



Food Safety Assessments at Poultry Slaughter Facilities

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Definitions

- **Food Safety Hazard:** any biological, chemical, or physical property that may cause a food to be unsafe for human consumption.
- **Hazard analysis:** conducted to determine the food safety hazards reasonably likely to occur in the production process and identify the preventive measures that can be applied to control those hazards.
- **Reasonably likely to occur** – establish would establish controls because historically occurred or reasonably likely to occur in the absence of those controls



Definitions

- Adulteration: defined in the Poultry Products Inspection Act (21 USC 453, section 4). Applies to any poultry product
 - (g)(1): Bears or contains any poisonous or deleterious substance which may render it injurious to health; but in case the substance is not an added substance, such article shall not be adulterated under this clause if the quantity of such substance in or on the article does not ordinarily render it injurious to health.
 - (g)(4): if it has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health.



Food Safety Assessments in Poultry Slaughter Plants

- Thirty-one Comprehensive Food Safety Assessments (FSA's) conducted in Poultry Slaughter Plants since October 1, 2005 were reviewed with the following results:
 - 10: Notice of Intended Enforcement (NOIE),
 - 11: Noncompliance Record (NR) issued,
 - 9: No Action,
 - 1: 30-day reassessment letter issued.



General Observations

- Many Establishments do not Specifically Identify *Salmonella* as a food safety hazard reasonably likely to occur.
 - Supporting documentation indicates reasonably likely to occur
 - They do Identify “Microbial Growth,” “Enterobacteriae,” and “Pathogenic Organisms” as Hazards.
 - Inadequate consideration of incoming *Salmonella* loads, process control steps that affect *Salmonella* levels, nor interventions validated to address *Salmonella*.



Common Findings

- Inconsistencies Between the Hazard Analysis and the Selection of CCP's and CL's
- Hazards identified in hazard analysis, but no indication as to whether they are reasonably likely to occur.
- No supporting documentation for decisions that hazard is not reasonably likely to occur. Prerequisite programs lacked records on effectiveness of the prerequisite program in preventing the hazard from occurring.



Common Findings

- Supporting documentation is needed to demonstrate the scientific and regulatory basis of the program.
- Identified *Salmonella* as a hazard reasonably likely to occur at some process steps, but did not subsequently indicate where the hazard would be prevented, eliminated, or reduced.
- Some plants put controls in place and take actions consistent with a hazard the company is trying to prevent, eliminate or control, but decision was that hazard not reasonably likely to occur.
 - CCP's Established to Control a Food Safety Hazard not Identified as Reasonably Likely to Occur



Common Findings

- Key process steps without identified hazards.
 - For example, biological hazards were not identified at processing steps (such as "red water" and chilling steps). No documentation to justify how decisions were reached that there are no biological hazards.
 - Off-line reconditioning steps (fecal, airsac, IP) – either no hazards identified, or "none" specifically referenced.
 - Water reuse – no measures to reduce physical, chemical, or biological contamination to prevent contamination or adulteration. Impacts on other HACCP plans not considered.



Common Findings

- No support for decisions on selection of CCP's and critical limits.
- No supporting documentation for monitoring and verification frequencies selected for CCPs.
 - This was often true where the common controls involving zero fecal contamination and temperature controls were implemented.



Common Findings

- No validation of CCP's.
 - No validation that a CCP involving an antimicrobial intervention is effective to reduce the identified hazard.
 - Chlorine identified in hazard analysis at steps as a control measure to prevent a food safety hazard (*Salmonella*), however, chlorine is not being used at those steps.
 - Zero tolerance and temperature common CCP's



Common Findings

- Did not carry out or document monitoring and verification procedures as described in the SSOP or HACCP plan.
 - For example, no documentation showing monitoring of temperature controls or chilling steps.
 - Equipment calibration – procedures and frequency.
 - Receiving of raw or returned goods - temperatures.



Common Findings

- Corrective actions following critical limit deviations not implemented (e.g., for temperature controls).
- Corrective actions not documented, not implemented, and/or preventive measures ineffective.
 - Repetitive corrective action
 - Repetitive documentation (e.g., of temperature deviation).
 - Recurrence of deviation.
 - Did not conduct appropriate re-evaluation and modification or appropriate improvement in execution of SSOP's.



Sanitation Performance Standards

- Employee hygiene – restrooms, product handling
- Pest control
- Ventilation
- Equipment
- Water reuse



Sanitation Standard Operating Procedures

- Development of SSOP and implementation of Sanitation SOP
- Maintenance or effectiveness
- Corrective Actions
- Recordkeeping



HACCP

- Hazard Analysis - decision-making
- HACCP Plan – process steps
- Monitoring
- Corrective Actions
- Validation, Verification and Reassessment
- Recordkeeping



Putting it all together

- *Salmonella* positives reflecting status of process control
- *Salmonella* serotypes of human health concern
- Sanitation performance standards – repetitive findings
- Standard sanitation operation practices – design and execution on an ongoing basis
- HACCP – hazard analysis, monitoring, verification, validation, corrective action. What is the theoretical basis for the program, and is it being implemented as designed?