

**Barney's Beef Stew, Inc.**

Commercially Sterile Beef Stew  
HAZARD ANALYSIS AND CCPs

| Ingredient/Process Step | Potential hazards introduced, controlled or enhanced at this step. <sup>1</sup>   | Does this potential hazard need to be addressed in HACCP plan? (Yes/No) | WHY?<br>(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? <sup>2</sup> | Is this step a critical control point (CCP)? <sup>3</sup> |
|-------------------------|---|---|--|--|---|
| Receiving Frozen Beef   | B – Pathogenic sporeformers such as <i>Clostridium botulinum</i><br>– Enteric pathogens such as <i>Salmonella</i> , <i>E. coli</i> O157:H7<br>C – None<br>P – Bone, Plastic, Wood                         | Yes<br><br>No<br><br>No   | Final product is commercially sterile in compliance with 9 CFR 318 subpart G.<br><br>9 CFR 417.2 (b) (3) provides exemption for addressing microbiological hazards in the HACCP plan.<br><br>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)<br>C – None<br>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> )<br>C – None<br>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<br>C – None<br>P – Metal Fragments   | Yes   | The potential for metal contamination from grinder exists.   | Metal Detector at later step   | No  |
| Mixing                  | B – None<br>C – None<br>P – None  |   |  |  | No  |

<sup>1</sup> Hazards are classified as Biological, Chemical or Physical.

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

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

## Barney's Beef Stew

|  |   |                         |  |  |     |
|--|---|-------------------------|--|--|-----|
| Final Grinding   | B – None<br>C – None<br>P – Metal Fragments   | Yes                     | The potential for metal contamination from grinder exists.   | Metal Detector at later step                                 | No  |
| Receiving Frozen Vegetables (Carrots and dehydrofrozen potatoes) | B – Pathogenic sporeformers such as <i>Clostridium botulinum</i><br>– Enteric pathogens such as <i>Salmonella</i> , <i>E. coli</i> O157:H7<br><br>C – Pesticides<br><br>P – Plastic, stones, wood | Yes<br><br>No<br><br>No | <i>C. botulinum</i> is known to be present on root crops and likely to cause illness if not controlled.<br><br>Enteric pathogens are known to be present on vegetables, however it is not reasonably likely that they will survive the retort process.<br><br>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.<br><br>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)<br>C – None<br>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><br>C – None<br>P – Plastic, Wood, Rocks  | Yes<br><br>No           | <i>C. botulinum</i> can potentially be present and is likely to cause illness if not controlled.<br><br>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 Dry and Non-Refrigerated Ingredients                     | B – None<br>C – None<br>P – None  |                         |  |  |     |
| Weighing   | B – None<br>C – None<br>P – None  |                         |  |  |     |
| Batching   | B – None<br>C – None<br>P – None  |                         |  |  |     |
| Metal Detection  | B – none<br>C – None<br>P – Control presence of metal fragments   | Yes                     | Plant records show that metal is likely to be present as a result of one or more previous steps.   | The metal detector at this step is where control is applied. | Yes |

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|                       |  |                        |   |  |  |
|-----------------------|--|------------------------|---|--|--|
| Holding Tank          | B – Growth of pathogens<br>C – None<br>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<br>C – None<br>P – Metal fragments  | No                     | Approved supplier specification for receiving cans without defects, damage, or metal fragments  |  |  |
| Storing Cans & Lids   | B – None<br>C – None<br>P – None   |                        |   |  |  |
| Filling Cans          | B – Overfilling resulting in under processing and survival of pathogens.<br>C – Chemical residues<br>P – Metal fragments | No<br><br>No<br><br>No | Automatic rejection of overweight cans. Process designed for full can with no headspace.<br>SSOPs, no evidence or QC reports of cleaning chemical residues or lubricants found in product.<br>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<br>C – None<br>P – None   |                        |   |  |  |
| Can Coding            | B – None<br>C – None<br>P – None   |                        |   |  |  |
| Retorting             | B – Improper process allowing survival of pathogenic sporeformers such as <i>C. botulinum</i><br>C – None<br>P – None    | No                     | Process complies with 9 CFR 318 subpart G   |  |  |
| Cooling               | B – Growth of pathogens such as <i>C. perfringens</i><br>C – None<br>P – None  | No                     | Retort process designed to destroy pathogens such as <i>C. perfringens</i>  |  |  |
| Labeling              | B – None<br>C – None<br>P – None   |                        |   |  |  |
| Casing / Warehousing  | B – None<br>C – None<br>P – None   |                        |   |  |  |

