Supplemental Table 1. Hot Smoked Fish HACCP Plan[9]

Ingredient/processing step	Identify potential hazards, controlled or enhanced at the step (1)	Are any potential food safety hazards significant? (Y/N)	Justify your decisions for column 3.	What preventive measures can be applied to prevent the significant hazards?	Is this step a critical control point? (Y/N)
Receiving non-scombrotoxin-forming fish	BIOLOGICAL pathogen inclusion	no	smoking/cooking step		NO
	BIOLOGICAL parasites	no	using frozen fish only		
	CHEMICAL mercury	no	species		
	PHYSICAL metal	no	using H&G fish only		
Receiving scombrotoxin-forming fish	BIOLOGICAL pathogen inclusion	no	smoking/cooking step		NO
	BIOLOGICAL parasites	no	using frozen fish only		
	BIOLOGICAL histamine	no	secondary processor of frozen fish only		
	CHEMICAL mercury	no	species		
	PHYSICAL metal	no	using H&G fish only		

Supplemental Table 2: Thermally Processed, Commercially Sterile Beef Stew[10]

HAZARD ANALYSIS/PREVENTIVE MEASURES PROCESS CATEGORY : THERMALLY PROCESSED, COMMERCIALLY STERILE PRODUCT EXAMPLE : BEEF STEW			
Process Step	**HAZARDS** **Biological (B) Including Microbiological** **Chemical (C)** **Physical (P)**	**Preventive Measures**	**Examples of How Hazard Is Introduced ***
RECEIVING - FROZEN COOKED DICED BEEF	**B- Excessive microbial load *(staphylococcus aureus*) due to improper temperature and handling.**	**Measure and record temperature of incoming lots. Check container integrity.**	**B-Transport refrigeration unit is not functioning properly (out of freon).**
	C-Antibiotic and pesticide residues.	**Supplied by inspected establishments.**	**B-The shipping container (the cardboard combo bin) was crushed by a forklift and the immediate container (the film wrapped around the individual trays) was torn and punctured introducing harmful microbes into the product.**
	P- (Foreign Material) - Visible hazardous foreign material that could compromise product safety.	**Provided by supplier inspected establishments and visual examinations.**	**P-Pieces of glass found in product from a broken light bulb, metal clips, knives, plastic, etc.**
RECEIVING - NON-MEAT INGREDIENTS	**B-Excessive bacteriological (spore) load. Meat and Poultry Products Hazard and Control Guide.**	**Verify that the letter of guarantee is on file and appropriate for product use from third party audit of a supplier or other means.**	**B-Spices have not received a treatment to reduce or eliminate bacteriological (spore) load.**
	C- Pesticide	**Suppliers letter of guarantee and ingredient specification.**	**C-Improper pesticide usage by producers and previous processors.**
	P- (Foreign Material) - Visible hazardous foreign material that could compromise product safety; metal, glass , etc.		**P-Pieces of glass found in product from a broken light bulb, metal clips, knives, etc. when received from supplier.**
	P- (Foreign Material/Adulteration) - All non-meat ingredients, packaging materials, etc. must be stored to prevent contamination due to foreign material.		

Ingredient Name	Storage Conditions (Ambient, Refrigerated, Frozen	Potential hazards introduced by this ingredient	Severity of Hazard (1,2,3)	Likilihood of Occurrence (1,2,3)	Risk Factor (multiply severity and likilihood of occurrence ratings)	Is this a significant hazard?	Rationale	What measure(s) can be applied to prevent, eliminate, or reduce the hazard(s)	Is the control measure a Critical Control Point (CCP) or an Operational Prerequisite Program (OPrP)?
Pork Heavy Ham inside/ Knuckle	Refrigerated	Biological Vegetative Pathogens *Listeria, moncytogenes, Salmonella, E. Coli, S. aureus*	3	2	6	Yes	Biological: This raw material or one of its components is a sensitve ingredient	Cook CCP 002 Chill CCP 003 PrP - Raw, In Process and Finished Product Refrigeration PrP - Raw Meat receival	CCP
		Biological: Sporeforming Pathogens C. perfringens, C. botulinum	3	2	6	Yes	Biological: This raw material or one of its components is a sensitve ingredient	Chill CCP 003 PrP - Raw, In Process and Finished Product Refrigeration PrP - Raw Meat receival	CCP
		Biological: Trichinae	3	2	6	Yes	Biological: This raw material or one of its components is a sensitve ingredient	Cook CCP 002 PrP - Raw Meat receival	CCP
		Chemical: None	1	1	1	No	Chemical: Allergen risk evaluation performed and supported by allergen checklist risk evaluation based on company analysis	None	N/A
		Physical: None	1	1	1	No	Physical: Risk evaluation done by Risk Factor Matrix demonstrates no hazards	None	N/A

Supplemental Table 3. USDA HACCP Plan- Ingredient Hazard Analysis

Step #	Process Step (if the step controls a hazard, list the hazard that is being controlled at this step)	Potential hazards introduced or enhanced at this step	Severity of Hazard (1,2,3)	Likilihood of Occurrence (1,2,3)	Risk Factor (multiply severity and likilihood of occurrence ratings)	Is this a significant hazard?	Rationale	What measure(s) can be applied to prevent, eliminate, or reduce the hazard(s)	Is the control measure a Critical Control Point (CCP) or an Operational Prerequisite Program (OprP)?
1	Raw Meat Receiving	Biological: None	1	1	1	No	No biological hazards are introduced at this step in the process.	None	N/A
		Chemical: None	1	1	1	No	No chemical hazards are introduced at this step in the process.	None	N/A
		Physical: Wood fragments	3	1	3	No	A series of inspection programs are in place throught the process which act synergistically, ensuring physical hazards are not likely to occur in finished products, (eg. receival inspections, point of use inspecations, pickle filtration, equipment checks). Additionally functioning metal detectors and x-ray later in the process are one measuer of the adequacy of upstream controls.	PrP - Raw Material Recieval Process PrpMeatl Detecion CCP -X-Ray Dedecation	N/A
2.	RTE Meat Receiving - CCP001 (This step controls for biological hazards)	Biological: Pathogen growth	3	2	6	Yes	The potential for pathogen growth exists at this step	CCp - Raw Meat Receiving	CCP
		Chemical: None	1	1	1	No	No chemical hazards are introduced at this step of the process.	None	N/A
		Physical: None	1	1	1	No	No physical hazards are introduced at this step in the process.	None	N/A

Supplemental Table 4. USDA HACCP Plan – Process Step Hazard Analysis