline Data Collection Program hereinafter referred to as the MHBS. Information in this notice applies to the 90-day Shakedown period that will be conducted before the actual MHBS begins. The 90-day Shakedown period will begin upon receipt of sampling forms to be issued within 30 days of issuance of this notice. In general, the sample collection procedures for the initial Shakedown period and the actual MHBS will be the same as those for collecting standard *Salmonella* performance verification samples from post chill carcasses. However, there are some significant modifications as listed in Section VIII., “Sampling Procedures” of this notice. In particular, one significant modification is that the 90-day Shakedown and the actual MHBS will also include the collection of a pre-evisceration sample. The addition of the pre-evisceration sample result will permit comparative evaluation with the post chill sample result.

After completion of the Shakedown period, a subsequent notice will describe the final procedures to be followed during the actual MHBS.

II. SHAKEDOWN KEY POINTS

- Shakedown period is 90 days.
- Sample sets are collected 1) pre-evisceration (i.e. most preferably at any point post stunning to pre-scalding or pre-skinning in which the sample can be safely collected) and 2) post chill.

DISTRIBUTION: Electronic

NOTICE EXPIRES: 1/1/2010

OPI: OPPD

- Each sample consists of two sponges - one sponge per each side of one whole or split carcass (i.e., two sponges per carcass). Samples are evaluated for differences in type and quantity of several food-borne microorganisms.
- Each FSIS Form 10,210-3, Sample Request Form (See Attachment 1) contains survey questions to be answered by the Inspector-in-Charge (IIC) for each sample.
- Shakedown sample results are not reported.
- All supply requests and questions are resolved by submitting a request or question via Outlook to the "Market Hog Sampling Baseline Mailbox";

III. SHAKEDOWN BACKGROUND

The Shakedown portion of the MHBS is designed to collect sponge samples from the belly, ham, and jowl portion of certain hog carcasses. Only market swine are eligible for testing in the MHBS. The MHBS excludes boar/stag swine, feral swine, roaster swine, and sows.

Inspection program personnel will collect the two sponge samples from different hogs during their shift at the following slaughter/dressing locations: 1) pre-evisceration (i.e. most preferably post stunning to pre-scalding or pre-skinning) and 2) post chill from carcasses that are thoroughly chilled post-rigor and available during the same shift when the pre-evisceration sample is collected. Each pre-evisceration sponge sample must be accompanied by a post chill sponge sample to complete the sample set for the shift.

IV. 90-DAY SHAKEDOWN PERIOD

The purpose of the 90-day Shakedown period is to ensure that inspection program personnel are familiar with sample collection procedures and to collect information concerning certain characteristics of the establishment. During this period, market hog carcasses will be tested for the presence of a variety of microorganisms, as well as their levels (number of colony forming units).

Any updates or changes in procedures will be posted in a FSIS Notice after the Shakedown period is over and prior to the initiation of the actual MHBS.

V. REVIEW OF FSIS DIRECTIVES AND VIDEO MATERIALS BY INSPECTION PROGRAM PERSONNEL

Upon receipt of this notice and training materials included with the first set of sample supplies, inspection program personnel who will be collecting the samples are to review the following materials:

1. [FSIS Directive 10,230.5](#) and the Self-Instruction Guide for Collecting Raw Meat and Poultry Product Samples for *Salmonella* Analysis available at the following link:

http://www.fsis.usda.gov/OPPDE/rdad/FSISDirectives/Salmonella_Analysis.pdf

2. The DVD titled "Sampling Raw Meat and Poultry for *Salmonella*"

A copy of the DVD will be included in the first sample collection kit for the MHBS.

NOTE: If you do not receive a copy of the DVD with your first sample collection kit, an email can be sent to the “Market Hogs Baseline Mailbox” in Outlook. Include your name, establishment number, mailing address, and the phone number so that a DVD can be mailed to you at your duty station.

3. FSIS Directive 10, 210.1, Unified Sampling Form. The MHBS uses a pre-printed FSIS Form 10,210-3. FSIS Directive 10,210.1 provides instructions to inspection program personnel for the use of a unified sampling form for all directed sampling programs (microbiological, chemical, and residue). This directive transmits sample copies of FSIS Form 10,210-3 and instructions for completing the form, and specific instructions for each individual sampling project.

4. FSIS Directive 7355.1, Revision 2, Use of Sample Seals for Laboratory Samples and other Applications. This directive can be accessed at the following web address.

