CATTLE SLAUGHTER STANDARD OPERATING PROCEDURES (SOP) FOR CONTROL OF SPECIFIED RISK MATERIALS (SRMs)
By: Ryan R. Baumert, HACCP Specialist, University of Nebraska-Lincoln
Dr. Dennis Burson, Meat Science Extension, University of Nebraska-Lincoln
2-17-04

This document is to be used as an example of an SOP for control SRMs in a slaughter operation, in accordance with USDA-FSIS Notices 4-04 and 5-04. Each operation should modify this document or create a new SOP according to the in-plant operations.

Specified Risk Materials (SRMs)
SRM are prohibited for use as human food. They are designated in 9 CFR 310.22(a) as:
1. The brain, skull, eyes, trigeminal ganglia, spinal cord, vertebral column (excluding the vertebrae of the tail, the transverse processes of the thoracic and lumbar vertebrae, and the wings of the sacrum), and dorsal root ganglia (DRG) of cattle ≥30 months of age.
2. The tonsils and the distal ileum (the entire small intestine must be removed to ensure removal of the distal ileum) from all cattle.

Procedures of Control of SRMs:
1. Carcass identification will be placed with the carcass and recorded on the Cattle Receiving Log with the proper animal identification.
2. If possible, any beef animal(s) determined to be ≥30 months of age will be held for slaughtering after young age documented animals are slaughtered. If the animal is determined to be ≥30 months of age through dental examination, equipment used to cut through SRMs (i.e. heading knife and splitting saw) will be cleaned and sanitized between carcasses.
3. Tonsils, brain, eyes and trigeminal ganglia from all cattle will remain on the skull and be placed in the inedible barrel.
4. The entire small intestine from all cattle will be placed in the inedible barrel after post-mortem inspection.
5. Head meat, cheek meat and tongues from cattle ≥30 months of age will be kept if there is no leakage of brain material from the stunning procedure (Cerebral fluid is not an SRM; FSIS Notice 7-04). If brain material is present, the head will be trimmed of brain material and reinspected or the entire head will be placed in the inedible barrel, if trimming is done.
6. Spinal cord will be removed from the vertebral column, after splitting of the carcass, with the use of a knife and/or hook and placed in the inedible barrel. On carcasses identified from cattle ≥30 months of age, grossly identifiable spinal cord material spread by the splitting process will be trimmed from the carcass with a knife (Spinal fluid is not an SRM; FSIS Notice 7-04). If the spinal cord can not be removed due to a bad split, the vertebral column will be re-sawed to expose the spinal cord.
7. At the end of the slaughter process, carcasses will be identified by one of the following:
a. Cattle will be tagged according to age classification (<30 months of age or ≥30 months of age).
b. The vertebral column of both sides of carcasses of animals ≥30 months of age will be marked with edible marking ink.
c. Any carcass from which a BSE test is pulled, the carcass will be tagged for holding and will be held from fabrication until the test results are returned.

**Monitoring:**
- Records of control procedures will be collected by the Slaughter manager or designee.
- Records will be a visual observation of the SRMs control procedures to ensure proper performance.
- Visual observation will be conducted once per day during slaughter operations.

**Corrective Actions:**
1. Slaughter operators will be retrained in SRMs control procedures.
2. SRMs will be properly disposed of to inedible.

**Records:**
- Slaughter SRMs Control Log

**Sanitation of Equipment used to Cut through SRMs**
If equipment (i.e. heading knife and splitting saw) is used to cut through SRMs of a carcass(s) designated as ≥30 months of age during the slaughter of animals ≤30 months of age, the equipment must be cleaned and sanitized* before being used on animals ≤30 months of age. The equipment will be rinsed free of organic materials with hot water. The equipment will then be dipped in the sterilizer or sprayed with the plant's sanitizing solution. On days slaughtering only beef animals ≥30 months of age, all equipment will be cleaned and sanitized at the end of the day in accordance with the plant’s SSOPs.

* As stated in FSIS Notice 10-04, this equipment need not be cleaned to a pre-operational state before sanitizing. The organic materials must be removed to ensure adequate sanitization.
<table>
<thead>
<tr>
<th>Date</th>
<th>Classification</th>
<th>Age Classification</th>
<th>SRM Disposal</th>
<th>Sanitation</th>
<th>Monitor (initials/time)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 30 Months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥ 30 Months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trade Secret / Confidential Commercial Information This document contains trade secret / confidential commercial information pursuant to 5 U.S.C. 552(b)(4)