

**TEXAS TECH UNIVERSITY
GORDON W. DAVIS MEAT SCIENCE MEAT LABORATORY**

**STANDARD SANITATION OPERATING
PROCEDURES**

Standard Sanitation Operating Procedures will be performed by the plant manager or designee at the frequency stated. Any deficiencies, corrective actions, and preventative measures will be documented accordingly.

Sanitation Guidelines

A. Slaughter Operations

Frequency – after any slaughter operations

1. Rinse down all equipment with warm water. Apply cleaning chemicals to equipment to clean and sterilize any surfaces or areas that could come in contact with product.
2. Wash down alley, scales, and concrete by pens while letting chemical sit to clean and sterilize equipment.
3. Any areas or equipment heavily soiled from operations will be scrubbed by hand.
4. Rinse down floors, walls, and all equipment with warm water before applied chemical dries.
5. Inspect for cleanliness. Re-clean if necessary.
6. Use squeegee to move standing water to floor drains.
7. Air-dry all metal equipment and tools on kill floor. Oil all equipment using a light coat of edible oil to curb rust and corrosion on any contact surface.
8. After procedures on kill floor are completed, the entire room and all equipment will be sanitized using a quaternary sanitizer. Sanitizer will be mixed according to label directions and applied using an air fogger.
9. Air knives are to be taken apart and thoroughly cleaned. Food grade grease is to be applied where applicable before re-assembly. Spray edible oil in air nozzle of air knives and run for approximately 30 seconds. Hang upside down to allow excess water to drain.

B. Fabrication/ Processed Meats Operations

Frequency – after any fabrication/ production of processed meats operations

1. Remove all product and waste material.
2. Pre-rinse all equipment, food contact surfaces, floors, walls, tables, etc. with warm water.
3. Clean and scrub equipment and surfaces using a designated detergent.
4. Rinse equipment.
5. Visually inspect all equipment and tables for any missed areas. Repeat steps 3 and 4 if not clean visually.
6. Apply a sanitizer to the floor and equipment. Allow at least the minimum contact time for the sanitizer.
7. Rinse sanitizer with hot water.
8. Use squeegees to move standing water to floor drains.

9. All equipment is then air-dried. A light coat of edible white oil is applied to any metal surface areas to curb rust and corrosion.

C. Smokehouse:

Frequency: After each use, Prior to use.

- a. Put racks, trucks, and rods in the cutting floor or slaughter floor.
- b. Rinse smokehouse out with hot water.
- c. Use Xylon and soap to scrub entire smokehouse, inside and outside.
- d. Rinse away particles with hot water.
- e. Clean ashes out from smoke generator.
- f. Scrub floor outside the smokehouse, then rinse with hot water.
- g. Squeegee water out of smokehouse room.
- h. Close smokehouse door.
- i. Clean trucks, racks, and rods using Xylon and soap in the cutting floor.
- j. Trucks and racks may stay on the cutting floor, but rods go in a barrel in the sausage room.

D. Coolers and other rooms

Frequency – when necessary. (Floors and walls will be cleaned at the same time.)

1. Move all product out of cooler or room.
2. Dispose of any materials no longer needed.
3. Rinse down all floors and walls with hot water.
4. Apply cleaning agent to floors and walls and scrub.
5. Inspect for cleanliness. Re-clean if necessary.
6. Rinse down floors and walls thoroughly.
7. Squeegee standing water to floor drains.

E. Hallway

Frequency –every day of processing

Remove all trash and debris

1. Rinse Floor with Hot Water (180 f)
2. Soap and apply degreaser to floor and walls (as needed)
3. Rinse Floor with Hot Water (180 f)
4. Squeegee floors

F. Packaging rooms

Frequency – after any packaging procedures

1. Make sure all product is out of room.
2. Clean counter tops and cabinets with a wet clothe. Spray sanitizer on surfaces and clean off.
3. Take out vacuum machine boards and scrub and sanitize.
4. Clean floor and walls.
5. Inspect area for any meat or fat overlooked.

G. Freezers

Frequency – when necessary

1. Reorganize racks. Combine racks of same product.
2. Label all boxes and product.
3. Make sure all boxes and bags are off of floor.

4. Sweep floor free of debris.

F. Rendering Room

Frequency – when necessary

1. Spray floors and walls with hot water.
2. Scrub floors and walls with designated detergent.
3. Rinse floors and walls with hot water.

Other general procedures:

- Use squeegees to move standing water to floor drains.
- Use squeegees to remove excess water off of table tops.
- All equipment is then dried. A light coat of edible white oil is applied to any metal surface areas to curb rust and corrosion.