<http://www.fsis.usda.gov/OPPDE/rdad/FSISDirectives/7355.1Rev2.pdf>

VI. AWARENESS MEETING WITH ESTABLISHMENT MANAGEMENT

A. Upon receipt of this notice, the IIC is to have an awareness meeting with establishment management to inform them that the establishment will be part of the Shakedown portion of the MHBS and explain the program as outlined below. The actual MHBS will follow the 90-day Shakedown period and FSIS will issue a separate notice with supplemental information.

B. The IIC is to provide establishment management with a copy of this notice and review the following program points during the awareness meeting:

1. The IIC is to emphasize to establishment management that the results of the microbiological sampling from this baseline testing will NOT be the basis for regulatory actions. Consequently, the establishment need not hold any sampled carcasses or production lots including these sampled carcasses.

2. The Shakedown portion of the MHBS is designed to gather sponge samples from two different carcasses at two different time points in the slaughter/dressing/chilling operation. Trained inspection program personnel will collect a sample set of 4 sponges. Each sample set includes one carcass sample (two sponges) collected at 1) pre-evisceration (i.e., most preferably post stunning to pre-scalding or pre-skinning) and another carcass sample (two sponges) collected at 2) post chill from carcasses thoroughly chilled post-rigor available at the time of pre-evisceration sample collection. Pre-evisceration carcass samples representative of micro flora on the hog at ante mortem are collected at the nearest (i.e., earliest) location post stunning yet is safe for sample collection. Once determined, the pre-evisceration carcass sample location should remain at the same point throughout the Shakedown trial period. The corresponding post chill sample is collected randomly from a post rigor carcass chilled for 12 hours (or less time if

the establishment has accelerated chilling capability) that is available during the same shift when the pre-evisceration sample is collected. Post chill samples may be collected from any available chilled carcasses (i.e. post-rigor and post chilled) from the previous slaughter shift. First shift pre-evisceration samples must NOT be matched with second shift post chill samples and Second shift pre-evisceration samples must NOT be matched with first shift post chill samples.

NOTE: Pre-evisceration samples are to be collected promptly after lethal stunning to ensure proper bleeding. If samples are not able to be collected promptly, the sample should be collected post bleeding. If samples cannot be easily, safely, and properly collected post stunning or post bleeding, PHVs are to collect pre-evisceration samples from U.S. Suspects passed for slaughter that are bright alert market hogs (e. g. non-ambulatory disabled swine in minimal distress). Steps should be taken to ensure conditions (e. g, degree of hide soiling) are as close to those experienced by the majority of swine processed by the establishment as possible. Contact PDD (1-800-233-3935) for more information.

3. Sample sets collected throughout the Shakedown period are to be collected at random times during each slaughter shift. No more than one sample set of 4 sponges (i.e 2 samples) representing a slaughter shift is collected in any given day. Inspection program personnel will follow the methodologies for random collection of samples as directed in this notice. Shift 1 collected samples need to be collected and shipped on the same and Shift 2 samples need to be collected and shipped on the same or following day.

4. FSIS is conducting a 90-day Shakedown period before the actual MHBS begins. The purpose of the 90-day Shakedown period is to ensure that inspection program personnel are familiar with the new sample collection procedures and to collect information concerning certain characteristics of the establishment.

5. During the 90-day Shakedown period, the contract laboratory will test the samples for generic *Escherichia coli*, *Salmonella*, *Campylobacter*, *Enterobacteriaceae*, coliforms, and total aerobic plate count. Inspection program personnel are to send all samples to the FSIS contract laboratory, Food Safety Net Services, San Antonio, TX.

6. At the conclusion of the 90-day Shakedown period, after a Headquarters' review of the sample collection, shipping and sample receipt condition results, FSIS having concluded that inspection program personnel have a sufficient understanding of the collection procedures and any identified implementation problems have been resolved, the actual MHBS will begin and continue for a minimum of one year.

7. No microbiological data from the Shakedown portion of MHBS is reported. During the Shakedown portion of MHBS, inspection program personnel will not receive laboratory testing results for the non-regulatory samples analyzed at the contract laboratory. These non-regulatory testing results are not posted in LEARN. Nor will FSIS provide individual or cumulative results from samples collected during the Shakedown period of individual establishments to inspectors or establishments.

8. The Agency expects each establishment to maintain and carry out any sampling described in its own food safety system or required by regulation (9 CFR 310.25 Part C) for swine regardless of whether FSIS collects a sample in the MHBS.

VII. SHAKEDOWN SAMPLING FORMS

Inspection program personnel are to use the following methodology for collecting samples and completing FSIS Form 10,210-3 as directed in this notice.

