Docket Clerk  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Patriots Plaza 3  
355 E. Street, SW  
Room 8–164,  
Washington, DC 20250-3700  

Re: Docket No. FSIS-2012-0026; Notice of Availability and Opportunity for Comments (Compliance Guideline for Controlling *Salmonella* in Market Hogs)  

To Whom It May Concern:

Formed in 1906, the American Meat Institute (AMI) is the nation’s oldest and largest trade association representing packers and processors of beef, pork, lamb, veal, turkey, and processed meat products. AMI members manufacture more than 90 percent of these products. Also, approximately 80 percent of AMI member companies are classified as small or very small according to Small Business Administration standards. AMI members continue to adopt food safety practices to produce meat products, which are safe, affordable, and available. The safety of the products AMI members produce is their top priority.

AMI appreciates the opportunity to comment on the *Federal Register* Notice, FSIS-2012-0026 (the Notice) and Compliance Guideline for Controlling *Salmonella* in Market Hogs (compliance guideline, guide or guideline)

**The Guideline Incorrectly Suggests Current Processes Are Not Effective in Controlling *Salmonella* in Market Hogs.**

Throughout the guideline the Food Safety and Inspection Service (FSIS or the agency) asserts that [market hog] slaughter management practices should be improved to address *Salmonella*. In addition, foodborne illness outbreaks attributed to pork are used to support the “need” for this compliance guideline, purportedly because products derived from market hogs were the cause of *Salmonella* illnesses.

AMI suggests that the agency use a more focused approach to address the *Salmonella* issue and suggests further that current processes used in federally inspected market hog processing plants are effective in controlling *Salmonella*. This perspective is demonstrated by the following:
1. Previous market hog baselines\(^1\) completed in 1996 and 1998 and the latest baseline completed in 2011 demonstrate continuous improvement in percent positive \textit{Salmonella}. The first survey reported a \textit{Salmonella} percent positive of 8.7\% and the second survey reported a \textit{Salmonella} percent positive of 6.9\%. The 2010-2011 report states, “The estimated prevalence of \textit{Salmonella} in Market Hogs is 1.66\% (confidence interval of between 0.82\% and 2.51)\(^2\)

2. According to the Guide there has been only one Food Safety Assessment conducted since 2009 that was in response to a facility’s inability to meet the \textit{Salmonella} Performance Standards for market hogs. This single FSA highlights the fact that \textit{Salmonella} control in the market hog industry is working. Moreover, in this particular facility the performance standard was exceeded by one positive sample. Corrective actions were implemented and the establishment met the performance standard on the second (subsequent) sample set.

3. There have been no FSIS recalls for raw pork products related to \textit{Salmonella} illness from 1999-2013.

4. From 2006-2011 the FSIS verification sampling for \textit{Salmonella} averaged 2.9\%, significantly less than the performance standard of 8.7\%.

5. The Guide states that during the 2010-2011 market hog baseline shake down period, \textit{Campylobacter} was not detected and because of these results \textit{Campylobacter} was not sampled. Not finding \textit{Campylobacter} during the shakedown period points to the success of current processes being effective in controlling \textit{Campylobacter}.

**Public Health Relevance Provides Data But Does Not Address Attribution.**

A highlighted drop down section of the Guide states, “Outbreaks resulting in human \textit{Salmonella} illnesses involving pork have been consistently identified on an annual basis, suggesting pork as a vehicle for salmonellosis.”\(^3\) Information gathered by CDC can be useful but should be used to guide further discussions about the cause and solutions of an issue. To use CDC data and make policy without further investigating the cause is not an effective use of FSIS resources and, if not properly identified, could have limited impact on public health. Regarding the current issue two very important questions come to mind. First, what type of pork caused the illness? If meat from market hogs were not the cause, then this Guide and other possible issuances will not have the projected impact on public health. Second, was the pork implicated in the outbreaks slaughtered and/or processed under Federal inspection? Again, if the pork was not processed under Federal

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1 Post chill data
2 The Nationwide Microbiological Baseline Data Collection Program: Market Hogs Survey August 2010-August 2011, page 6
3 Compliance Guideline for Controlling \textit{Salmonella} in Market Hogs, December 2013, page 17
inspection then guidance or regulatory issuances would not be implemented in non-Federal establishments and outbreaks could continue. These two very rudimentary questions should be answered in order to determine whether the guideline will substantially impact public health.

