

ABC Meat Company

Commercially Sterile Beef Stew
HAZARD ANALYSIS AND CCPs

Ingredient/Process Step	Potential hazards introduced, controlled or enhanced at this step. ¹	Does this potential hazard need to be addressed in HACCP plan? (Yes/No)	WHY? (Justification for decision made in previous column. Base the justification on the severity and likely occurrence of the hazard.)	What measures can be applied to prevent, eliminate or reduce the hazard being addressed in your HACCP plan? ²	Is this step a critical control point (CCP)? ³
Receiving Frozen Beef	B – Pathogenic sporeformers such as <i>Clostridium perfringens</i> – Enteric pathogens such as <i>Salmonella</i> , <i>E. coli</i> O157:H7 C – None P – Bone, Plastic, Wood	Yes No No No	Pathogenic sporeformers including <i>C. perfringens</i> are known to be present and likely to cause illness if not controlled. Enteric pathogens are known to be present in beef, however it is not reasonably likely that they will survive the retort process; underprocessing is more likely to result in hazards due to pathogenic sporeformers. Physical hazards not likely since beef is received from FSIS facility operating under HACCP per supplier guarantee.	Heat treatment (Retort process) at a later step	No
Storing Frozen Beef	B – Growth of Pathogens (pathogenic sporeformers such as <i>C. botulinum</i> and non sporeformers such as <i>Salmonella</i> , <i>E. coli</i> O157:H7) C – None P – None	No	Growth of pathogens during storage of meat due to temperature abuse is not likely due to temperature control prerequisite program.		
Microwave Tempering	B – Growth of Pathogens (pathogenic sporeformers such as <i>C. botulinum</i> and non sporeformers such as <i>Salmonella</i> , <i>E. coli</i> O157:H7, <i>L. monocytogenes</i>) C – None P – None	No	Tempering procedures are unlikely to lead to bacterial growth since product is tempered for short time and used immediately; moreover product will be retorted.		
Initial Grinding	B – None C – None P – Metal Fragments	No	Prerequisite program for equipment maintenance and inspection prior to start up. Metal is not a problem based on analysis of metal detector kick outs for last 3 yrs.		
Mixing	B – None				No

¹ Hazards are classified as Biological, Chemical or Physical.

² List control measures within your operation which occur at this or any later step.

³ Note CCP number and hazards controlled (e.g., CCP1 (B) for a biological hazard). Use decision tree to assist in identifying CCPs.

	C – None P – None				
Final Grinding	B – None C – None P – Metal Fragments	No	Prerequisite program for equipment maintenance and inspection prior to start up. Metal is not a problem based on analysis of metal detector kick outs for last 3 yrs.		
Receiving Frozen Vegetables (Carrots and dehydrofrozen potatoes)	B – Pathogenic sporeformers such as <i>Clostridium botulinum</i> – Enteric pathogens such as <i>Salmonella</i> , <i>E. coli</i> O157:H7 C – Pesticides P – Plastic, stones, wood	Yes No No No	<i>C. botulinum</i> is known to be present on root crops and likely to cause illness if not controlled. Enteric pathogens are known to be present on vegetables, however it is not reasonably likely that they will survive the retort process. Pesticides are used widely to treat vegetables and may be present in small amounts as residues on these foods. However, harmful pesticide residues are not likely because unapproved pesticide residues occur infrequently and the public health impact is typically not severe. Physical hazards of size that can cause injury are not likely, due to supplier GMPs and supplier guarantee.	Heat Treatment (Retort process) at a later step	No
Storing Frozen Vegetables	B – Growth of Pathogens (pathogenic sporeformers such as <i>C. botulinum</i> and non-sporeformers such as <i>Salmonella</i> , <i>E. coli</i> O157:H7) C – None P – None	No	Growth of pathogens during storage due to temperature abuse is not likely due to temperature control prerequisite program.		
Receiving Dry and Non-Refrigerated Ingredients	B – Pathogenic sporeformers such as <i>Clostridium botulinum</i> C – None P – Plastic, Wood, Rocks	Yes No	<i>C. botulinum</i> can potentially be present and is likely to cause illness if not controlled. Physical hazards of size that can cause injury are not likely, due to supplier GMPs and supplier guarantee.	Heat treatment at a later step	No
Storing Dry and Non-Refrigerated Ingredients	B – None C – None P – None				
Weighing	B – None C – None P – None				
Batching	B – None C – None				

	P – None				
Metal Detection	B – None C – None P – Metal fragments	No	Prerequisite program for equipment maintenance and inspection prior to start up. Metal is not a problem based on analysis of metal detector kick outs for last 3 yrs.		
Holding Tank	B – Growth of pathogens C – None P – None	No	Not likely to occur due to prerequisite program for temperature control. Product enters holding tank above 135°F and is maintained at that temperature.		
Receiving Cans & Lids	B – None C – None P – Metal can fragments	No	Approved supplier specification for receiving cans without defects, damage, or metal fragments		
Storing Cans & Lids	B – None C – None P – None				
Filling Cans	B – Overfilling resulting in underprocessing and survival of pathogens. C – Chemical residues P – Metal fragments	No No No	Automatic rejection of overweight cans. Process designed for full can with no headspace. SSOPs No evidence or QC reports of cleaning chemical residues or lubricants found in product. Not reasonably likely to occur due to preventative maintenance program and supplier specifications No consumer complaints or evidence of metal fragments from equipment found in product		
Can Seaming	B – None C – None P – None				
Can Coding	B – None C – None P – None				
Retorting	B – Improper process allowing the survival of pathogenic sporeformers such as <i>C. botulinum</i> C – None P – None	Yes	Improper retort process may not kill spores of <i>C. botulinum</i> to survive.	This is the step at which lethality treatment is delivered.	Yes
Cooling	B – Growth of pathogens such as <i>C. perfringens</i> C – None P – None	No	Retort process designed to destroy pathogens such as <i>C. perfringens</i>		
Labeling	B – None C – None				

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	P – None				
Casing	B – None C – None P – None				
Warehousing	B – None C – None P – None				