A. Inspection program personnel will receive the pre-printed FSIS Form 10,210-3 in the mail from Headquarters.

B. Block 14 (Project No.) of the pre-printed FSIS Form 10,210-3 indicates the Project Identification Code (Project ID code) for the sample to be collected. There will be a Project Identification Code (e.g. S48PREV1) for each pair of pre-evisceration (most preferably post stunning to pre-scalding or pre-skinning) and (e. g. S48POST1) for each pair of post chill samples. The Project Identification Code indicates the type of sample in each sample set (i.e. pre-evisceration (post stunning to pre-scalding or pre-skinning) vs. post chill) during the 90-day Shakedown period as listed in Table 1.0 below:

Table 1.0 – Project Identification (Project ID) Codes	
Shakedown– First Shift Sample Set	Shakedown– Second Shift Sample Set
S48PREV1 -Shakedown pre-evisceration (most preferably post stunning to pre-scalding or pre-skinning) carcasses slaughtered on “A” or First Shift. (2 sponges-1 sponge/side)	S48PREV2 - Shakedown pre-evisceration (most preferably post stunning to pre-scalding or pre-skinning) carcasses slaughtered on “B” or Second Shift (2 sponges-1 sponge/side)
Shakedown– First Shift	Shakedown– Second Shift
S48POST1 -Shake Down post chill carcasses available on “A” or First Shift. (2 sponges-1 sponge/side).	S48POST2 -Shake Down post chill carcasses available on “B” or Second Shift (2 sponges-1 sponge/side).

C. Each pre-printed FSIS Form 10,210-3 also identifies the week of sample collection (Block 4).

D. To the extent possible, inspection program personnel are to collect all samples during the week indicated in Block 4 on the Sample FSIS Form 10,210-3, and are to ship them to the designated contract laboratory listed in Block 9 (Receiving Laboratory) on the FSIS Form 10,210-3. Pre-printed shipping labels are included with the sample supplies. The contract laboratory will accept samples collected outside of the designated week.

NOTE: FSIS is interested in processing the maximum number of samples by reducing discards. If resources (supplies, time, or personnel) or lack of production does not permit submission of samples during the designated week or if market hogs are NOT being slaughtered during the week indicated in Block 4, please collect carcass sponge samples as close to the designated week as possible (i.e., just prior to or as soon as possible after the designated week). FSNS, the contract laboratory, will analyze all samples that meet the MHBS criteria. Do not send any samples to any FSIS laboratory.

E. Block 18 of the FSIS Form 10,210-3 will provide additional information about the type of sample to be collected. The shift specified for sample collection will alternate during the study and is indicated in the Project Identification Code (Table 1.0) and Block 14 (i.e. Shift 1 is S48PREV1 or S48POST1 and Shift 2 is S48PREV2 or S48POST2) of the FSIS Form 10,210-3.

F. Inspection program personnel are to include the Name of Producer/Grower in Block 26.

G. Pre-printed questions and answers regarding pre-evisceration (most preferably post stunning to pre-scalding or pre-skipping) and post chill samples appear in Block 28 of FSIS Form 10,210-3 during the 90-day Shakedown period and are listed in Table 2.0 and Table 3.0 respectively below. Make sure the FSIS Form 10,210-3 questions and Project Identification Code correspond with the sample you are collecting.

**Table 2.0* - Pre-evisceration (post stunning to pre-scalding or pre-skining)
Sample Questions in Block 28 of FSIS Form 10,210-3:**

1. Was the shift from which this market hog was slaughtered and sampled preceded by a total clean-up/pre-op? Yes___ No___
2. Time of sample collection: _____ (HH:MM)
3. What is the avg. live wt. (lbs.) of the lot from which this hog was sampled?
4. Where was this pre-evisceration sample collected? _____ Refer to Table 4 in this notice.
5. **Will** a Pre-ECS wash cabinet be used? Yes___ No___ Intervention _____ Refer to Table 5 in this notice.
6. **Will** a Post-ECS wash cabinet be used? Yes___ No___ Intervention: _____ Refer to Table 5 in this notice.
7. What is the FSIS Form 10,210-3 Form number for the S48POST1/S48POST2 sample in this sample pair? _____