**The Guideline Purpose: “Recommendation” or “Regulatory Requirements”**?

Other compliance guidelines specifically mention that they are not regulatory requirements and are recommendations. The Compliance Guideline for Controlling *Salmonella* and *Campylobacter* in Poultry, third edition, May, 2010 states, “Again, this information is provided as guidance to assist poultry slaughter establishments, and is not legally binding from a regulatory perspective.”4 The September 2012, FSIS *Salmonella* Compliance Guidelines for Small and Very Small Meat and Poultry Establishments that Produce Ready-to-Eat (RTE) Products states, “This document provides guidance5 to assist establishments in meeting FSIS regulations. Guidance represents best practices recommended by FSIS, based on the best scientific and practical considerations, and does not represent requirements that must be met.”6 The Market Hog Compliance Guide, in contrast does not include any such reference that it is not legally binding. Furthermore, as stated in the Guide, the use of the words, “prevent,” “eliminate” or “reduces levels of *Salmonella* in hogs,” as well as the statement “best practices described throughout this document will enable the Agency to work more effectively with industry to reduce the risk of foodborne pathogens in FSIS regulated product”7 more than suggests that this Guide is regulatory in nature. For that reason, the Guide should include a statement that it is to be used as recommendations or reference material to market hog operations.

Section XXVII, Process Control Verification Using Indicator Organisms as Performance Criteria, also suggests the Guide has a regulatory focus because it says: “If aggregated test results over time for an establishment are above the national prevalence estimate of 1.66%8, it raises questions about the adequacy of process control within that establishment.”9 That FSIS would suggest that process control is a specified number is beyond the scope of a Compliance Guide and does not follow recommended established process control procedures.

The HACCP regulations set requirements that establishments must meet and establishing critical control points (CCPs) is one of those requirements. In contrast, requiring certain CCPs should not be part of a compliance guideline. Because the voluntary *Salmonella* Improvement Program (SIP) has been implemented in some market hog establishments the results from these operations could be used to address other regulatory issues that would have a lasting improvement in *Salmonella* levels.

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5 Note: emphasis as contained in guide, not added by author.
7 Compliance Guideline for controlling *Salmonella* in Market Hogs, December 2013, page 9
8 The Market Hog Baseline Data Collection Program; page 9
9 Compliance Guideline for controlling *Salmonella* in Market Hogs, December 2013, page 30
Furthermore, AMI recommends that FSIS eliminate any reference to *Toxoplasma gondii*, and *Trichinella spiralis* in the Guide. Referencing these parasitic hazards is outside the scope of the compliance guideline. FSIS stated that, “The purpose of this guideline is to provide information on best practices that may be used at slaughter establishments to prevent eliminate, or reduce levels of *Salmonella* on hogs.” Trichinella guidance both on-farm and in-plant is being drafted by the World Organization or Animal Health (OIE) and Codex. Guidance from FSIS, if warranted, should follow recommendations offered by OIE and Codex.

**Use of the Guide Should Be Used Only After Proper Review of Comments**

FSIS encourages market hog slaughter establishments to incorporate information in the guideline in their decision making process. FSIS should only begin using and posting of this Guide, however, after comments have been received, reviewed, and appropriate changes made. In that regard, FSIS Notice 04-14, Notification of Availability for the First Edition of the Guideline for Controlling *Salmonella* in Market Hogs, was posted January 16, 2014. This notice states that IPP are to inform management at establishments that slaughter market hogs of the availability of this compliance guideline at the next meeting. The notice also states that EIAOs are to review the information in the compliance guideline as part of their preparation for conducting food safety assessments (FSAs) in establishments that slaughter market hogs. Nowhere in the notice does the agency mention this Compliance Guide is in comment phase and could be changed based on comments. Moreover, the EIAO Responsibility section of the Notice instructs an EIAO to use the information in the Guideline as a technical resource when performing an FSA. As discussed in the attached technical comments, there are inaccuracies that need corrected before this Guideline can be a useful tool.

In closing, given the scarcity of information linking market hogs to foodborne illness outbreaks, the agency has failed to make a case that this Compliance Guideline is necessary. Even if the agency wishes to provide such a document for establishments to review and incorporate certain elements as tools that may improve their processes, it is incumbent upon FSIS to ensure that the Guideline is viewed and treated by agency officials as providing recommendations and not as establishing regulatory requirements.

AMI appreciates the opportunity to submit these comments. If you have any questions about these comments or would like to discuss any aspect of them please contact me at 202 587 4254 or sgoltry@meatami.com.

