

SRM Control Verification Task Job Aid

Instructions: Review this Job Aid and policy documents, regulations, and inspection methodologies with a mentor.

Acronyms/Definitions

- SRM – Specified Risk Material – Inedible tissues in all cattle depending on age as defined in [9 CFR 310.22\(a\)](#); prohibited for use as human food.
- Distal Ileum – SRM in cattle of all ages; the last 80 inches of unstretched small intestine that attaches to the large intestine.
- Tonsils – SRM in cattle of all ages; located in the head and tongue.
- Segregation – The sorting and identification of cattle, cattle carcasses or parts with SRMs before removal and disposal.
- Disposition – In this context, refers to SRM disposal (i.e., denaturing, rendering).
- Dentition – Use of teeth and their eruption pattern for determination of age.
- Ceco-colic Junction – The connection of the cecum and ascending colon, where the small intestine connects to the large intestine.
- FCS – Food contact surfaces; surfaces in the establishment that directly contact product.
- Clean and Sanitize – Sanitizing of FCSs used to cut through SRMs from cattle 30 months and older with 180°F water or chemical equivalent before using the FCSs (equipment) on cattle less than 30 months of age.
- “Routine” Sanitary Procedures – Required and performed on equipment or FCSs with visibly intact and identifiable SRM tissue.

Task Overview

- IPP perform the SRM Control Verification task to verify that all cattle slaughter and processing establishments that handle SRMs have written procedures describing the removal, segregation, and disposition of SRMs.
 - SRMs in cattle 30 months of age and older ([9 CFR 310.22\(a\)\(1\)](#)):
 - Brain, skull, eyes, trigeminal ganglia, spinal cord, vertebral column, and dorsal root ganglia
 - SRMs in cattle of all ages ([9 CFR 310.22\(a\)\(2\)](#)):
 - Distal ileum of the small intestine and the tonsils
- The establishment must remove SRMs from the carcasses of cattle, segregate SRMs from edible materials, and dispose of SRMs in accordance with [9 CFR 314.1](#) or [314.3](#).
- The establishment is to conspicuously and distinctly mark receptacles used for inedible materials to identify their use, as required by per [9 CFR 416.3\(c\)](#). The regulations do not require any one specific method (i.e. color-coding or labeling).

Basic Procedure

- Schedule the SRM Control Verification task.
- Review the hazard analyses for beef (including veal) slaughter and processing.
 - Verify the establishment has assessed SRMs as a potential food safety hazard.

- Verify the establishment incorporates SRM written procedures into the HACCP, Sanitation SOP, or prerequisite programs ([9 CFR 310.22\(e\)\(1\)](#)).
- Verify that beef or beef products are free of SRMs.
 - Directly observe employees performing the segregation, removal and disposal procedures.
 - Reinspect cattle carcasses and parts after removal of SRMs.
 - Review records to verify:
 - The establishment documents daily SRM procedures, monitoring, and results of monitoring.
 - The establishment correctly identifies and handles SRMs throughout slaughter and fabrication until SRMs are removed and disposed.
 - The establishment's corrective actions meet regulatory requirements and any changes to the food safety system are adequate and effective.
- Verify the establishment is not using captive bolt stunning devices that inject air into the cranium/skull. This is prohibited in cattle ([9 CFR 313.15\(b\)\(2\)\(ii\)](#) and [9 CFR 310.13\(b\)\(2\)](#)).
- Verify the spinal cord from the carcasses of cattle 30 months and older is removed at the establishment (i.e., not necessarily on the slaughter floor) where the cattle are slaughtered.
 - [9 CFR 310.22\(g\)](#) allows slaughter establishments to ship carcasses and parts that contain vertebral columns from cattle 30 months of age or older to another federally-inspected establishment for further processing under specific requirements:
 - Control is maintained while the carcasses or parts are in transit by establishment or moved under FSIS control/seal
 - Documentation accompanying carcasses or parts regarding vertebral columns from cattle 30 months of age or older
 - Records are maintained to identify the official establishment that received the carcasses or parts
 - Records are maintained to verify the required portion of the vertebral columns are removed as SRMs and disposed of appropriately