***Table 2.0 Notes:**

- Question #1: Was the sample collected on the shift preceded by a total clean up?
- Question #2 Indicate time of collection using the 24 hr clock. (HH:MM)
- Question #3 Provide the average live weight in pounds (lbs.) of the lot from which the hog is sampled at pre-evisceration.
- Question #4: Identify where the pre-evisceration sample was actually collected by indicating the location by letter (A, B, C, etc.) from Table 4.0.
- Question #5: A Pre-ECS or pre-evisceration carcass spray (PECS) cabinet uses a low pressure spray on carcasses after the polisher rinse and before opening of the carcass. Intervention: Identify all antimicrobial treatments or processes used at this step from Table 5.0 below. E. g. If steam or steam vacuuming is used, indicate "F" as the intervention. If there are multiple answers, separate answers with commas. E. g. "Intervention: F, G".
- Question #6: A Post-ECS or post evisceration carcass spray cabinets uses a low pressure spray after the carcass is split. Intervention: Identify all antimicrobial treatments or processes used at this step from Table 5.0 below. E. g. If chlorinated water is used at this step, indicate "H" as the intervention.
- Question #7: Identify the Sample FSIS Form 10,210-3 form number of the corresponding post chill sample taken from the same shift. NOTE: The sample request form number (Block 1 of FSIS Form 10,210-3) is a unique number and is not the same as the Project Identification Code (Block 14) on FSIS Form 10,210-3..

Table 3.0 - Post Chill Sample Questions in Block 28 of the FSIS Form 10,210-3:**

1. Was the shift from which this hog was slaughtered preceded by a total clean-up/pre-op? Yes___ No___
2. Time of collection _____ (HH:MM)
3. Was this hog skinned or mid-section skinned? Yes___ No___
4. Was an antimicrobial used in the final hog carcass wash used on this carcass?
Yes_____ No_____ Intervention:_____ Refer to Table 5 in Notice XX-08.
5. Indicate if the establishment uses an ice/water quick chill system, freezer blast chill system, or standard refrigeration to chill carcasses in the cooler _____
Refer to Table 5 in Notice XX-08.
6. What is the FSIS Form 10,210-3 form number for the S48PREV1/S48PREV2 sample in the sample pair? _____

****Table 3.0 Notes:**

- Question #2: Using a 24 hour clock, indicate the time this sample is collected.
- Question #4: The “final wash” is the wash that is located after the final rail prior to entering the cooler. Intervention: Identify all antimicrobial treatments or processes used at this step by letter from **Table 5.0 below**. For example, if steam or steam vacuuming is used, indicate “F” as the intervention. If there are multiple answers, separate answers with commas. E. g. “Intervention: F, G”. If no antimicrobial or antimicrobial process is used at this step and carcasses are washed with only potable water, indicate “E” as the intervention.
- Question #4. Be aware standard carcass cooling does not count as an antimicrobial intervention.
- Question #5. Indicate the type of chilling used by answering with the appropriate letter (L, M, or N) per Table 5.0.
- Question #6. On the post chill FSIS Form 10,210-3, identify the form number of the corresponding pre-evisceration (post stunning to pre-scalding or pre-skining) sample taken from the same shift. NOTE: The form number (Block 1) is a unique

number and is not the same as the Project Identification Code (Block 14) on FSIS Form 10,210-3.

Table 4.0 Location of Pre-evisceration Sample Collection Identified in Block 28 Responses
A. Post-Stunning (via US Suspect Pen) B. Post-Stunning (via normal stunning; pre-bleeding) C. Post bleeding (normal stunning; post bleeding to pre-shackling) D. Post Shackling (normal stunning; post shackling to pre-scalding)

Table 5.0 Antimicrobial Interventions, Treatments or Processes Identified in Block 28 Responses
E. None F. Steam vacuum; Steam pasteurization G. Hot water (160-180F) H. Chlorinated water 20-50 ppm J. Lactic Acid K. Other; (<i>please specify</i>) _____ L. Ice/water quick chill system M. Freezer blast chill system, N. Standard refrigeration (not L or M).

VIII. Supply List for Market Hog Sampling

Inspection program personnel are to review Section 2, *Supplies*, and Section 5, *Preparation for Sample Collection*, in FSIS Directive 10,230.5, Attachment 1, for all sponge samples collected.

NOTE: The supplies for this baseline study *are different* from those from prior baseline studies. The following is a list of the supplies for each sample request that will be inside a shipping box with baseline sorting labels (project labels):

A. Supply List for Pre-evisceration (post stunning to pre-scalding or pre-skinning) Sample

1. Four pairs of sterile gloves

2. Two containers, each containing 25 ml of sterile BPW (Buffered Peptone Water)
3. Two sterile specimen sponges in Whirl-Pack bags
4. Two one-quart zip-lock-type bag for collected samples
5. One 6" x 12" plastic sleeve for FSIS Form 10,210-3
6. One FSIS Form 7355-2A/2B (Laboratory sample container seals)
7. Two 10x10 cm² sterile templates

