HACCP Plan – Pork, Sheep, and Goat Slaughter

Product Description

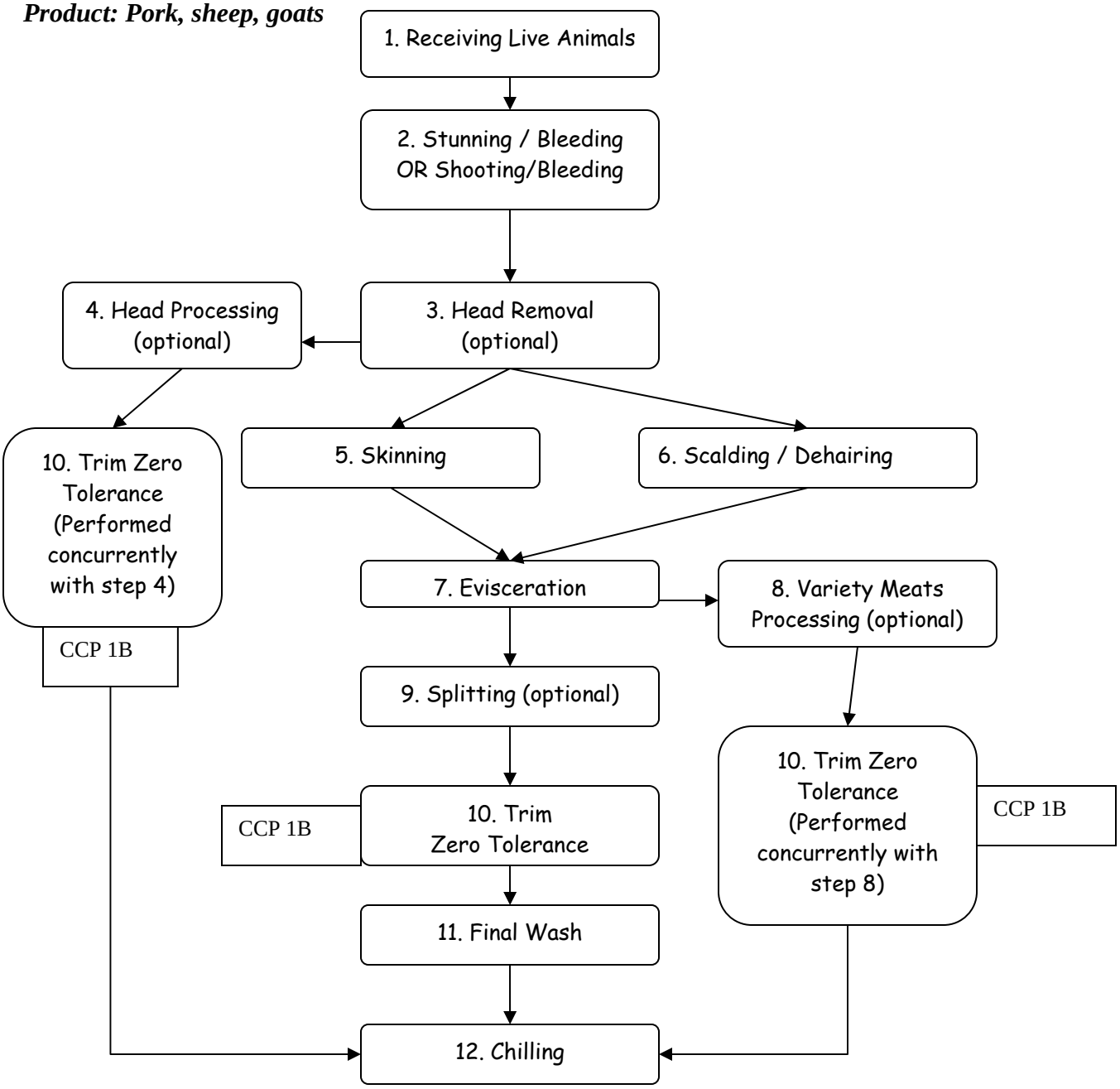
COMMON NAME:	pork, sheep, goat carcass halves or quarters; whole heads; head and cheek meat; variety meats (heart, liver, tongue)
HOW IS IT TO BE USED?	Further processing or sold wholesale
TYPE OF PACKAGE?	No packaging is used for carcass halves and quarters; butcher paper, freezer wrap, or cryovac bag for whole head, head and cheek meat; butcher paper or freezer wrap for heart, liver, and tongue
LENGTH OF SHELF LIFE, AT WHAT TEMPERATURE?	Carcass halves and quarters: 7 days under refrigeration ($\leq$ 41°F). Whole head, head and cheek meat: 7 days under refrigeration, 6 months frozen. Heart, liver, tongue: 7 days under refrigeration
WHERE WILL IT BE SOLD?	Further processed in our plant, sold retail and sold wholesale
LABELING INSTRUCTIONS:	Carcass halves have ID tag and state inspection legend; carcass quarters and whole heads have state inspection legend. Head and cheek meats are labeled with appropriate product label including safe handling instructions. Heart, liver, tongue (if not subdivided) have state inspection legend; if subdivided, these products would have an appropriate product label including safe handling instructions.
IS SPECIAL DISTRIBUTION CONTROL NEEDED?	Lot code based on production date applied along with appropriate product label.

