Hazard Analysis and Critical Control Point (HACCP) Program
Beef, Pork, and Lamb Meat Slaughter

by

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Model Plan
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Approved:

Signed: _____
Name:
Implementation Date: _____
Revision, Date: _____

Trade Secret/Confidential Commercial Information
This document contains trade secret/confidential commercial information pursuant to 5 U.S.C. 552 (b)(4).

Product Category Description

Product: **Beef, Pork and Lamb Carcasses and Variety Meats**

The following areas need to be defined when developing the product category description:

1. **Common Name/Description:**

   Beef Carcass, Pork Carcasses, Lamb Carcasses
   Hearts, liver, tongue, tail, head (cheek meat), leaf fat

2. **How is it to be used?**

   Beef Carcass, Pork Carcasses, Lamb Carcasses: Transferred within plant for fabrication into sub-primals, retail cuts and trim.
   Hearts, liver, tongue, tail, head (cheek meat), leaf fat: transferred to other operations in own facility for further processing or fabrication into retail cuts.

3. **Type of Package?**

   Beef Carcasses, Pork Carcasses, Lamb Carcasses: none
   Hearts, liver, tongue, tail, head (cheek meat), leaf fat: none

4. **Length of Shelf Life; At what temperature?**

   Beef Carcasses, Pork Carcasses, Lamb Carcasses: _28 days at ≤34° F
   Hearts, liver, tongue, tail, head (cheek meat), leaf fat: _2 - 4 days _36°F.

5. **Where will it be sold?**

   Wholesale

6. **Labeling instructions:**

   Carcass: none
   Hearts, liver, tongue, tail, head (cheek meat), leaf fat: none.

7. **Is special distribution control needed?**

   Controlled Temperature: Refrigerated Transport

Date:_____ Approved by: _____

Product and Ingredients

Product: Slaughter

Meat Ingredients:

Live cattle, hogs and lambs

Non-Meat Ingredients:

None

Restricted Ingredients:

None

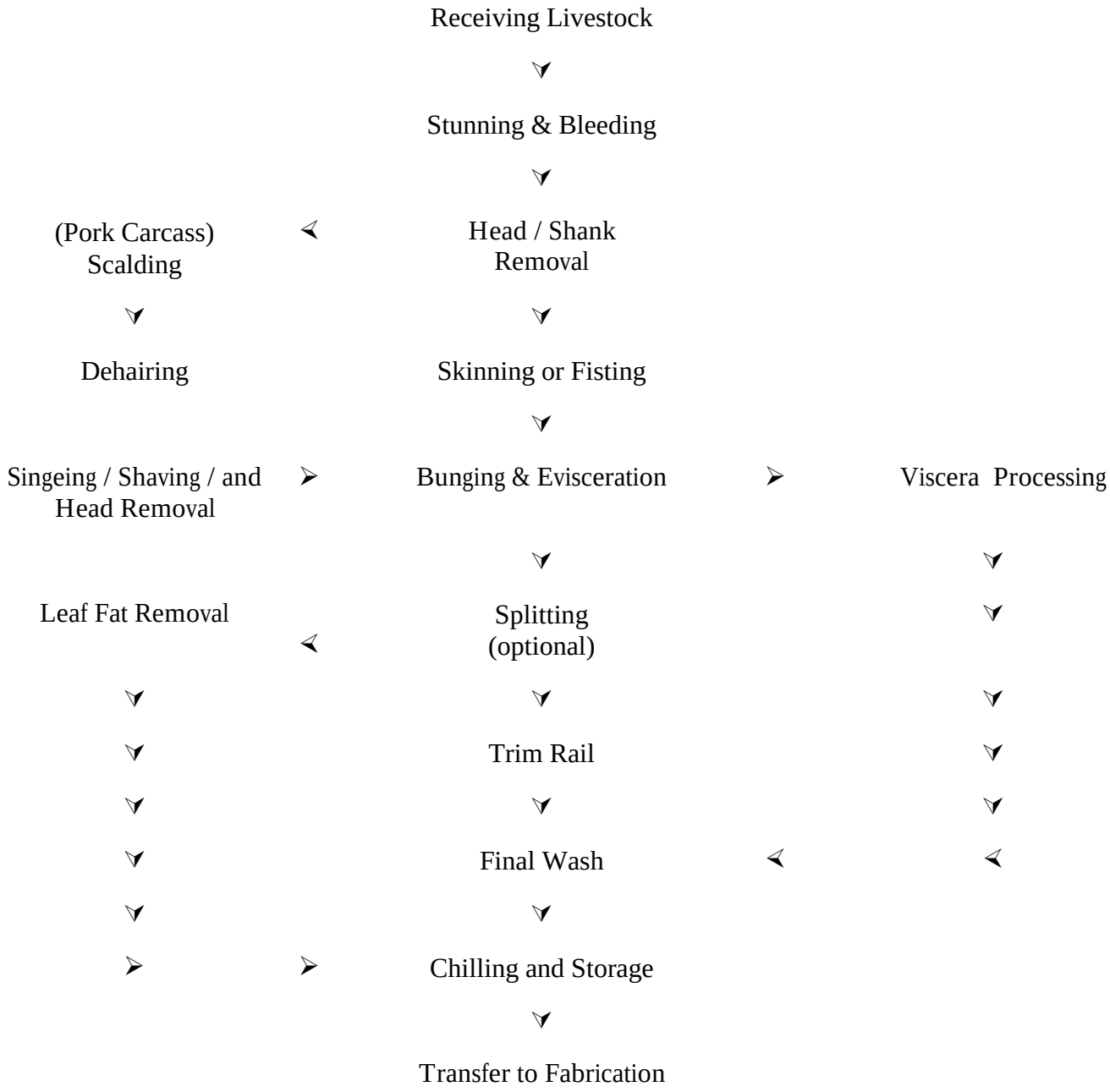
Packaging Materials:

None

Casing:

None

Process Flow Chart: Kill Floor



Hazard Analysis **Product: Raw, Other**				
Process Step	**Potential hazard introduced, controlled or enhanced at this step** **B= Biological** **C= Chemical** **P= Physical**	**Does this potential hazard need to be addressed in the HACCP plan?** **(Yes or No)**	**Justification for decision made in previous column**	**What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?**
Receiving Livestock	B - Presence of pathogens	Yes	Livestock are a known source of pathogens with the hide and ingesta as sources during slaughter.	Proper slaughter procedures to prevent contamination and trimming to remove contamination.
	C -Antibiotics	No	Low occurrence as USDA monitoring indicates a very low occurrence in market livestock and older livestock are purchased from within the University or from producers with active quality assurance programs.	
	P -metal	No	Low occurrence according to plant experience	
Stunning & Bleeding	B -Introduction of pathogens from equipment	No	Low occurrence as SSOP's are used to prevent contamination	
	C - Sanitizers and cleaners	No	Low occurrence as SSOP's are used to prevent contamination	
	P -Metal	No	Low occurrence according to plant experience	

Hazard Analysis

Product: Raw, Other

Process Step	Potential hazard introduced, controlled or enhanced at this step B= Biological C= Chemical P= Physical	Does this potential hazard need to be addressed in the HACCP plan? (Yes or No)	Justification for decision made in previous column	What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?
Head / Shank Removal	B -Introduction of pathogens from the hide	Yes	Contamination from the hide is a know source of pathogens that could cause illness.	Controlled by removal of contamination by trimming.
	C - None			
	P - None			
(Pork Carcass) Scalding	B - None			
	C - None			
	P - None			
Dehairing	B -Cross-Contamination with pathogens	No	Moderate risk of cross-contamination from dehairing equipment.	
	C - None			
	P - None			
Singeing / Shaving / and Head Removal	B -Pathogens from head removal	Yes	Ingesta may contaminate the carcass or the head.	Ingesta will be trimmed from the carcass.
	C - None			
	P - None			

