

**UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED PROGRAM**

APPROVED

USDA, AMS, LS, STDZ/Rm. 2607-S 05/22/2003

**TECHNICAL DATA SUPPLEMENT (TDS)
FOR FROZEN LEAN GROUND BUFFALO,
TDS-BUF-MAY 2003**

I. SCOPE

This technical data supplement (TDS) is for use by the United States Department of Agriculture (USDA), Agricultural Marketing Service (AMS), Livestock and Seed Program (LS) for the slaughter and processing of bison produced by Native Americans and Native American Cooperatives that are purchased by USDA. The bison will be processed into frozen lean ground buffalo. For this program, the buffalo products shall be processed under contract with the USDA. AMS will utilize the Institutional Meat Purchase Specifications (IMPS) descriptions and requirements for ground beef as specification requirements for the production of lean ground buffalo.

II. APPLICABLE DOCUMENTS

The following documents will be incorporated as part of this USDA, TDS-BUF:

- IMPS General Requirements, effective June 1996.
- IMPS For Fresh Beef Products, Series 100, effective June 1996.
- IMPS Quality Assurance Provisions, effective June 1997.
- Meat Grading and Certification (MGC) Branch Instruction Manual, Series 600 and 700.

III. ORDERING DATA: TO BE SPECIFIED BY THE PURCHASER (Section in the IMPS 100 Series) **Note:** References to "Ground Beef" (IMPS Item No. 136) are changed to Lean Ground Buffalo.

A. ITEMS

The bison shall be slaughtered in, and the finished product shall be prepared and handled in, an establishment(s) operating under the Voluntary Exotic Animal Inspection Program of the USDA, Food Safety and Inspection Service (FSIS). Bison must originate from U.S. produced American bison, produced by Native Americans or Native American Cooperatives

1. Lean Ground Buffalo

Lean Ground Buffalo shall be produced from any portion of the carcass, which yields product that meets the end item requirements for IMPS Item 136.

2. Material

The contractor will assure that the product complies with the **Material** section of IMPS Item No. 136 for lean ground buffalo and the following additional criteria:

- a) Domestic Origin – Bison must originate from U.S. produced American bison produced by Native Americans and/or Native American Cooperatives and be verified in accordance with MGC Instruction 606 for Domestic Origin Verification.
- b) Buffalo meat that is mechanically separated from bone with automatic deboning systems or advanced meat (lean) recovery (AMR) systems shall not be allowed.

- c) Slaughter Requirements – Bison must originate from slaughter establishments that:
 - (1) Have a segregation plan that assures non-ambulatory bison (bison that are unable to walk under their own power) commonly known as "downers" are handled in accordance with FSIS Directive 6900. 1R1 – Humane Handling of Disabled Livestock, issued 11/02/98. Carcasses originating from such animals must be segregated and the product from them cannot be included in USDA purchased lean ground buffalo.
 - (2) Use a stunning process that does not use an air-injected pneumatic stunner system.
 - (3) Include at least two pathogen intervention or anti-microbial steps. One of the intervention steps shall be steam pasteurization, an organic acid rinse, or a 180°F hot water wash and must be a critical control point (CCP) in their FSIS recognized slaughter process HACCP plan.
 - (4) Routinely test carcasses for E.coli 0157:H7 to verify effectiveness of interventions, as provided in Section VI. B. 3. of FSIS Directive 10,010.1 dated 2-1-98.
 - (5) Remove all spinal cord tissue.
- d) Boneless Bison Traceability - Contractors are responsible for providing product traceability of boneless bison to approved sources that comply with the above domestic origin and slaughter requirements. They must have documentation and a program in place that verifies the source of raw materials used in each lot of production.

3. Processing

Lean ground buffalo meat will be processed in accordance with IMPS and the following additional requirements:

- a) Lean ground buffalo will be processed in accordance with the **Processing** section of IMPS Item No. 136. A bone collector/extruder system must be in operation on the final grind of product.

B. GRADE – No grade requirement.

C. STATE OF REFRIGERATION

All finished buffalo products will be frozen, in accordance with FREEZING OPTION 1. Refer to I. **MEAT HANDLING, A. STATE OF REFRIGERATION, and B. PRODUCTION, TEMPERATURE AND TIME LIMITATIONS** section of the IMPS General Requirements.

