



January 8, 2016

To: Cargill Customers

RE: Beef HACCP Letter

Dear Valued Customer,

Thank you for requesting general information regarding the food safety initiatives at Cargill Meat Solutions Corporation (herein after "Cargill") beef harvest establishments in the United States and Canada. Cargill employs a validated multi hurdle intervention system in the production of our quality beef products at all of our harvest facilities. The following facilities inspected and verified by the United States Department of Agriculture (USDA) Food Safety Inspection Services (FSIS) harvest and process only bovine species at their facility, and no other species or ingredients of animal origin are utilized at these facilities.

The USDA Establishment numbers covered by this letter include:

<u>Facility Location</u>	<u>Establishment #</u>	<u>FDA Registered</u>
Friona, TX	86E	Yes
Dodge City, KS	86K	Yes
Schuyler, NE	86M	Yes
Fort Morgan, CO	86R	Yes
Wyalusing, PA	9400	Yes
Fresno, CA	354	Yes

Canadian beef harvest facilities have similar and equivalent programs to those in the U.S. The following facilities inspected and verified by Canadian Food Inspection Agency (CFIA) harvest and process only bovine species at their facility, and no other species or ingredients of animal origin are utilized at these facilities. These facilities meet or exceed the requirements of the Canadian Food Inspection Agency (CFIA), as well as USDA import requirements:

<u>Facility Location</u>	<u>Establishment #</u>	<u>FDA Registered</u>
High River, AB Canada	93	Yes
Guelph, ON Canada	51	Yes

General Food Safety Programs

Cargill is committed to the safety and quality of our products. All Cargill beef harvest facilities are in compliance with all USDA, FDA and/or CFIA regulations, as appropriate and all edible products are produced under a fully implemented Hazard Analysis and Critical Control Points (HACCP) Plan, which meets all requirements set forth in 9 CFR 417 and/or Canadian Meat Inspection Regulations Section 30.1. Additionally, Cargill facilities have in place Sanitation Standard Operating Procedures (SSOPs) that meet all requirements of 9 CFR 416 and/or CFIA, Chapter 3, section 3.9.1 in the Manual of Procedures (MOP).

Facilities that harvest and process raw beef product do consider *E. coli* O157:H7 and specified Non O157 Shiga Toxin *E. coli* as a 'hazard reasonably likely to occur' in Harvest HACCP plans. As interventions, fed cattle beef harvest facilities in the U.S. and Canada have installed Hide-On Carcass Wash, pre-evisceration rinse cabinets, post-evisceration acid rinse cabinets, and steam pasteurization cabinets. Cow harvest facilities have combinations of the following installed interventions; Hide-On Carcass Wash, steam vacuums, acid rinse cabinet, and steam pasteurization cabinets or hot water treatments. To eliminate or reduce the identified hazards to below detectable levels, Cargill has identified thermal pasteurization in the form of validated steam pasteurization intervention or validated hot water treatment as a Critical Control Point (CCP) for beef carcasses. Additionally, the thermal pasteurization CCP is validated by scientific research and internal use of time/temperature monitoring probes. These validation procedures meet the requirements of 9 CFR 416 and CFIA Chapter 4 of the MOP, Annex O. Cargill has identified an acid rinse cabinet as a validated intervention for red meat offal removed prior to the thermal pasteurization. All CCP and control point critical limits are monitored at a frequency to ensure process control.

Additionally, a peroxacetic acid based antimicrobial agent is being applied immediately prior to packaging of subprimals. This agent is recognized by USDA-FSIS (Directive 7120.1) and CFIA as a “processing aid”, therefore, there is no implication to labeling or including it in the ingredient statement. This treatment has been microbiologically verified in the facilities utilizing indicator microorganisms.

In addition, all beef facilities perform extensive microbiological tests on carcasses and other beef products that serve as verification that the intervention system is functioning as designed. Cargill’s harvest facilities located in the U.S. and Canada participate in USDA-FSIS *Salmonella* performance standards sampling (or equivalent sampling program) and sample carcasses for generic *E. coli* using the protocol designed in accordance with the requirements stated in 9 CFR 310.25. Moreover, all facilities also conduct routine environmental sampling at a variety of points in the production system. Depending on the facility, the microbiological monitoring includes testing for Aerobic Plate Count (APC), coliforms, and/or generic *E. coli* for product contact pre-operational cleanliness, environmental sampling and product sampling for both product quality and safety. Monitoring results are evaluated on an ongoing basis for trend analysis of the facility and products.