Hazard Analysis **Product: Raw, Other**				
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Skinning or Fisting	B -Introduction of pathogens from the hide	Yes	Bacterial pathogens could grow to levels with potential for moderate severity	Contamination from the hide is a known source of pathogens that could cause illness.
	C - None			
	P - None			
Bunging & Evisceration	B -Pathogens introduced from the Gastrointestinal tract	Yes	Ingesta may contaminate the carcass or the head.	Ingesta will be trimmed from the carcass.
	C - None			
	P - None			
Viscera Processing	B -Pathogens	Yes	Ingesta may contaminate the edible viscera.	Ingesta will be washed and trimmed from the edible viscera.
	C - None			
	P - None			
Splitting	B -None			
	C - None			

Hazard Analysis **Product: Raw, Other**				
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	P - Bone dust	No	Low severity and low occurrence after final wash of carcass	
Leaf Fat Removal	B None			
	C - None			
	P - None			
Trim Rail	B -Pathogens	Yes	Removal of hide fecal material and ingesta will reduce the bacterial levels on the carcass or edible viscera	Hand trimming or vacuum removal of visible fecal and ingesta material.
	C - None			
	P - None			
Final Wash	B -None			
	C - None			
	P - None			
Chilling and Storage	B -Growth of Pathogens	Yes	Pathogens may grow if improper chilling occurs.	Chilling the carcass to reduce surface temperature to slow or stop the growth of pathogens.

Hazard Analysis **Product: Raw, Other**				
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	C - None			
	P - None			
Transfer to Fabrication	B -None			
	C - None			
	P - None			

Principle 2 - CCP Determination

Product: A critical control point is defined as a point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated or reduced to acceptable levels.

Process step	Hazard Biological = B Chemical = C Physical = P	Q1. Does this step involve a hazard of sufficient risk and severity to warrant its control?	Q2. Does a preventive measure for the hazard exist at this step?	If Q2. is no: Is control at this step necessary for safety?	Q3. Is control at this step necessary to prevent, eliminate or reduce the risk of the hazard to consumers?	
Receiving Livestock	B - Presence of pathogens	Yes	Yes		No	
	C -					
	P -					
Head / Shank Removal	B -Cross-Contamination with pathogens	Yes	Yes		No	
	C -					
	P -					
Singeing / Shaving / and Head Removal	B -Pathogens from head removal	Yes	Yes		No	
	C -					
	P -					
Skinning or Fisting	B -Introduction of pathogens from the hide	Yes	Yes		No	
	C -					
	P -					
	B -Pathogens	Yes	Yes		No	

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Viscera Processing	C -					
	P -					
Trim Rail	B -Pathogens	Yes	Yes		Yes	CCP-1B
	C -					
	P -					
Chilling and Storage	B -Growth of Pathogens	Yes	Yes		Yes	CCP-2B
	C -					
	P -					

Principles 3, 4 and 5
Critical Limits, Monitoring and Corrective Actions

Product:

Process Step/ CCP	Critical Limits	Monitoring Procedures (Who/What/When/How)	Corrective Actions
Trim Rail	No visible fecal or ingesta	Who: Slaughter operator What: Slaughter operator will trim visible fecal or ingesta from the carcass or viscera When: Every fifth carcass will be evaluated at the end of slaughter before final wash. How: The carcass will be visually inspected.	**1.** If visible fecal or ingesta is detected it will be trimmed from the carcass. 2. If visible fecal or ingesta is frequent or covers large areas, the problem will be identified and operators will be retrained or equipment will be modified. In all other cases comply with guidelines in CFR Section 417.3.
Chilling and Storage	Surface temperature of the carcass and edible viscera will be less than 45^{o}F within 24 hours from slaughter.	Who: Hot Cooler supervisor What: Surface temperature. When: Approximately 24 hours after slaughter. How: A calibrated thermometer will be inserted immediately under the tissue covering the thickest portion of the hind leg on one carcass and on one randomly selected viscera meat cut.	1) Place carcasses on hold and evaluate time and temperature relationships to determine disposition. If carcasses are acceptable, continue chilling to carcass surface temperature of less than 45^{o}F before transfer to fabrication. Discard product if necessary. 2) Check hot box cooler temperature and move carcasses to alternate cooler if necessary. 3) Check spacing of carcasses in cooler. 3) Make repairs and adjustments to refrigeration if necessary. 4) Replace refrigeration equipment if necessary. 5) In all other cases comply with guidelines in CFR Section 417.3.

Principles 6 and 7
Verification and Record Keeping

Product:

Process Step/CCP	Records	Verification Procedures
Trim Rail	1. Carcass visual inspection log 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	Daily review and initialing of the visual inspection log. Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 3 months.
Chilling and Storage	1. Carcass and edible viscera temperature monitoring log. 2. CCP deviations/corrective actions log. 3. CCP monitoring activities audit report.	Daily review and initialing of the carcass and edible viscera temperature monitoring log and thermometer calibration log by the HACCP manager. Daily calibration of thermometers used to monitor CCP's by a designated employee. Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 3 months.
Overall plan	Thermometer Calibration log	Annual review of HACCP plan.

HACCP Plan

Product: PLAN - A - Red Meat Slaughter

Process Step	Hazard Description	CCP Description	Critical Limit	Monitoring Procedures/ Frequency/ Person Responsible	Corrective Action/ Person Responsible	HACCP Records	Verification Procedures/ Person Responsible
Receiving of Livestock	B- Presence of pathogens	CCP-1B	No visible fecal, ingesta, or milk	Who: slaughter operator What: Slaughter operator will trim fecal or ingesta from the carcass or viscera. When: Every fifth carcass will be evaluated at the end of slaughter, before final wash. How: The carcass will be visually inspected.	1. If visible fecal or ingesta is detected it will be trimmed from the carcass. 2 . If fecal or ingesta is frequent or covers large areas, the problem will be identified and operators will be retrained or equipment will be modified. In all other cases comply with guidelines in CFR Section 417..3.	1. Carcass visual inspection log. 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	Daily review and initialing of the visual inspection log 2. Audit of CCP monitoring activities and procedures by HACCP manager
Chilling and Storage	Pathogen growth	CCP-2B	Surface temperature of the carcass and edible viscera will be less than 45°F within 24 hours from slaughter.	Who: Cooler supervisor. What: Surface temperature. temperature When: Approximately 24 hours after slaughter. How: A calibrated thermometer will be inserted immediately under the covering of the thickest portion of the hind leg on one carcass and on one selected viscera meat cut.	**1.** Place carcasses on hold and evaluate time and temperature relationships to determine disposition. If carcasses are acceptable, continue to carcass surface temperature of less than 45°F before transfer to fabrication. Discard product if necessary. 2. Check hot box cooler temperature and move carcasses to alternate cooler if necessary.\3. Check spacing of carcasses in cooler. 4. Make repairs and adjustments to refrigeration if	1. Carcass and edible viscera temperature monitoring log. 2. CCP deviations/corrective actions log. 3. CCP monitoring activities audit report.	Daily review and initialing of the carcass and edible viscera temperatures monitoring log and thermometer calibration log by the HACCP manager. 2 Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 3 months.

HACCP Plan

Product: PLAN - A - Red Meat Slaughter

Process Step	Hazard Description	CCP Description	Critical Limit	Monitoring Procedures/ Frequency/ Person Responsible	Corrective Action/ Person Responsible	HACCP Records	Verification Procedures/ Person Responsible
					necessary. 5. In all cases comply with guidelines in Section 417.3.		