D. FAT LIMITATIONS

The fat content shall not exceed 10 percent and will be declared in the nutrition facts panel on the package label. (Lean ground buffalo will be sampled and analyzed for fat content by AMS and the results reported to the Contracting Officer).

E. WEIGHT RANGE - Not applicable.

F. NETTING AND TYING - Not Applicable.

G. PACKAGING AND PACKING

Refer to **II. PACKAGING AND PACKING** section of the IMPS General Requirements and the following additional requirements:

1. Packaging

Lean Ground Buffalo will be packaged in the following manner:

(1) Mechanically packaged into tamper-proof, commercial casings or (2) vacuum packaged in accordance with the IMPS General requirements.

2. Packing

Twenty 2-pound packages of lean ground buffalo shall be packed into nonperforated shipping containers to a net weight of 40 pounds, without slackfilling or overfilling. Spacers or fillers may not be used to satisfy this requirement. Only one style and size of shipping containers may be used in any one-delivery unit.

3. Closure

Shipping containers will be closed by strapping, taping, or gluing. When strapping is used, the initial closure (usually the bottom of container) shall be secured by the gluing or taping method.

4. Marking of Containers

a) Shipping containers will be marked in accordance with Exhibit A. However, contractors may vary the placement of the required information shown in Exhibit A. Additional markings (e.g., company bar codes, logos, etc.) that are consistent with all other commercial labels, may be included.

b) Individual package labels of lean ground buffalo will have:

- (1) A "Best-if-used-by" date (180 calendar days from the date of production),
- (2) Safe handling instructions,
- (3) The FSIS establishment number,
- (4) Name of product,
- (5) Nutrition Facts Panel,
- (6) Any other FSIS required markings.

5. Palletized Unit Loads

Required, see IMPS General Requirements.

H. USDA CERTIFICATION

1. Product will be certified by USDA, AMS, MGC

AMS agents will perform examinations in accordance with IMPS General Requirements, IMPS QAPS, MGC Branch Instructions and as specified below:

a) Product Examinations

- (1) **Lean Ground Buffalo** – Prior to freezing, product shall be examined for excellent condition and detailed item description requirements in accordance with QAPS. In TABLE 100 I, delete defect numbers 218 and 219 in their entirety and replace with the following defects:

“218 Presence of any portion of the popliteal, prescapular, or prefemoral

lymph glands or any other exposed lymph glands measuring 1.0 inch or more in one dimension and 0.5 inch in a second dimension.

- 219 Presence of non-carcass components or fat from the thoracic, lumbar, Pelvic, cod, and/or udder areas of the carcass measuring 2.0 square inches or more and 0.5 inch or more in dept at any point.”

Delete defect 294 in its entirety. Insert the following note at the bottom of the table:

Note: The presence of any non-meat components not listed as defects above (e.g., spinal cord, organ tissue, foreign materials, etc.) shall cause rejection of the product by AMS.”

- b) Condition of Container - Final examination of condition of shipping containers will be limited to scanning (without destructive sampling) the delivery unit for defects which may have occurred during handling and storage (e.g., crushed, torn, dirty, stained, etc.). All defective containers must be replaced or corrected.
- c) Net Weight - In accordance with the QAPS only.
- d) Average Fat Content Analysis – In accordance with the QAPS.
- e) Temperature Examinations for Lean Ground Buffalo.
 - (1) Temperature will be examined for Freezing Option 1.
 - (2) Bison previously frozen shall be examined before grinding for evidence of defrosting or mishandling during storage (see **3. PROCESSING**). The examination shall be in accordance with IMPS QAPS (stationary lot). Only the sample units shall be completely thawed to an internal temperature of not less than 34°F, or more than 40°F, for examination (thaw only the sample size).

2. The AMS agent will:

- a) Certify and issue an official certificate indicating the status of each lot as required by MGC Branch Instructions. Lot size and purchase unit size are defined as follows:
 - (1) For finished product, the lot size will not exceed the amount specified by the purchaser as a purchase unit.
 - (2) The purchase unit size for lean ground buffalo is 40,000 pounds net weight (1,000 shipping containers) plus the amount for use in making box fills at the time of laboratory sample withdrawal.
- b) Supervise the loading and sealing of each truck.