Furthermore, all Cargill beef harvest facilities have supporting prerequisite programs encompassing:

- Good Hygiene Procedures (GHP)
- Recall and traceability procedure to ensure proper identification for all products coming into/through the system and leaving the system.
 - Recall procedures are in place at each production facility such that in an emergency, all products that are produced can be traced as product codes and volumes shipped, to the first level of distribution. Each of our production businesses has an Emergency Response team made up of personnel identified according to the necessary disciplines needed for prompt action. Members of the team include Production, Transportation, Sales, Food Safety, Quality, and Regulatory (FSQR), Corporate Affairs, Legal and Information Technology personnel. These procedures are practiced at a minimum of annually to ensure effectiveness in the ability to trace all products and ensure all team members are competent in their roles. In the event of a natural disaster, or other crisis situation, that renders a production facility inoperable, Cargill has production contingency plans that involve other Cargill facilities, as well as approved External Manufacturers.
- Pest Control Program
- Management of Supplied Materials - Cargill requires that all raw material suppliers comply with all applicable government regulations and meet the following applicable requirements in order to become and remain an approved supplier:
 - HACCP
 - Raw beef purchased from the United States or Canada are USDA/CFIA inspected facilities operating under an implemented HACCP program.
 - Foreign facilities must be operating under “equivalent” inspection programs and certified by USDA-FSIS to export to the US or CFIA to export to Canada.
 - Meet the USDA Salmonella Performance Standards – for products sold to or within the United States
 - Facility shall have a minimum of two validated interventions to control *E.coli* O157:H7, of which, one must be a CCP.
 - Microbiological Testing
 - All ground beef components will be sampled and tested for *E. coli* O157:H7. An N=60 equivalent or better sampling method must be used. Cargill will not accept product that tests presumptive positive for *E. coli* O157:H7.
 - Intact lot loads must arrive with a negative certificate of analysis or product notification document
 - Verification Sampling must be completed and shared with Cargill on a quarterly basis
 - Facility must have an effective “event period” program including actions on subprimals.
 - Suppliers must have adequate segregation programs, if handling multiple species in one location, to ensure there is no risk of substitution and the labeled species is accurate.
 - SSOPs, Pre-requisites and Training

- Beef supplier facilities must have implemented written SSOPs/Pre-requisites and training programs sufficient to ensure that all processing and handling equipment that contacts product is cleaned and sanitized properly and that sanitation effectiveness is monitored during pre-operational inspection.
- Live Animal Handling
 - Beef harvests facilities must have programs that:
 - Exclude non-ambulatory disabled livestock as defined by FSIS 6900.2, Rev. 2.
 - Are in compliance with FSIS Directive 6100, Rev. 2 Ante-Mortem Livestock Inspection, Final Regulations for Non-Ambulatory Disabled Cattle and Specified Risk Materials (SRMs) or CFIA MOP Chapter 17, Annex D.
 - Require all animals be handled in a manner compliant with the current “Recommended Animal Handling Guidelines and Audit Guide” published by the North American Meat Institute (NAMI) Foundation.
- Supplier Audits
 - Beef supplier facilities must schedule, conduct and maintain certification against a Global Food Safety Initiative (GFSI) certification audit.
 - As applicable, must have conducted an animal handling audit by a PAACO trained auditor annually.
- Non-Meat Ingredient suppliers
 - Must have an annual 3rd party audit
 - Incorporate a food safety plan within their process, sufficient to identify and control hazards.
 - Provide a specification for ingredients supplied to Cargill
 - Complete an allergen assessment or other necessary documentation to support claims and/or nutritional panels.
- Food Defense Program
 - Facilities are access controlled, fenced and guarded. At all production facilities, visitors are restricted, except under certain strictly controlled circumstances. Food defense procedures have been in place for some time and Cargill reviews these procedures on an annual basis.
- Allergen Control Program – currently few beef harvest facility utilize allergenic ingredients within the products or process. Those facilities with allergenic ingredients onsite have fully implemented allergen control programs that include segregation and measures to prevent cross contamination. However, employees at all facilities are provided basic allergen training.
- A livestock program to require all cattle producers to certify compliance with 21 CFR 589.2000

Non O157 Shiga Toxin *E.coli*

Cargill refers to the Non O157 Shiga Toxin *E. coli* as STEC6 (with *E. coli* O157:H7 as STEC7). As referenced in both FSIS Directive 10,010.1 revision 4 dated 8/20/15 and FSIS Directive 10,010.2 dated 8/20/2015 regarding verification activities, FSIS has carried out verification procedures, including sampling and testing manufacturing trim harvested on and after June 4, 2012 to ensure control of both *Escherichia coli* O157:H7 and six other serogroups of Shiga toxin-producing *E. coli* (STEC) (O26, O45, O103, O111, O121 and O145). Published research documents show the existing *E. coli* O157:H7 pathogen reduction technologies are effective on the STEC6. Therefore, no changes to pathogen control programs were implemented due to the reassessment. However, Cargill continues to collect and review necessary data from baseline research and testing methods for STEC7 and reassess accordingly.