B. Supply list for Post Chill Sample

1. Four pairs of sterile gloves
2. Two containers, each containing 25 ml of sterile BPW (Buffered Peptone Water)
3. Two sterile specimen sponges in Whirl-Pack bags
4. Two one-quart zip-lock-type bag for collected samples
5. One 6" x 12" plastic sleeve for FSIS Form 10,210-3
6. One FSIS Form 7355-2A/2B (Laboratory sample container seals)
7. Two 10x10 cm² sterile templates

Also included;

Absorbent pad

Six cardboard separator

Gel coolant pack(s)

FedEx (preprinted) billable air bill to San Antonio, TX

NOTE: The BPW broth media is to be examined and chilled on receipt. Inspection program personnel need to check the BPW and make sure it has no particulate matter, cloudiness, and turbidity. BPW needs to be placed in a refrigerator upon receipt of supplies. Chilling of BPW is critical to the accuracy of the sample analysis. Inspection program personnel are not to use un-chilled BPW for baseline samples.

NOTE: Each sample box for this project contains all supplies needed to collect and ship each 2 sponge sample per carcass (i.e., 1 sponge per side). However, shipping of the samples is limited to no more than 2 samples (4 sponges per box) provided each 2 sponge sample and FSIS Form 10,210-3 are clearly identified by using laboratory sample container seals [FSIS Form 7355-2].

C. Ordering Additional Sampling Supplies

Additional sample boxes, forms, and other supplies may be requested by emailing a request via Outlook to “Market Hogs Baseline Mailbox”. Please allow 3-4 days for delivery. Sample boxes and supplies should be received at least one to two weeks in advance of sampling.

IX. SHAKEDOWN SAMPLING PROCEDURES

A. GENERAL

NOTE: The following sampling procedure instructions are for this Shakedown only. Inspection program personnel assigned to establishments that are participating in this study are to follow the sample collection methods in this notice and disregard the sample collection instructions in FSIS Directive 10,230.5, except where FSIS Directive 10,230.5 is referenced below.

1. Verify when the sample is to be collected. Collect the sample from the designated week [Block 4] or at the next opportunity during the designated shift indicated by the Project Identification Code (Table 1.0) on the pre-printed FSIS 10,210-3 [Block 18].

2. In this study, samples are collected in sets (4 sponges total). Each sample set consists of two carcass samples: 1) pre-evisceration (2 sponges) and 2) post chill (2 sponges). Each carcass sample consists of two (2) carcass sponges (one sponge per carcass side). Avoid sponging the same side twice. Each sponge sample is to be taken from the three distinct areas on the carcass as per FSIS Directive 10,230.5 at the belly, ham, and jowl. The pre-evisceration (most preferably post stunning to pre-scalding or pre-skinnering) sample representative of the micro flora present at ante mortem will be collected as near to bleeding as possible and prior to any antimicrobial *treatment* or opening of the carcass. Once the most safe and suitable location meeting the above criteria had been determined, it shall remain the same throughout the course of the study.

NOTE: Pre-evisceration samples are to be collected promptly after lethal stunning to ensure proper bleeding. If inspection program personnel are not able to collect the sample promptly, the sample should be collected post bleeding. If samples cannot be easily, safely, and properly collected post stunning or post bleeding, PHVs are to collect pre-evisceration samples from U.S. Suspects passed for slaughter that are bright alert market hogs (e. g., non-ambulatory disabled swine in minimal distress). Steps should be taken to ensure conditions (e. g., degree of hide soiling) are as close to those experienced by the majority of swine processed by the establishment as possible. Contact PDD (1-800-233-3935) for more information.

To complete the sample set, post chill samples (2 sponges) are to be taken from a chilled carcass available during the same shift. The post chill sample is derived from a chilled carcass available that had been cooled in the cooler for at least 12 hours (or less time if the establishment has accelerated chilling capability) during the shift the sample set

is taken. It is important to remember that if the pre-evisceration sample is collected during Shift 1 then the post chill sample must also come from a Shift 1 carcass and a Shift 2 pre-evisceration sample must be paired with a Shift 2 post chill sample.

B. Preparation for Sampling

Before sampling, inspection program personnel are to review and follow Section 8, *Sample Storage Prior to Shipment*, of FSIS Directive 10,230.5, Attachment 1, for all samples collected.

1. Ensure you have all needed supplies needed to collect the sample. Upon receipt of sample boxes, verify sample boxes have required supplies, refrigerate BPW broth, and freeze chilling media.