Sanitation Verification

- On-line inspection of heads, viscera, and carcasses is to verify:
 - Each carcass or part is not contaminated with visible and identifiable SRM tissue displaced from normal location.
 - Establishment removes visible SRM contamination in a satisfactory and sanitary manner before completing inspection.
- When equipment is used to cut through SRMs of cattle 30 months and older, verify the establishment:
 - Uses routine sanitary procedures when equipment is contaminated with visibly intact or identifiable SRM material to prevent product adulteration.

- Cleans and sanitizes all equipment used to cut through SRMs of cattle 30 months and older before using the equipment on cattle less than 30 months of age, or
- Handles all cattle as 30 months and older.

Using Livestock Producer Records

- Verify, if establishment uses producer records, that the records are sufficient to accurately:
 - Identify the cattle (e.g., tags, breed, description, owner).
 - Indicate the age based on production dates.
- Notify the PHV if the records:
 - Are clearly not sufficient to accurately determine the age of the cattle and
 - Show a significant discrepancy between records and dentition (i.e., greater than 3-6 months) or
 - Are based on owner affidavits alone.

Using Dentition to Age Cattle

- Identification of SRMs depends on accurate determination of cattle age. Establishments age cattle by using dentition or livestock producer records.
- Verify the establishment:
 - Determines the age of cattle.
 - Properly segregates cattle 30 months and older from less than 30 months.
 - Identifies, removes, and disposes of SRMs.
- Verify establishments using dentition make age determinations consistent with FSIS guidelines – [Using Dentition to Age Cattle](#)
 - FSIS considers cattle that exhibit eruption of one or both of the second set of permanent incisors above the gum line as 30 months of age or older.
 - IPP observe employees performing dentition examinations.
 - IPP perform dentition checks and compare results with establishment.
 - IPP review records documenting the dentition procedures.

Removal of Tonsils

- Verify the establishment:
 - Identifies, removes, and disposes of the tonsils from the head and tongue saved as edible.
 - Does not use tonsil in meat food products or contaminate edible products with SRM tissue.
 - Removes the lingual tonsil within the skin and submucosal layers of the tongue by using a:
 - Transverse cut caudal (just behind or below) to the last vallate papillae or
 - Skinning machine to remove no less than 5mm from the surface of the tongue down to the muscular layer caudal to the last vallate papillae.
 - Removes tonsillar material in a sanitary manner.
 - Removes lingual and palatine tonsils before shipping cattle market heads or tongues.

Removal of Distal Ileum

- Verify the establishment effectively identifies, removes, and disposes of the distal small intestine or ileum ([9 CFR 310.22\(d\)](#)). Verify the establishment:
 - Identifies, removes, and disposes of no less than 80 inches of uncoiled, unstretched, and trimmed distal ileum as measured from the ceco-colic junction.
 - Is not using the distal small intestine in meat food products, edible casings, or in edible rendering.

Disposal of SRMs

- Verify that the establishment segregates SRMs from edible materials, and disposes of SRMs per [9 CFR 314.1](#) or [314.3](#).
- Verify that the establishment handles all SRMs as inedible product and denatures SRMs prior to transport or renders SRMs on site.
 - **Note:** Per FDA requirements, brain and spinal cord of cattle 30 months and older must be segregated from other SRMs and inedible/condemned materials and alternatively disposed of using landfill, incineration, or composting. If IPP have any concerns, contact the supervisor for guidance.

Discussion Points

- Discuss the method of aging cattle by dentition vs. use of producer records.
- Discuss how to identify SRMs for removal verification, including where SRMs need to be removed.

Knowledge Check

- What are SRMs in cattle of all ages?
- What are SRMs in cattle that are 30 months of age and older?

Resources

- [FSIS Directive 6100.4](#) – *Verification Instructions Related to Specified Risk Materials in Cattle of all Ages*
- [9 CFR 310.22](#)