Directions for Use of the Process Flow Diagram

1. Cross out, white out, or delete all steps that are NOT part of your process. Re-number steps as necessary.
2. Add any processing steps not already shown and make sure that each new step is assigned a number.
3. Note that if the "mechanical; gunshot" method is used for slaughter, then only the following portions of the head are to be considered edible and under this HACCP plan:
    a. Pork – tongue
    b. Sheep – tongue
    c. Goat - tongue

Process Flow Diagram

Process Category: Slaughter
Product: Pork, sheep, goats



Directions for Use of the Hazard Analysis Form

1. Make sure that every step shown on the Process Flow Diagram is entered in the Hazard Analysis Form. Make sure that each step has the same name and number in both the Process Flow Diagram and the Hazard Analysis Form.
2. Check the three categories of hazard (Biological, Chemical, Physical) shown for each step.
    a. If you think a listed hazard is not reasonably likely to occur, leave it in column 2 (Food Safety Hazard) and enter "No" in column 3 (Reasonably likely to occur?). Then provide a reason in the column 4.
    b. If you think there are no relevant hazards for a particular category, delete the listed hazard and write "none" in column 2, write "No" in column 3, and cross out any information in columns 4 – 6.
    c. If you think that a relevant hazard should be added at a step, describe the hazard in column 2 (Food Safety Hazard). Then determine whether the hazard is reasonably likely to occur and put the answer in column 3. Then provide, in column 4, a reason for deciding whether or not the hazard is reasonably likely to occur.
        i. For example, following an SSOP, SOP, or approved formulation may make a hazard unlikely to occur, or a supplier may provide a letter of guarantee stating that the hazard should not be present.
        ii. On the other hand, a history of outbreaks or contamination related to a hazard would mean that the hazard IS reasonably likely to occur.

    Columns 5 and 6 can be left blank if a hazard is NOT reasonably likely to occur.

    IF the hazard IS reasonably likely to occur: fill in columns 5 and 6.
        iii. In column 5, list measures that could be applied to prevent, eliminate, or reduce the hazard to an acceptable level. NOTE: at least one of these measures must be

either a Critical Control Point (CCP) at the present step, or a CCP at a later step.

iv. Finally, if the hazard is controlled by a CCP at the present step, enter the CCP number in column 6. The accepted numbering system is to number the CCP's in order, followed by either B, C, or P to indicate what type of hazard is being controlled. For example, if the 2nd CCP in a process controlled a physical hazard, it would be entered as CCP -2P.

d. I f you agree that a listed hazard is relevant, no changes are necessary.

HAZARD ANALYSIS – PORK, SHEEP, GOAT SLAUGHTER –

Carcass halves and quarters, whole head, head meat, heart, liver, tongue

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
1. Receiving live animals	Biological – Pathogens (Salmonella) carried on hide and in intestinal tract	Yes (Pathogens)	Livestock are a known source of Salmonella	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	
	Chemical – Drug residues	No	Low risk according to USDA Residue Monitoring Program		
	Physical – Buckshot, needles, bullets	No	No reported incidences at this facility (must be supported with		

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			evidence); visual observation for foreign materials during processing, inspection of equipment during cleaning make hazard unlikely.		
2. Stunning/ Bleeding OR Shooting/ Bleeding	Biological- Pathogens (see list above) introduced into animal's circulatory system by the sticking knife	Yes (Pathogens)	Sticking knife will be heat-sanitized prior to sticking. Operational SSOP will be followed. However, pathogen transfer may still occur.	Trim Zero Tolerance step (CCP later in the process) controls pathogens. Stick wound is trimmed on every animal.	
	Chemical – None	No			
	Physical – Bullet fragments	No	If frangible (easily broken) bullets are used, the head will be discarded. Otherwise, only tongue will be		