2. Sample boxes are to be chilled before packing of samples. Inspection program personnel are to avoid storing sample boxes near heaters or areas exposed to excessive heat. The laboratory will discard samples that arrive at or above 15°C (59°F). It is critical to the success of this baseline study that the sample temperature be properly maintained during collection and shipment.

3. Ensuring that the BPW is pre-chilled is CRITICAL to this FSIS Nationwide Market Hogs Microbiological Baseline Data Collection Program. Use only pre-chilled BPW when collecting a sample.

4. Verify the appropriate Project Identification Code on the FSIS Form 10,210-3 for the two sponge sample of a single carcass you are collecting from corresponds with the sample you are going to collect.

5. Copy the Project Identification Code from Block 14 (Project No.) to the upper right hand corner of the above the pre-printed bar code. Do not write anything on the preprinted bar code.

For example: Identify the post chill sample by marking on the FSIS Form 10,210-3 with the Project Identification Code: S48POST1 above the pre-printed barcode in the upper right-hand corner of the FSIS Form 10,210-3. Project Identification Codes are listed in Table 1.0.

6. Inspection program personnel are from here on forward to follow the standard methodologies for collecting random samples as directed in this Notice as per FSIS Directive 10,230.5 that describes the procedures for collecting sponge samples for the standard Salmonella Performance Standard verification. Additional steps are described to ensure uniform handling of results and reduce extraneous variables in the sample results.

NOTE: Inspection program personnel can review the collection procedures outlined in Section VI if needed.

C. Sample Collection

NOTE: The pre-evisceration and post chill samples are collected on the same shift; the post chill sponge sample is collected from chilled carcasses available during the same shift from which the pre-evisceration sample is collected. Make note of the pre-evisceration (most preferably post stunning to pre-scalding or pre-skinning) FSIS Form 10,210-3 form number as it is recorded on the corresponding post chill FSIS Form 10,210-3 and vice versa.

Inspection program personnel are to use appropriate microbiological sample collection techniques. Change disposable gloves after collecting each sample and whenever necessary to prevent cross-contamination of carcasses and samples.

1. Select the requested carcass sample randomly for the pre-evisceration or post chill carcass sample for the indicated shift per Block 18.

2. Using the first of the two (2) sterile sponges, saturated with 25 ml of cold sterile Buffered Peptone Water (BPW) media, swab one half (side) of the carcass at the 3 designated sites, the ham, belly and jowl within a sterile 10x10 cm (100 cm²), plastic template, a 300 cm² surface area composite. The composite includes one ham site (100 cm²), one belly site (100 cm²) and one jowl site (100 cm²).

3. Repeat the procedure on the opposite half of the same carcass using the second sponge also saturated with BPW media as above.

4. After sampling, each sponge will be collected in its own sample (whirl-pak) bag and then combined into another larger sample bag identifiable with the corresponding FSIS Form 10,210-3. The two sponges of one carcass should be identifiable and associated with the corresponding FSIS Form 10,210-3 using the laboratory sample seal.

NOTE: Inspection program personnel may use a “sharpie” marker to facilitate identification of individual sample bags prior to packaging and identification of the pair of sponge samples with the laboratory seal. Sample carcasses need not be retained by the establishment. All samples are from carcasses eligible for further processing or shipment in commerce.

5. Inspection program personnel are to verify that the sample to be collected corresponds with the requested sample by verifying that the form contains the appropriate Project Identification Code from Block 14 of FSIS Form 10,210-3 and copying it to the upper right hand corner of the same FSIS Form 10,210-3 above the pre-printed bar code. The Project Identification Codes are listed in Table 1.0 above. Do not write anything on the preprinted bar code itself.

D. Preparation for Shipping Samples

NOTE: The Shift 1 pre-evisceration sample (2 sponges from 2 sides of one carcass) [Identified by Project Identification Code S48PREV1] is to be collected and shipped on the same day. The Shift 1 (slaughter) post chill carcass sample [S48POST1] is to be collected from chilled carcasses available during the same shift from which the corresponding pre-evisceration carcass sample is collected. First and second shift sample sets are to be shipped via FedEx on the same day or at the nearest opportunity on the following day respectively. Do not ship more than 2 samples (4 sponges) in one shipper.

1. Inspection program personnel are to review and follow the instructions in Section 9, *Sample Shipment*, of FSIS Directive 10,230.5, Attachment 1. Samples are to be collected and shipped to the contract laboratory the same day when possible. **All samples are to be refrigerated immediately after sampling and maintained under refrigeration at 40°F, or lower, until shipped.** Do not freeze collected samples. All samples are to be kept secure from tampering.

