

TITLE 35. OKLAHOMA DEPT. OF AGRICULTURE, FOOD, AND FORESTRY

CHAPTER 37. FOOD SAFETY

SUBCHAPTER 7. CONSTRUCTION STANDARDS FOR MEAT PACKING PLANTS

PART 1. DESCRIPTION OF PLANS AND SPECIFICATIONS

REQUIRED

35:37-7-1. Submission of plans

(a) Three (3) sets of drawings with separate specification sheets that fully and clearly illustrate and describe the applicant's plans for constructing and equipping the plant for inspection must be submitted to: Oklahoma Department of Agriculture, Food, & Forestry, Food Safety Division, Meat Inspection Services, 2800 N. Lincoln Boulevard, Oklahoma City, Oklahoma 73105-4298.

For custom and/or retail exempt plants, only two (2) sets of drawings and specification sheets are required. This procedure is required for a new plant and for changing or modifying an existing plant. Plans should be reviewed and given an initial approval by the District or Circuit Supervisor prior to submission to the Oklahoma City office for final approval. The appropriate District or Circuit Supervisor will be identified to the applicant when he or she makes initial contact with the Oklahoma City office.

(b) The name and address of the applicant must be shown on each sheet of drawings. The sheets on which prints or drawings are made should not exceed 34 by 44 inches.

(c) It is essential for the lines on the drawings to be sharp and clear and all writing to be legible.

(d) The required specification sheets which accompany the drawings should cover such features as the finish of the floors, walls, and ceilings; the source of the water supply; method of sewage disposal; method of controlling rodents and vermin; description of the trapping and venting of drainage lines; description of the hot water system, means to dispel steam and vapor in work rooms; screens for other openings to prevent admittance of flies; as well as other important

features. The specifications should be typewritten on 8 1/2 by 11 inch sheets and organized into sets.

35:37-7-2. Plot plan

(a) The plot plan must show the entire premises. This should include the location of **ALL** buildings, railroad sidings, roadways, and alleys adjoining the plant, as well as all streams, catch basins, water wells, routing of sewer lines on premises, and storage tanks. If buildings exist on adjoining property, their height and use should be indicated. The character and surfacing of roadways, driveways, streets, and the paving of vehicular loading areas and alleys should be indicated. The north point of the compass is to be shown.

(b) A scale of not less than 1/32 inch-per-foot is required for plot plans. Extremely large plants may be exempted from this scale only to the extent necessary to fit the plot plan on the maximum allowable size sheet of 34 by 44 inches

35:37-7-3. Floor plans

(a) A floor plan must be submitted for each entire floor of the establishment. Each floor plan must accurately illustrate the facilities as they will exist when the establishment is actually in operation. Most floor plans should be scaled 1/8 inch-per foot. However, complicated layouts such as large slaughtering departments, hog cutting departments, and large sausage kitchens will need to be scaled 1/4 inch-per-foot so that necessary details can be clearly illustrated. Very large floor plans can be divided into two or more sheets by using a key to show how the sheets relate to each other.

(b) The essential features to show on floor plans are locations of walls, partitions, posts, doorways, windows, floor drainage openings and gutters, rail systems for conveying carcasses, principal pieces of equipment (also include platforms, tables, etc.), hot and cold water hose connections, hand-washing facilities, pipelines for moving product or product ingredients, lockers and benches, toilets, urinals, shelves and racks, chutes, conveyors, ventilation fans, ramps, and stairways.

(c) Floor plans for poultry plants should also show the point at which live poultry is hung on the conveyor line, the point at which dressed poultry is removed, the point of transfer of dressed poultry to the eviscerating line, and the routes of the edible and inedible products.

(d) In addition to the drawing features, the floor plans must include the name and use of each room, number of employees using each welfare and toilet room, room temperature (for coolers, freezers, processing areas, etc.), height of rails, height of all work platforms, and height of inspection tables. The rooms or areas illustrated on the drawings that will not be part of the official establishment must be clearly marked as such.

(e) The pitch of floors to floor drains or drainage gutters must be indicated by either grade lines or arrows noting the direction of the pitch.

35:37-7-4. Plumbing plan

The plumbing plan of the floor drainage system and the toilet soil lines must be shown for the entire plant and the size of the drainage lines shown. Furthermore, the toilet soil lines must show that the two systems are separate to point outside the building and must be complete for the official premises. Toilet soil lines must not discharge into grease catch basins.

35:37-7-5. Rearrangement of operations or activities

Expansion or remodeling projects often results in rearrangement of operations to the extent that previously approved overall floor layouts are misleading. In these instances, updated overall floor layouts must be submitted.

35:37-7-6. Approval of plans and specifications

If the examination of the drawings and specifications shows that they meet the requirements, a letter of approval will be placed with them and an approved set and letter of approval returned to the applicant. Another set is retained for the Meat Inspection files in Oklahoma City. If the plant is to operate as an officially- inspected establishment, a third set will be filed in the plant inspector's files.