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			deemed edible.		
3. Head Removal (optional)	Biological –Pathogens (see list above) introduced by knife	Yes	Hide opening and removal of head may introduce pathogens onto the carcass.	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	
	Chemical – None	No			
	Physical – None	No			
4. Head processing (optional)	Biological: Presence or growth of pathogens (see list above)	Yes (Presence) No	Raw meat is a known source of pathogens. Head skinning and	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
		(Growth)	removal are done rapidly enough to prevent pathogen growth.		
	Chemical – None	No			
	Physical – None	No			
5. Skinning	Biological – Presence or growth of pathogens (see list above)	Yes (Presence) No (Growth)	The hide is a known source of pathogens. Skinned carcass is moved rapidly enough to next step to prevent pathogen growth during this step.	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	
	Chemical – None	No			
	Physical - None	No			
6. Scalding / Dehairing	Biological – Contamination by pathogens when tissue is exposed during process	No	Exposed subcutaneous tissue is trimmed using a sanitized knife.		

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	Chemical - None	No			
	Physical - None	No			
7. Evisceration	Biological – Presence or growth of pathogens (see list above)	Yes (Presence) No (Growth)	The intestinal tract of animals is a known source of pathogens. Eviscerated carcass is moved rapidly enough to next step to prevent pathogen growth during this step.	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	
	Chemical – None	No			
	Physical – None	No			
8. Variety Meats Processing (optional)	Biological - Presence or growth of pathogens (see list above)	Yes (Presence) No (Growth)	Livestock are a known source of pathogens. Heart, liver, tongue may be contaminated via tools, employees, hides and gastrointestinal	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			tract, although Operational SSOP reduces this risk. Variety meats are moved rapidly enough to next step to prevent pathogen growth during this step.		
	Chemical –None	No			
	Physical – None	No			
9. Splitting (optional)	Biological – Presence or growth of pathogens (see list above)	Yes (Presence) No (Growth)	Pathogens are known to be present on livestock carcasses; splitting saw may transfer pathogens from carcass to carcass or from location to location on one carcass. Carcass halves are moved rapidly	Trim Zero Tolerance step (CCP later in the process) controls pathogens.	

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			enough to next step to prevent pathogen growth during this step.		
	Chemical –None	No			
	Physical – Metal or bone fragments	No	No history of problem (must provide evidence). Visual observation for foreign materials during processing, inspection of equipment during cleaning make hazard unlikely.		
10. Trim Zero Tolerance (may be done concurrently with step 4 or step 8 for head meat and	Biological – Presence or growth of pathogens (see list above)	Yes (Presence) No (Growth)	Pathogens are known to be present on livestock carcasses, and are also reasonably likely to	All visible fecal material, milk, ingesta is trimmed off carcass halves and quarters, whole heads, head meat, and variety meats. Stick wound is trimmed on every	1B

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
variety meats, respectively)			be present on head meat and variety meats. Carcass halves, whole head, head meat, and variety meats are moved rapidly enough to next step to prevent pathogen growth during this step.	animal.	
	Chemical – None	No			
	Physical – None	No			
11. Final Wash	Biological – Presence or growth of pathogens (see list above)	No (Presence) No (Growth)	Prior step (Trim Zero Tolerance) reduced likelihood of hazard occurring to an acceptable level. Carcass halves, whole head, head meat, and variety meats are moved		

1. Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			rapidly enough to next step to prevent pathogen growth during this step.		
	Chemical – None	No			
	Physical - None.	No			
12. Chilling	Biological – Biological – Presence or growth of pathogens (see list above)	No (Presence) No (Growth)	Pathogens adequately controlled at preceding CCP, SOP for final product storage makes growth of pathogens (if present) unlikely.		
	Chemical – None	No			
	Physical - None	No			