Sincerely,

Scott J. Goltry
Vice President
Technical Services
Cc:  Jim Hodges  
     Mark Dopp  
     Betsy Booren, PhD
Technical Comments: Compliance Guide for Controlling *Salmonella* in Market Hogs

These comments are a technical review of the processing steps contained in the Compliance Guideline for Controlling *Salmonella* in Market Hogs.

**Lairage and Transportation Comments**
The common theme of these processes in these two steps deals with hog to hog or hog to truck to hog contamination. These steps have been well understood by the processor, however to date no practical solution that would not have an adverse impact on the humane treatment of the hogs or safety of workers can be overcome. This source of contamination is considered in the design and use of food safety interventions in the establishments. As evidenced by FSIS microbiological data, current processing steps have been able to address the issue of lairage and transportation issues in market hogs. AMI would encourage research of lairage and transportation in order to find a resolution to the adverse impact on animal well being and worker safety of interventions at pre-harvest during extreme weather condition.

**Slaughter/Bleeding Comments**
The process step should be called Bleeding. Slaughter refers to the whole process from stun to chill. AMI disagrees with the first paragraph of this section. A single study should not be taken as the norm of the industry. Suggest addition of best practice be: knives are sanitized between each carcass and stick wounds are trimmed after scalding.

**Scalding Comments**
The key point suggests that scalding be a CCP. The development of CCP’s should be completed based on industry accepted decision methods and not be suggested in a compliance guide. The guide should focus on ‘how’ to meet the regulatory requirements. The guide references PSE as an issue related to vertical scalding. Since this issue is related to pork quality it should not be included in this guide that is related to *Salmonella* control. Vertical scalding technology is not widely used in the industry therefore citing in a compliance guide and stating this procedure may improve the bacteriological quality of the meat is not proven and not an industry best practice. Therefore, the paragraph regarding vertical scalding should be removed. If the agency believes that this section should remain please correct the temperature of 5 degrees F and 41 degrees C.

Regarding the recommend best practice comments, statements regarding maintaining sanitary condition at this processing step should be further defined. Also comments regarding condensation in this area are not a key to reduction of *Salmonella*. AMI suggests the following Recommended Industry Best Practices for Scalding:

1. Drain and clean the scalder daily.
2. Remove or prevent accumulation of hair and protein from the scalder.
3. The stick wound should be removed and trimmings discarded prior to entering the scald tank (see bleeding).
4. Scald temperature should be adjusted to assist in maximum hair removal.

**De-hairing Comments**
AMI is cautious of the prescriptive tone of the best practices provided regarding the cleaning of this crucial piece of equipment. Many cleaning methods are available to properly clean equipment. Furthermore, more information should be received regarding this process in small and very small operations.

**Gambrelling Comments**
Comments state that establishments assure carcasses are not recontaminated is a known fact. Stating this as a best practice is not needed. There is no reference to a practice to be done to prevent recontamination.

**Steam/Hot Water Vacuuming Comments**
This process can be done in multiple locations. The reference to use of 2% lactic acid seems out of place and is not consistent with the flow chart.

**Singeing Comments**
Although the temperature recommended (212 degrees F) would no doubt kill all pathogens, verification is difficult and lower temperatures could also be effective.

**Polishing Comments**
Reference to the use of high pressure water jets should be removed. Acceptable results can be achieved without use of this technology.

**Knife Trimming Comments**
Suggest changing process name to Shaving. There is no trimming at this step.

**Evisceration Comments**
The comment related to sanitary dressing guidelines for beef may be applied to swine should be removed completely from this guide. The beef slaughter process is totally different than market hog slaughter. To reference beef sanitary dressing guidelines would cause confusion and misdirection with little impact on the reduction of *Salmonella* on market hog carcasses.

**Pre-chill Final Rinse/Hot Rinse/Steam Pasteurization Comments**
The recommended best practice is to use a pressurized diluted 2-3% lactic acid or acetic acid. But in the FSA example found in the Guide stated the establishment’s corrective action was to increase the lactic acid on carcasses entering the cooler to 4.5%. This difference should be reconciled prior to posting on the FSIS website in order to avoid confusion.

**Spray Chilling Comments**
Not all market hog carcasses remain in the cooler for 2 days. The typical amount of time in the cooler is one day.
Carcass Fabrication Comment
The use of organic acids is not considered a best practice since it is not widely utilized in the industry and little data is available to demonstrate the effectiveness of use.

Thank you for allowing AMI to submit these technical comments. Please contact Scott Goltry at sgoltry@meaami.com if there are further comments.