35:37-7-7. Changes and revisions

Meat Inspection Services, Oklahoma City, Oklahoma, maintains the approved drawings on file. Accordingly, when changes are proposed in areas for which drawings have been previously approved, one of the following types of revised drawings must be submitted for review and consideration. (1) A completely revised sheet or sheet or sheets that show the existing construction and equipment which will remain unchanged, together with the proposed alterations and/or additions (preferable method); or (2) The required number of sets of pasters [two (2) required for custom and/or retail exempt plants, and three (3) required for plants under inspection] showing proposed changes, one of which is superimposed and securely affixed to the most recently approved sheets(s). The pasters, as affixed, must not obscure essential data and must be prepared to the same scale and presented on a background similar to that of the previously approved drawings. A new sheet must be submitted when changes would require several pasters.

35:37-7-8. Use of competent architect or engineer

Because of the specialized knowledge required to design and construct a well-arranged meat or poultry packing plant, a competent architect or engineer experienced in laying out plans for operation under State Meat and Poultry Inspection should be employed to prepare the drawings and specifications.

PART 3. LOCATION OF ESTABLISHMENTS

35:37-7-9. Site

(a) To the extent possible, slaughtering or processing plants shall be located in areas reasonably free of objectionable odors, smoke, flying ash, dust, etc., that may be produced by oil refineries, city dumps, chemical plants, sewage disposal plants, dye works, paper pulp mills, and the like.

(b) The prevailing winds are also an important factor in the site determination because objectionable substances emanating from more distant sources may be a problem if the winds carry them to the plant site.

35:37-7-10. Accessibility

The shipping and receiving areas of the plant should be connected to public streets or highways by adequate, dust-proof access ways. If supplies or raw materials are to be received into the plant

or the finished product is to be shipped from the plant by rail, consideration should be given to arranging for suitable railroad spur tracks.

35:37-7-11. Separation

An establishment operating under State Meat and Poultry Inspection must be separated from any other plant or building.

Direct communication by means of doorways, windows, stairways, elevators, passageways, loading or unloading platforms, or loading courts is permissible only when authorized by the Program Coordinator.

35:37-7-12. Retail business on premises

If a retail meat or poultry business is carried on within the official premises of a state-inspected establishment, it must be arranged so that customers have access only to the room or rooms where such business is conducted.

35:37-7-13. Expansion

In planning a plant, consideration should be given to providing space that will permit future expansion. To this end, coolers, freezers, processing departments, etc., should be located so that they may be enlarged without adversely affecting other departments.

35:37-7-14. Inedible products departments and grease catch basins

(a) Features such as the inedible products department and catch basins for grease recovery must be suitably located to avoid objectionable conditions affecting the preparation and handling of edible products.

(b) The Plant is to be designed so that the flow of inedible and condemned products will not come into contact with edible products or otherwise be likely to contaminate edible products.

PART 5. WATER SUPPLY, PLANT DRAINAGE, AND SEWAGE DISPOSAL SYSTEM

35:37-7-15. Potable water supply

(a) The water supply must be ample and potable. A certificate showing that the water is potable must be obtained from the State- Federal Agriculture Laboratory in Oklahoma City, Oklahoma, prior to granting approval for the plant to operate.

(b) If chlorinators are required to assure a continuous potable supply, they should be automatic, with devices that inform the plant management and inspector when they have ceased to function.

(c) Poultry plants must have specified, in terms of gallons-per minute, the water available for the processing needs of the plant.

(d) Water must be distributed throughout the plant under adequate pressure and in quantities sufficient for all operating needs. Both hot and cold water must be provided. Hot water must come from a central heating plant of sufficient capacity or from other facilities capable of furnishing an ample supply. Hand-operated mixing valves for mixing steam and water are not acceptable for producing hot water used for such purposes as sanitizing equipment or areas contaminated by diseased material. If automatic mixing valves are utilized, a thermometer must be located at a point after mixing has occurred.

35:37-7-16. Nonpotable water supply

A nonpotable water supply is a potential health hazard. If such a supply is essential for fire protection or for the condensers of the refrigeration system, it must be kept separate from the potable supply. If a cross-connection between the two supplies is necessary, it must adequately safeguard the potable supply, and be acceptable to Meat Inspection Services and appropriate health authorities. Nonpotable water lines should be avoided in buildings where edible products departments are located.

35:37-7-17. Vacuum breakers

Vacuum breakers of an acceptable type should be provided on all steam lines and water lines connected to various pieces of equipment for the purpose of preventing contamination to the general water supply through back-siphonage of contaminated water and other wastes. Examples of these various pieces of equipment are thawing vats, sanitizers (heated by steam), urinals, etc.

35:37-7-18. Plant waste disposal

An efficient method of disposing of plant wastes is essential.

If a private septic tank or sewage disposal system is used, it must be efficiently designed and operated so as not to produce objectionable conditions. The system must be acceptable to those authorities having jurisdiction.

35:37-7-19. Disposal of paunch contents, hog hair, feathers, blood, and similar waste material

Waste material such as paunch contents, hog hair, feathers, blood, and pen manure must be disposed of without creating objectionable conditions, and the drawings or specifications must indicate how this will be accomplished.