NOTE: Do not freeze collected samples or place sponges in direct contact with freezer packs or gel coolant.

a. All pre-evisceration and post chill samples are to be shipped the same day or at the nearest available shipping time or else they will be discarded by the laboratory.

b. All samples collected on first shift may be collected Monday through Friday if shipped the same day. Be sure dates of sample collection, dates of shipping, and sample questions in Block 28 are accurately completed on the FSIS Form 10,210-3.

c. Inspection program personnel are only to collect second shift samples Monday through Thursday (M-Th) due to shipping-related issues. Samples collected on the second shift Monday through Thursday and shipped to the contract laboratory the next day will not be discarded.

d. Inspection program personnel are to ship each 2 sponge sample (one sponge per side from a single carcass) with the corresponding FSIS Form 10,210-3 in the pre-chilled designated shipping container using only the FEDEX Bill enclosed in the sample box and is to be shipped to contract laboratory by FSIS listed in Block 9 of FSIS Form 10,210-3: Food Safety Net Services, San Antonio, TX. Do not ship sample sets to any FSIS laboratory.

e. Inspection program personnel are to place the two individually bagged sponge samples into a pre-chilled insulated shipper with the corresponding FSIS Form 10,210-3 and chilled gel-ice packs capable of maintaining the sample sponges at refrigeration temperatures (~40°F) and shipped to the designated laboratory via an overnight delivery service.

f. Inspection program personnel are to ensure:

1. The sponge samples are not in direct contact with the freezer or gel-ice pack.

2. The sponge FSIS Form 10,210-3 matches with the corresponding sample as per the sample seal, is completed, and included in the sample box.

3. The sample box is sealed and appropriate shipping label is attached.

4. The shipping box containing samples collected prior to Fedex pickup and shipped on Fridays is labeled with "For Saturday Delivery" sticker.

X. FSIS MICROBIOLOGICAL TESTING OF MARKET HOGS BASELINE SAMPLE RESULTS

Inspection program personnel will not receive laboratory testing results for the non-regulatory samples analyzed at the contract laboratory. These non-regulatory testing results are not posted in LEARN.

XI. ADDITIONAL SUPPLIES, ASSISTANCE AND INFORMATION

A. For additional supplies or pre-printed FSIS Form 10,210-3 forms, contact OPHS via "Market Hogs Baseline Mailbox".

B. If FSIS personnel have additional questions concerning the directives, video material, or the sampling procedures, they may send questions to OPHS via the "Market Hogs Baseline Mailbox" in Outlook

C. See Appendix 1 for additional information about the supplies and Attachment 2 for frequently asked questions and answers.



Assistant Administrator
Office of Policy and Program Development

APPENDIX

1. Sampling supplies for the market hogs baseline study are different from supplies used for FSIS regulatory program for *Salmonella* in raw products. **Major differences include 4 sponges, 4 templates, 4 zip-lock bags, 4 containers, each with 25 ml of sterile BPW, additional gloves, 2 form sleeve (Pre-Evis and Post Chill), two sets of sample seals and the M-20 shipper.**



2. A complete sample for the market hogs baseline includes four sponge samples: two swabs for Pre-Evis and two swabs for Post chill. To prevent confusion **PRE/L (Pre-Evis Left)** and **PRE/R (Pre-Evis Right)** and **Post/L (Post Chill Left)** and **Post/R (Post Chill Right)** should be written on the whirl-pak® bags for the corresponding sponges before sampling takes place.



3. There will be six cardboard separators included in the supply box for this baseline study. All **six cardboards** should be used to pack and ship the sample in the shipper as shown below to prevent freezing of the samples.



4. The **four** sponge samples should be placed on top of the absorbent pad, followed by the six cardboard separators, the gel pack, the forms, and then the foam plug.