STEC7 Control and Testing

As a part of our continuing food safety efforts, in facilities that test raw ground beef components, Cargill utilizes a Test and Hold program. A ‘Product Notification Document’ (PND) is sent to the customer receiving the tested raw ground beef components (the ‘ship to’ customer). This information contains the lot number of the product, the result, test method and other comments regarding the lab results. If you are not considered the ‘ship to’ customer, then this

information would be sent to your sales representative or broker. Cargill's "PND" has been accepted with no objections by USDA and CFIA, as an alternative method to Certificate of Analysis (COA)¹.

A Test and Hold program is also in place in some facilities producing and testing finished ground beef. The statements of testing compliance are on the transportation bill of lading (BOL)².

A similar Test and Hold program is in place for all components destined for use in raw ground products such as Hearts, Head Meat, Cheek Meat, Weasand Meat, Tongue Root, PDCB, FTB and other raw ground beef components³. Cargill would like to outline certain key aspects of its *E. coli* verification-testing program:

- Beef Trim lot integrity will always be kept intact. Lots will not be broken or split to cause combos within a lot to be sent to different customers.
- A robust N=60 surface excision sample program is used for boxed and combo trim and other comboed raw beef components such as whole muscle meats sampled for *E. coli* O157:H7. A minimum of 60 samples are taken per lot, whether the lot is 1 combo or maximum of 5 combos.
- Note that Cargill does not sample and test any vacuumed packaged boxed primal or subprimal products. We would strongly encourage our customers to not use traditional boxed beef primals and subprimals in raw ground products and instead purchase trim in a combo or box or purchase grinds. This will ensure you have a test result from a minimum of N=60 sample and a microbiologically independent lot.
- Finely Textured Beef product group [including Finely Textured Beef (FTB) and product variations including Primal specific products (i.e. Round, Sirloin and Chuck), Breed specific products (i.e. Angus, Certified Angus Beef), and Grade specific products (i.e. Choice); this product is also known in the marketplace as Beef Trimmings Finely Textured (BTFT) and (Canada Only) Finely Textured Beef Trimmings (BTFT)] sample program is in place where individual box sampling is performed for each lot and a minimum of 375g is tested.
- Partially Defatted Chopped Beef (PDCB) and Partially Defatted Cooked Chopped Beef (PDCCB) are also involved in sampling programs in which individual box sampling is performed for each lot and a minimum of 375g is tested.
- Cargill utilizes both 3rd party and internal accredited laboratories to conduct the tests.
- BioControl Assurance GDS, a PCR based test method, is utilized for *E. coli* O157:H7 and STEC6 testing. No cultural confirmation is completed for *E. coli* O157:H7. Disposition is determined on a presumptive positive test result. Cultural confirmation may, on occasion, be completed for STEC6.
- Cargill has a third party verification program of its *E. coli* O157:H7 sampling program. Under this program, raw ground beef components are ground, sampled and analyzed to verify the effectiveness of sampling technique. The verification program is conducted at a minimum of once quarterly with an increased frequency during high prevalence months (April through September). This program is used to meet the FSIS best practice expectation that customers conduct on-going verification of its incoming product and CFIA Chapter 4 MOP, Annex O.5.3 (references below). Cargill has chosen to test STEC6 within this program to provide additional data for review and verification of the interventions effectiveness on STEC6.

Event Period Protocol

Cargill has an "Event Period" program that when an abnormal number of presumptive positive *E. coli* O157:H7 results on trim and/or ground beef have occurred in the same production day, a facility will hold and evaluate previously tested negative like-kind products. During this evaluation, a determination is made on whether or not products that previously tested negative may be associated with the presumptive positive product. If product is associated, that product is held and removed from the raw ground beef material stream. Untested subprimal products may be evaluated for determination of association with the positive raw ground beef components as well. Additional details are available in separate letter.

¹ Please verify that your supplier program accepts a PND in lieu of a COA.