Directions for Using the HACCP Plan Form

1. Examine your Hazard Analysis form to determine which steps are CCP's and what type of hazard (Biological, Chemical, or Physical) each CCP controls.
2. Check to see whether each CCP is already listed on the HACCP Plan Form. If a CCP is not already listed, enter the CCP number and step in the column labeled "CCP # and Location".
3. For CCP's already listed on the model form, examine the Critical Limits listed. In the HACCP Plan Form for some HACCP categories there will be several options for Critical Limits. If this is the case, choose the Critical Limits that will work best in your plant and cross out, white out, or delete the other Critical Limits and the Monitoring Procedures that go with them. It may be helpful to check the "Monitoring Procedures and Frequency" column during your decision-making. For CCP's already on the model form, supporting scientific documentation is already included in your manual.
4. If you are adding a new CCP, you will need to determine the scientifically valid Critical Limits to be used with the CCP. You must also obtain scientific information supporting your choice of Critical Limits. Consult your inspector or university extension specialists for help.
5. Examine the "Monitoring Procedures and Frequency" column for each CCP. If you wish to change the procedure and/or the frequency, check with your inspector or a university extension specialist for help. If a change is OK, you will need to write down your reasoning for making the change and include this reasoning in your HACCP manual.
6. Examine the "HACCP Records" column. If you are using different forms for record-keeping in this HACCP Plan, please put the correct form title(s) in the "HACCP Records" column.
7. The verification activities listed in the "Verification Procedures and Frequency" column are required by the regulation. However, you may choose to do additional activities; for example, for verification, carcass samples may be taken and sent to a laboratory for generic *E. coli* or *Salmonella* testing. If you do any additional verification activities, enter them in the "Verification Procedures and Frequency" column. If you choose to use a frequency for the required verification activities that is different than the frequency shown, you must provide written justification for the different frequency. Consult your inspector or university extension specialists for help.
8. We suggest that you make no changes in the "Corrective Actions" column. Be sure to have a form for documenting corrective actions that you take. A corrective action form is included in this model.

HACCP PLAN

Pork, Sheep, Goat Slaughter Model

PROCESS CATEGORY: Pork, Sheep, Goat Slaughter

Product example: pork, sheep, or goat carcass halves or quarters; whole heads; head and cheek meat; variety meats (heart, liver, tongue)

CCP# and Location	Critical Limits	Monitoring Procedures and Frequency	HACCP Records	Verification Procedures and Frequency	Corrective Actions
1B – Trim Zero Tolerance	Zero visible fecal material, ingesta, or milk present .	The carcass trimmer or designee will carefully perform a visual inspection of <u>each</u> carcass half or quarter, head, head or cheek meat, or variety meat. Formal record-keeping of monitoring can be done after a specified number of carcasses, carcass halves, whole heads, removed head and cheek meats, livers, hearts, or tongues rather than after every one.	Slaughter Log Corrective Action Log	Establishment owner or designee will review the Slaughter Log and Corrective Action Log once per week. Establishment owner or designee will observe monitoring of trim zero tolerance at least once per month.	If a deviation from a critical limit occurs, the establishment owner or designee is responsible for corrective action protocol as stated in 9 CFR 417.3 1. The cause of the deviation will be identified and eliminated. 2. The CCP will be under control after the corrective action is taken. 3. Measures to prevent recurrence are established. 4. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce.

Sign and date at initial acceptance, modification, and annual reassessment.

Signature _____ Date _____ Signature _____ Date _____

Signature _____ Date _____ Signature _____ Date _____

Corrective Action Log

Product:	Lot ID:
Date / Time:	Responsible Person:
Deviation:	
Cause of Deviation:	
Cause of Deviation Eliminated By:	
CCP Under Control After Corrective Actions Taken:	
Preventative Measures:	
Product Disposition:	

Verification (Records Review) by and Date: _____

Plant Number:	Date:	**Slaughter Log**						
Owner Name, Tag ID No. & Species P = Pork, S = Sheep, G = Goat, Bis = Bison	Wt	<u>Monitoring</u> Contamination with feces, ingesta, milk? (yes/no, time, initials)				<u>Verification</u> Action: OM = Observe Monitoring, RR = Records Review Result: ✓ = Acceptable, - = Unacceptable Add comments if result is unacceptable		
		Carcass	Whole Heat	Head Meat	Variety Meats	Action	Result	Date/ Initials
Pre-Use/Shipment Review: (Signature) (date)								

SOP for Finished Product Storage

- Once meat/poultry items are packaged and labeled, they will be master-packed (if appropriate), and immediately moved into either dry storage (jerky and other shelf-stable products), refrigerated storage, or frozen storage.
- All coolers will be maintained to hold a temperature of 41°F or lower, with daily monitoring and documentation.
- All freezers will be maintained to hold a temperature of 0°F or lower, with daily monitoring and documentation.
- Finished raw products will be stored separately from finished Ready-To-Eat (RTE) products, either in separate coolers/freezers/rooms, or on physically separate racks/shelves.
- Finished RTE products will NEVER be stored below finished or unfinished raw products.
- No products (finished or unfinished) will be stored on the floor.