Attachment 1

Project ID code

U.S. DEPARTMENT OF AGRICULTURE FOOD SAFETY AND INSPECTION SERVICE REQUESTED SAMPLE PROGRAMS <input type="checkbox"/> FOOD CHEMISTRY <input type="checkbox"/> MICROBIOLOGY <input type="checkbox"/> RESIDUE		Barcode here 1. SAMPLE FORM NO.			
PART I. SAMPLE COLLECTION AND MAILING INSTRUCTIONS					
2. SAMPLE TYPE CODE	3. EST. NO.	4. COLLECT TISSUES/SAMPLES ON Day of: Week of: Within 30 days of:	5. REGION/DISTRICT	6. STATE	7. CIRCUIT/IFO
9. ESTABLISHMENT ADDRESS / SAMPLE COLLECTION ADDRESS (i.e., Est., Retail Store)			9. NAME & ADDRESS OF RECEIVING LABORATORY		
10. SLAUGHTER CLASS CODE	11. SPECIES TO COLLECT	12. TISSUE	13. ANALYSIS REQUESTED		
14. PROJECT NO.	15. COUNTRY OF ORIGIN	16. COUNTRY CODE	17. FOREIGN EST. NO.		
18. ADDITIONAL INSTRUCTIONS					
PART II. COLLECT SAMPLE INFORMATION (To be completed by sample collector)					
19. DATE COLLECTED	20. DATE SENT TO THE LAB	21. PRODUCT TEMPERATURE	22. PRODUCT HELD <input type="checkbox"/> Yes <input type="checkbox"/> No		
23. FSIS 9540-1 NO.	24. LOT NO.	25. IMPORTED <input type="checkbox"/> Normal (06) <input type="checkbox"/> Increased (07) <input type="checkbox"/> Special (53) <input type="checkbox"/> Hold (24)	27. ANIMAL ID (Tag No.)		
26. PRODUCER / DEALER / OWNER-NAME / ADDRESS / EST. / ZIP CODE					
28. REMARKS					
29. COLLECTOR'S SIGNATURE		30. NAME OF COLLECTOR (Print)	31. BADGE NO.	32. TELEPHONE NO. AT EST.	
33. IF THE REQUESTED SAMPLE(S) ARE NOT COLLECTED, CHECK OFF THE APPROPRIATE REASON & RETURN THIS FORM TO THE LAB INDICATED ABOVE. (172) <input type="checkbox"/> REQUESTED PRODUCT(S) NOT PRODUCED DURING THE SAMPLING TIME FRAME (If checked, plant will be subject to sampling at a later date.) (601) <input type="checkbox"/> PLANT DOES NOT SLAUGHTER SPECIES/CLASS OR PRODUCE THE REQUESTED PRODUCTS (If checked, plant will be removed from this sampling program.) (67) <input type="checkbox"/> NEEDED SUPPLIES OR APPROPRIATE SHIPPING CONTAINER NOT AVAILABLE. (53) <input type="checkbox"/> OTHER (Explain):					
PART III. LABORATORY RECEIPT INFORMATION					
34. SAMPLE PACKAGING <input type="checkbox"/> 3034 Intact Package <input type="checkbox"/> 3035 Non-Intact Package			35. SAMPLE RECEIPT DATE		
36. PRODUCT CODE	37. NO. SAMPLES IN COMPOSITE		38. SAMPLE RECEIPT TEMPERATURE		
39. SAMPLE RECEIPT CONDITION CODE	40. SEAL CONDITION CODE	41. DISCARD CONDITION CODE			

SAMPLE COPY

Attachment 2

Questions and Answers

Q1. What is the definition of a roaster swine?

A1. There is no regulatory definition of a roaster swine. A roaster swine is any swine typically 40-300 lbs in size and sold with the head on and with intention of being roasted.

Q2. What is a market swine?

A2. For purposes of this Notice, a market swine is typically a barrow (young castrated male) or gilt (young female) 5-6 months of age weighing about 280-300 lbs.

Q3. What is a boar/stag?

A3. A boar is an intact male swine typically used for breeding. A stag is typically a young castrated (late) boar or barrow with male characteristics (enlarged neck muscles).

Q4. What are feral swine?

A4. A feral swine are typically once-domesticated swine that have returned to the wild state. Once captured, feral swine may receive ante and post mortem inspection.

Q5. Are pre-evisceration (most preferably post stunning to pre-scalding or pre-skipping) and post chill samples collected from the same animal?

A5. No. Pre-evisceration (post stunning to pre-scalding or pre-skipping) and post chill samples are collected from different animals slaughtered on the same shift although at different times.

Q6. Can a post chill sample be collected before or after more than 12 hrs of carcass chilling?

A6. Yes, a sponge sample may be collected before 12 hrs of chilling (e. g. when establishments uses a blast chiller and normally processes carcasses 8 hrs later) or after 12 hrs of carcass chilling.

Q7. Are establishment results subject to regulatory control actions?

A7. No. Individual results will not be made available or posted on LEARN. Since results are not reported; no regulatory actions will be taken on individual establishment results.

Q8. Are establishment results applicable to Assurance Net performance standards?

A8. No. However, excessive sample discards from improperly processed samples will be reported to supervisors.

Q9. What is the difference between an antimicrobial treatment and antimicrobial process?

A9. An antimicrobial treatment is a carcass treatment with an antimicrobial compound such as chlorinated water. An antimicrobial process may include use of a steam vacuum or pasteurization cabinet.