Pre-Operational Sanitation Procedures

A pre-operational inspection of all areas and equipment or utensils that will be used in operations that day or come in contact with product will be done each day before production begins by plant manager or designee. All surfaces that could come in contact with any product will be thoroughly checked. Areas or surfaces that do not pass inspection will be cleaned thoroughly and sanitized, and the deficiency, corrective action, and preventative measures will be documented in the pre-operations report log. All requirements of 9 CFR 416.15 and 9 CFR 416.16 will be met. The manager or an appointed, trained employee will be responsible for pre-operational sanitation.

Implementation

The main individual responsible for implementing and maintaining daily sanitation will be the meat lab manager. If, for some reason, the meat lab manager cannot be there before production starts or will be absent, either a trained employee will be assigned to pre-operational sanitation duties as well as maintaining daily SOP's or the first employee at work would be responsible. Either way, the manager as well as the professor in charge of the meat lab will ensure all duties of the SOP's are carried out.

Documentation

A daily documentation of duties carried out will be kept. Any deficiencies as well as corrective actions will be documented in the daily SSOP deficiency report log.

Signatures

Signature of persons responsible for
implementation and maintenance of SOP's

Bradley Price and Shandon Rankin
Meat Lab Management

Signature of professor in charge

Dr. Mark Miller
Professor Meat Science and Muscle Biology

STANDARD OPERATING PROCEDURES

Standard operating procedures will be performed daily by Laboratory Manager or designated employee. Any deficiencies, corrective actions, and preventive measures will be documented in the Standard Operating Procedures Log.

1. Hairnets and Hard Hats are required in all processing rooms, coolers and slaughter areas.
2. Clean frocks will be worn in processing and product handling areas and clean rubber aprons or frocks must be worn during slaughter operations
3. Aprons and Lab Coats from the Old Lab and other labs must be removed before entering any food processing rooms, coolers and freezers.
4. All employees or students handling product will wear cutting gloves, cotton gloves, and rubber gloves in slaughter, fabrication and product handling areas. This is to ensure no open cuts, wounds, or dirty hands come in contact with the product as well as making the hands easier to clean with hot water to ensure better handling sanitation. Also, anytime a glove becomes contaminated with dirt, hair, oil, grease, fecal material, etc.; it must be thoroughly washed and sanitized before operations by the person before continuing.
5. Any knives, tools, or equipment dropped on the floor or otherwise contaminated will be taken to the sink, cleaned and sterilized before continued use.
6. Any equipment with build up or contamination will be cleaned and sanitized before use.
7. No boxes or foreign items are to be put on any table or counter that has or will have any exposed product. After putting boxes on table, tables must be washed and sanitized just like you were processing.
8. When working on the kill floor, hands are to be washed frequently. Knives are to be sterilized after each animal is stuck for bleeding.
9. If floor drains will not drain, inform the meat lab management so the problem can be corrected.
10. All product in the meat lab must be identified. Research Product must be marked as such and labeled "Not For Sale". This includes all product even judging. Do not write on any labels bearing the inspection legend.
11. The mark of inspection cannot be applied to any product that:
 - i. Has not come from an USDA Inspected Facility
 - ii. That TTU doesn't have an approved label for.
 - iii. That has left the facility and returned
12. No lamb or beef product is to be cut on the same table or equipment after pork until the table or equipment is cleaned and sanitized.

13. Fully cooked product shall not come in contact with any raw product. No cooked product shall come in contact with any surface that has not been cleaned and sanitized. Cooked product shall be packaged in the cooked product packaging room unless otherwise specified.
14. Meat dropped on floor shall be trimmed free of contamination and then washed off in the meat only sink.
15. Rendering barrels shall be cleaned prior to entering the facilities.
16. Occasionally product is fabricated in the big classroom for cutting demonstrations. Product temperatures shall be monitored to ensure that the product has not increased above the safe zone. If product reaches higher than 45 F, then it will be placed into a cooler and allowed to drop in temperature.
17. During any process that involves grinding or chopping, product temperatures will be monitored to ensure that the product has not increased above the safe zone. If product reaches higher than 45 F, then it will be placed into a cooler and allowed to drop in temperature.
18. Rails shall be monitored for rust and other possible contamination. Rails will be greased when necessary.
19. The plant will be monitored continuously for condensation.
20. No food, candy, and tobacco products are permitted in any production areas.
21. All Personal Protective Equipment (Mesh Aprons, No Cut Gloves, Hard Hats, No Cut Sleeves, Scabbards) must be worn and used when handling knives and sharp objects.