3. Official certificate shall include:

- a) Contract number.
- b) Notice-to-Deliver number.
- c) Name of product.

- d) Six digit commodity code.
- e) Production lot number(s) and the date each lot was produced.
- f) Count of shipping containers and total projected net weight in each production lot.
- g) Total projected net weights per delivery unit.
- h) Identity of conveyance (numbers and letters, seals, license, etc.) as applicable.
- i) Destination(s).

4. Microbiological Requirements


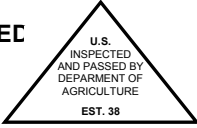
- a) Requirements – Lean ground buffalo will be sampled and analyzed for the bacteria levels listed in the following AMS LEAN GROUND BUFFALO MICROBIAL REQUIREMENTS table. The appropriate analytical method for each of the bacteria levels specified shall be as described in the current edition of the Compendium of Methods for the Microbiological Examination of Foods, published by the American Public Health Association, and the "USDA/FSIS Microbiological Laboratory Guidebook, 3rd Edition/1998, Chapter 5" for E. coli O157:H7 requirements. Analysis results shall not exceed the levels listed in the following table.

AMS LEAN GROUND BUFFALO MICROBIAL REQUIREMENTS	
Standard Plate Count	≤500,000/gram
Total Coliforms	≤500/gram
E. coli	≤100/gram
E. coli O157:H7	Negative/325 grams
Salmonella	Negative/25 grams

- b) Quality Assurance
 - (1) Sampling protocol – The AMS agent will sample each lot. For the purpose of this section, a lot will be defined as production of finished product between "clean ups". The AMS agent will prepare and handle samples in accordance with MGC Branch Instruction 613 for Examination and Sampling Procedures for Microbiological Requirements. Vendors will be responsible for cost of microbial testing.
 - (2) When the results of a sample exceed the levels specified in the above table, the contracting officer must be notified and the involved lot will not be allowed delivery to USDA.

EXHIBIT A

SHIPPING CONTAINER MARKINGS: COMMERCIALY LABELED SHIPPING CONTAINERS SHALL INCLUDE THE INFORMATION SHOWN BELOW. MANUFACTURER'S NAME AND ADDRESS SHALL APPEAR. THE USDA SYMBOL AND DONATED STATEMENT SHALL BE BLACK, FLAT, WATERFAST, AND NONSMEARING. THE USDA SYMBOL SHALL BE AT LEAST 3 1/2 INCHES HIGH. ALL OTHER PRINTING OR STENCILING SHALL BE OF A SIZE AND CONTRASTING COLOR TO STAND OUT PROMINENTLY AND COMPLY WITH THE USDA-FSIS REGULATIONS OR STATE REGULATIONS.

	<p>PERISHABLE FROZEN - STORE AT 0°F (-17.8°C) OR BELOW</p> 	
	<p>Manufacturer's Name and Address (here or on principle display panel)</p>	
	<p>LEAN GROUND BUFFALO, FROZEN PRODUCT CODE A635</p>	<p>DATE PACKED LOT# _____ BOX _____</p> 
	<p>CONTRACT NO. KEEP FROZEN</p>	<p>NET WT. 40 LBS. (18.2 KG)</p>

NOTES: DATE PACKED SHALL BE THE MONTH, DAY, AND YEAR OF PACKING.
SERIAL CONTRACT NUMBER WILL BE FURNISHED BY USDA.
LOT NO. AND BOX NO. MAY BE PLACED ON THE SAME LINE OR AS SHOWN ABOVE.
BOX NUMBERS SHALL BE SEQUENTIAL.

Boxes must include Safe Handling instructions in accordance with FSIS Mandatory Safe Handling Statements on Labeling of Raw Meat and Poultry.
PER 9 CFR 317.4 & 317.5, PRIOR APPROVED LABELS NEED NOT BE RESUBMITTED. CONTRACTORS THAT DO NOT HAVE APPROVED LABELS ON FILE MUST SUBMIT LABELS IN SKETCH FORM ONLY TO THE APPROPRIATE USDA, FSIS OR STATE AGENCY.