² Please ensure your supplier programs accept a BOL statement in lieu of a COA (if appropriate).

³ Please note that vacuum packaged beef subprimals in a box have not been tested and are not intended for use in ground beef products.

Vacuum Packaged Beef Subprimals Not Intended For Grinding

Each Cargill facility produces subprimal products packaged into vacuum bags and either boxed or placed into combos that are not tested and are intended solely for intact use. Cargill expects any customers who purchase vacuum packaged primals in boxes or combos, and utilizes these products for non-intact processes, to address the specific usage within their HACCP plan.

Cargill also produces tested trim and subprimal products that are not bagged and packaged in lined boxes or combos. Tested products are intended for non-intact use, such as grinding, needle tenderizing or injection.

3rd Party Audits

Cargill Beef Harvest facilities have obtained certification under an approved Global Food Safety Initiative (GFSI) standard. In addition, each facility is evaluated by a 3rd party auditing firm for E.coli addendum, Animal Welfare (including transportation) and SRM audit annually.

Control of Specified Risk Materials

Cargill is very cognizant of the concern of Bovine Spongiform Encephalopathy (BSE) occurring in North America and has joined others in requiring our suppliers of live cattle to verify that the cattle we purchase from them are in compliance with FDS CFR 9 589.2000. Operations at our facilities are governed by applicable USDA/CFIA regulations, including all additions pertaining to the exclusion of "Specified Risk Materials (SRMs)" from the human food supply. Cargill Beef harvest facilities are in compliance with FSIS-2007-0015, Final Regulations for Non-Ambulatory Disabled Cattle and Specified Risk Materials (SRMs) or CFIA MOP Chapter 17, Annex D. All SRMs are segregated from Human food and discarded to inedible rendering, incinerated or landfilled:

- The tonsils and spinal cords are removed from all carcasses.
- The skull including brains, eyes and trigeminal ganglia are sent to landfill from all cattle 30 months and older.
- In order to ensure the complete removal of the dorsal root ganglia, the vertebral column of cattle aged 30 months and older (excluding the vertebrae of the tail, the transverse processes of the thoracic and lumbar vertebrae, and the wings of the sacrum) will be removed during fabrication and discarded to inedible rendering, incinerated or landfilled.
- Carcasses are segregated according to age based on the guidelines presented in FSIS-2007-0015 or CFIA MOP Chapter 17, Annex D. to ensure proper disposal of SRMs from cattle 30 months or older.
- Eighty inches of small intestines including the distal ileum as measured from the ileocecal junction is discarded to rendering.
- No air injection stunning is used.
- Cattle identified as over 30 months of age are identified in the finished product containers at the Canadian facilities with a triangle 3 marking on the finished box label.
- US facilities follow labeling directives 6100.1, 6100.4 and 7160.1 for proper identification of products.

Animal Handling

Cargill is committed to meeting all applicable regulations that pertain to animal handling and the proper care of animals as regulated by the USDA/ CFIA Animal Welfare regulations, as well as the current North American Meat Institute (NAMI) Good Management Practices for Animal Handling. The following information is provided to demonstrate our commitment to Animal Welfare:

- Cargill has a systematic approach to humane handling that meets or exceeds FSIS Directive 6900.2 and/or CFIA MOP 12.2.2 and Meat Inspection Regulation 57.
- Cargill has training programs in place specifically designed to address animal handling issues. The NAMI training guidelines developed by Dr. Temple Grandin are the foundation of this program.
- Industry experts have been used to design equipment and review the animal handling and slaughter process.
- An independent 3rd party Professional Animal Auditor Certification Organization (PAACO) trained auditor

completes yearly audits. In addition, Cargill completes internal daily monitoring audits, as well as independent 3rd party daily observation audits to ensure animal handling requirements are continuously met.

- All Cargill Beef Harvest facilities have a PAACO certified auditor on site.

Export

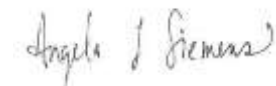
To ensure all products meet or exceed the standards set for export into other countries, Cargill specifies certain products and produce them under the standards set forth for export into those countries. All products should be verified to be eligible for export to that country prior to producing the finished product for export. All products are adequately labeled to provide the necessary required information to complete Form 9060-6 for export.

