

# Mobile Slaughter Unit

*Name of the business/responsible entity*

**USDA Facility Number: 00000**

## Standard Operating Procedures (SOP)

### Signature Page

**Slaughter: beef, swine, goat, and lamb**  
*(list all species you intend to slaughter)*

**Mailing Address of Organization**

*Address*

*City, State, Zip*

**Mobile Unit is parked at:**

*Location address*

*City, State, Zip*

*Phone number*

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Managing Butcher

Date

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**SOP-1: Live Animal Receiving**

The owner of the livestock to be slaughtered will fill out the SOP-1 Receiving Log to certify the age of cattle; that all animals presented for slaughter are suitable for slaughter and free of residues and foreign materials; and that records of all medications administered and pesticides used have been kept and will be available for review on request for 3 years after the slaughter date.

## **SOP-2: Organic Acid Spray Preparation and Use**

This MSU will use one of two types of organic acid spray solutions: acetic acid (vinegar) or lactic acid. The type of acid used each slaughter day shall be recorded in the Organic Acid Spray Log, along with the amounts of acid and tap water (certified as potable, per SSOP-2) used to prepare the solution. The organic acid solution shall be prepared to yield the following concentrations:

- Acetic Acid: 2.5% (vol/vol). Commercial vinegar is usually 5% acetic acid (label will be checked), so a 50:50 dilution in tap water will normally produce the 2.5% solution.
- Lactic acid: 2 – 2.5% (vol/vol). Purchased lactic acid is usually 88% (label will be checked), so adding 3.25 fluid ounces of that solution to a gallon of water will result in a 2.1% solution, or adding 3.75 fluid ounces of that solution to a gallon of water will result in a 2.4% solution.

The pH of the acid solution will be taken and recorded on the Organic Acid Spray Log.

Regardless of the acid used, the following basic steps shall be followed.

- a. Each carcass half shall be thoroughly rinsed with tap water (Final Wash step) before the organic acid spray is applied;
- b. Each organic acid spray solution shall be prepared fresh on the day of use with tap water (cold or hot) and stored in the MSU for use that day and one consecutive day (i.e. if the MSU is out for a two day period).
- c. Each carcass half shall be sprayed thoroughly on the exterior (hide) surface from top to bottom and back to the top. Then the interior (gut) surface shall be sprayed from top to bottom and back to the top. Whole heads, removed head and cheek meats, livers, hearts, or tongues shall be sprayed in one application of the same organic acid spray used for carcass halves.

**SOP-3: Thermometer Calibration**

For this SOP, we recommend using Flores and Boyle, 2000, "Thermometer Calibration Guide," Kansas State University, available at

<http://www.agr.state.nc.us/meatpoultry/pdf/Thermometer%20Calibration.pdf>.

The guide also includes a log. The entire publication can be used as a plant's SOP for this topic.

#### **SOP-4: Procedures for Minimizing BSE Risks Associated with Specified Risk Materials**

These procedures, based on the requirements of 9 CFR 309.3 and 9 CFR 310.22, outline how this establishment will reduce the risk of BSE agent entering the human food chain.

##### **Ante-Mortem Inspection**

All livestock to be slaughtered will be presented for ante-mortem inspection by FSIS inspection personnel to determine whether the animals are fit for slaughter for human food. The livestock owner will be responsible for presenting livestock for ante-mortem inspection.

Non-ambulatory cattle, as defined in 9 CFR 309.2(b), will not be accepted for slaughter. Any livestock condemned by inspection personnel will be humanely handled and destroyed. All destroyed animals will be coated with a denaturant and properly disposed of according to state and local law. Establishment personnel will immediately notify the inspector when cattle that have passed ante-mortem inspection become non-ambulatory. The inspector will determine the disposition of such cattle.

All owners of livestock will be required to certify that all livestock presented for slaughter have not recently received antibiotics or hormones that would prohibit human consumption.