Residue Testing

All US Cargill Meat Solutions establishments are federally inspected by trained FSIS/USDA veterinarians, which inspect and test suspect carcasses for chemical residues. In addition, FSIS Directive 10,800.1 "Procedures for Residue Sampling, Testing, and other Responsibilities for the National Residue Program" and its Clarification Notice 44-01 outlines procedures for random evaluation of carcasses. Each Public Health Veterinarian (PHV) located at each Cargill Facility will follow the random sampling request sent to them from the Office of Public Health Science (OPHS). Any sampled carcasses are retained until sample results are returned and found to be negative. Additionally, all Canadian Cargill establishments are also federally inspected under the supervision of CFIA veterinarians. The inspection staff follows the random sampling plan to test for residues as outlined in the CFIA "National Chemical Residue Monitoring Program". The facilities have implemented acknowledgement forms that producers sign to ensure understanding and compliance with the requirements for animals to be suitable for human consumption at the time of harvest.

Cargill beef harvest facilities are continuously striving to minimize pathogenic bacteria contamination through the implementation of proven new technology and advanced testing programs, while at the same time exploring new technologies as they come into existence. Cargill believes our food safety program sets the standard for the industry, but at the same time, neither we, nor for that matter, anyone is able to guarantee pathogen free raw materials. Accordingly, we want to reiterate the importance of proper handling and cooking of all raw meat products by you and your customers. Cargill commits to ensure prompt updates to our documents upon any changes to our procedures or processes. For additional information and/or updates please visit our website <http://www.cargill.com/products/meat-food-safety>. However, should you have any specific questions please contact our office at 316-291-2500.

Sincerely,



Angela L. Siemens, Ph.D.
Vice President Food Safety, Quality & Regulatory
Cargill Meat Solutions Corp.

References:

Published Non-O157 STEC documents can be found from the NAMI Foundation website:
<http://www.namif.org/research/>

BIFSCo Best Practices for Processing Raw Ground Beef Products www.bifsc.org/bestpractices.aspx

FSIS Directive 10,010.1 (pages 58 – 60) http://www.fsis.usda.gov/Regulations_&_Policies/index.asp

Compliance Guidelines for Establishments on the FSIS Microbiological Testing program and other verification activities for *Escherichia coli* O157:H7 April 13, 2004

http://www.fsis.usda.gov/oppde/rdad/fsisdirectives/10010_1/ecolio157h7dirguid4-13-04.pdf

USDA Export Checklist http://origin-www.fsis.usda.gov/regulations_&_policies/Export_Checklist/index.asp

Revision History:

1/7/16 – Removed Milwaukee facility references. Added single species statements, updated allergen control section, added supplier approval requirements, added Canadian chemical residue program statement, added CFIA animal welfare regulation reference and made grammatical and clarification language updates.

5/8/2015 – Clarified to show prerequisite programs, added supplier review program and clarified food defense review verbiage.

1/9/2015 – Removed Plainview footnote, updated and clarified references and verbiage. Added language regarding livestock purchases and review of repeat violator list. Updated to version 8.

8/3/14 – updated with footnote to regarding closure of Milwaukee, WI est. 17690 facility.

1/7/14 – updated CFIA meat regulations reference, changed STEC6, STEC7 and FTB verbiage to be consistent throughout letter, removed Plainview reference and made necessary document format changes.

11/26/13 – included statement regarding multi hurdle intervention approach and included clarification paragraph regarding tested and untested subprimals intended use.

11/5/13 – included Canada in *Salmonella* and generic *E.coli* sampling statement. Updated Cargill Function name change from Technical Services to Food Safety, Quality & Regulatory (FSQR).

9/13/13 – Added a statement on CFIA's acceptance of Cargill's Product Notification Document (PND) and add notes to customers to ensure receiving programs had provisions to accept PND's as a substitute for COA's.

2/14/13 – updated the Annex N reference for CFIA SRM controls to Annex D

2/6/13 – Included a footnote regarding the ceasing of operations at the Plainview, TX Est. 86H facility.

1/1/13 – Changed date, updated name, added headers, added references and revision history, and changed FSEP reference for HACCP and Sanitation.

8/24/12 – Added notice 40-12 reference and changed beef parts acid cabinet from CCP to validated intervention.

5/29/12 – Referenced FSIS Notices 29-12 and 30-12 regarding STEC 6, added statement committing to test STEC6 during quarterly verification sampling, Changed CFIA SRM reference,

4/27/12 – Clarified components of and testing of ground beef and beef for grinding, Added subprimal review in event day section.

3/14/12 – added clarity to the subprimal acid spray statement.

1/10/12 – Added no allergen statement, removed *E.coli* reassessment language, clarified intervention language, clarified event day program language, added 30 month identification and labeling requirement statements, added website address to obtain information.