The age of all cattle presented for slaughter will be determined so that Specified Risk Materials (SRMs) can be identified for removal from the human food chain. Documentation will be the primary means of determining the age of cattle to be slaughtered. During ante-mortem inspection, cattle 30 months of age or older will be identified to assure they are slaughtered after all other animals less than 30 months of age have been slaughtered. The owner of cattle to be slaughtered will be required to provide accurate and reliable documentation verifying the age of cattle. Acceptable forms of documentation:

- Records or certificates that can be related to individual cattle;
- Records or certificates that provide evidence of age that goes back to the farm where cattle were born or raised, including the name and address of the owner;
- Pregnancy check records;
- Calving records;
- Branding, ear tag, or electronic ear ID records;
- Artificial insemination records;
- Purchase receipts showing age of animal when purchased.

Whether cattle are older or younger than 30 months will be recorded on the Slaughter Log. If accurate and reliable documentation is not provided, dentition will be used to determine whether cattle are 30 months of age or older.

##### **Removal, Segregation, and Disposition of Specified Risk Materials**

All cattle 30 months of age and younger will be slaughtered before cattle 30 months of age and older are slaughtered.

SRMs to be removed from all cattle include the tonsils and small intestine.

SRMs to be removed from cattle 30 months of age and older include:

- Tonsils and small intestine;
- 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 the dorsal root ganglia.

SRMs removed during the slaughtering process include the tonsils, small intestine, brain, skull, eyes, trigeminal ganglia, and spinal cord.

The head will be skinned and removed from the carcass and placed on the inspection rack. The tongue will be removed from the head. The skull, brain, trigeminal ganglia, and tonsils will be injected with a denaturant and placed in a container outside the offal chute to await disposal. During evisceration, the heart, liver, and kidneys will be removed and placed in the inspection tray for inspection. After viscera inspection, all viscera with SRMs attached will be marked with a denaturant and placed in a separate container for SRM disposal. After the carcass is split, the spinal cord will be removed and placed in the container for SRM disposal. The vertebrae will be marked with branding ink identifying them for removal at the further processing stage. All SRMs removed will be marked with a denaturant and properly disposed of, according to state and local law. Red carcass tags will be used to identify the animal as being 30 months of age or older. Carcasses will be hung separately and will not be allowed to touch other carcasses younger than 30 months. The cut & wrap facility manager will be made aware of these animals at the time of off-loading.

SRMs removed during the further processing stage will include the transverse processes of the thoracic and lumbar vertebrae, and the wings of the sacrum.

The removal of SRMs for each animal 30 months of age and older will be recorded on the Slaughter Log. The managing butcher or designee will verify that all SRMs were removed and disposed of accordingly.

This establishment will evaluate the effectiveness of these procedures and will revise these procedures whenever necessary to reduce the risk of BSE agent from entering the human food chain.

**SOP-5: Generic E.Coli Testing Plan**

For this SOP, we recommend using FSIS’s “Guidelines for Escherichia coli Testing for Process Control Verification in Cattle and Swine Slaughter Establishments,” available here:

[http://www.fsis.usda.gov/PDF/Guideline\\_for\\_Ecoli\\_Testing\\_Cattle\\_Swine\\_Estab.pdf](http://www.fsis.usda.gov/PDF/Guideline_for_Ecoli_Testing_Cattle_Swine_Estab.pdf)

The Pathogen Reduction/HACCP Regulation (9 CFR 310.25) requires that all establishments that slaughter livestock test carcasses for generic E.Coli as a way to verify control processes.

You can read the regulation here: [http://edocket.access.gpo.gov/cfr\\_2003/9CFR310.25.htm](http://edocket.access.gpo.gov/cfr_2003/9CFR310.25.htm)

The “Guidelines” document outlines sampling and microbial testing procedures that meet this requirement.

We do recommend you read the regulation also. FSIS notes that the Guidelines document “is a supplement to the Regulation but not a substitute; in-depth details of microbial sampling and testing may be found in the Regulation.”



**SOP-1: Receiving Log**

**Owner:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Owner address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

Owner certifies the age (under or over 30 months) of cattle and that all animals presented for slaughter are suitable for slaughter and free of residues and foreign materials. The owner certifies that records of all medications administered and pesticides used have been kept and will be made available for review on request for 3 years from this date.

**Owner signature:** \_\_\_\_\_

Species	Animal ID # (ear or hide tag)	Older/Younger than 30 months (cattle only; per dentition)

Signature of Managing Butcher or Designee: \_\_\_\_\_ Date & Time \_\_\_\_\_