35:37-7-20. Acceptance of plant waste system

The sewage disposal facilities must be acceptable to those having jurisdiction over such matters. If the packing plant is to be connected to a city or municipal sewage system, the acceptance must be obtained from that city or municipality. For plants connected to a sewage system outside of city limits, acceptance must be obtained from: Oklahoma Department of Environmental Quality. A letter or permit from these authorities indicating that the proposed sewage system is satisfactory to them must be submitted to the Meat and Poultry Inspection Services Office in Oklahoma City before approval can be granted for the plant to operate.

35:37-7-21. Catch basins for grease recovery

Catch basins for the recovery of grease must not be located in or near edible products departments or areas where edible products are shipped or received. To permit easy cleaning, such basins must have inclined bottoms and a removable cover. They must be constructed so that they can be completely emptied of their contents for cleaning. Hot water hose connections must be provided at convenient locations near the basins for cleanup purposes. The area surrounding an outside catch basin must be paved with impervious material such as concrete, and provided with proper drainage. Suitable facilities, such as a blow tank, must be provided for the transfer of grease to the point of disposal after it is skimmed from the basins.

35:37-7-22. Plant drainage

(a) All parts of floors where wet operations are conducted must be well drained. As a general rule, one drainage inlet must be provided for each 400 square feet of floor space. A slope of ¼ inch-per-foot to drainage inlets is required. In areas such as beef sales, coolers, and other departments where a limited amount of water is used, the slope may be 1/8 inch-per-foot.

(b) It is important that the floors slope uniformly to drains with no low spots where liquids could collect. Floor drains are not required in freezer rooms or dry storage areas. When floor drains are installed in rooms where the water seal in traps is likely to evaporate unless replenished, they shall be provided with suitable removable metal screw plugs.

(1) *Special drainage requirements.* In certain departments, special floor drainage may be required. For example, in very large plants, floor drainage valleys are essential under the dressing rails for hogs, calves, and sheep. Such valleys in the floor should be about 24 inches wide, and should slope at least 1/8 inch-per-foot to floor drains within the valleys. In on-the-rail cattle slaughtering departments, floor valleys under the dressing rails are required unless the floor drainage is carefully localized, with drainage inlets placed advantageously beneath the dressing rail. In poultry picking rooms and poultry eviscerating rooms, for example, drains must have adequate capacity and slope (counter to product flow) to accommodate the operational and cleanup demands without overflow or backup of effluent. All drains should have effluent flow in the reverse direction from edible product flow.

(2) *Traps and vents on drainage lines.* Each floor drain, including blood drains, must be equipped with a deep-seal trap approved by the appropriate plumbing code. Drainage lines must be properly vented to the outside air and be equipped with effective rodent screens.

(3) *Trunk lines.* Where several drainage lines discharge into one trunk line, this line must be proportionately larger so as to handle the drainage into it efficiently.

(4) *Sanitary drainage lines.* Drainage lines from toilet bowls and urinals must not be connected with other drainage lines within the plant and must not discharge into a grease catch basin. Such lines must be located so that if leakage develops, it will not affect product or equipment.

(5) *Size and construction of drainage lines.* Drains for cattle and bison paunch contents must be at least 8 inches in diameter to avoid clogging. Drains for hog, sheep, and calf stomach contents

must be at least 6 inches in diameter. Such drains must not be connected to the regular plant drainage lines or to toilet lines. All other lines must have an inside diameter of at least 4 inches. Drainage lines within the plant must be constructed of cast iron, galvanized metal or other acceptable material.

PART 7. PLANT CONSTRUCTION

35:37-7-23. Minimum requirements

The building materials listed in this handbook represent minimum requirements. Variations are acceptable, provided substitutions equal or exceed these standards.

35:37-7-24. Materials

Building materials should be impervious, easily cleanable, and resistant to wear and corrosion. Wall and ceiling surfaces should be white or light colored for light reflection and sanitation. Whenever practical, materials that do not require painting must be used. Materials that are absorbent and difficult to keep clean are generally unacceptable. Examples of such unacceptable materials are wood, plasterboards, and porous acoustical-type boards.

35:37-7-25. Floors

Floors must be constructed of durable water-resistant materials. Commonly used acceptable materials are concrete, ceramic floor tile, floor brick, and synthetic materials approved by Meat and Poultry Inspection Services. As a safety precaution, excessively smooth floors must be avoided. Good results are obtained by using brick or concrete floors with abrasive particles embedded in the surface. Concrete floors should have a wood float (rough) finish. Concrete or mortar floors that incorporate an approved latex or synthetic resin base have better than ordinary resistance to meat fats and acids.

35:37-7-26. Coves

Coves with radii sufficient to promote sanitation should be installed at the juncture of floors and walls in all rooms.

35:37-7-27. Interior walls

Interior walls must be smooth, flat, and constructed of impervious materials such as glazed brick, glazed tile, smooth surfaced Portland cement plaster, plastic, or other nontoxic, nonabsorbent material applied to a suitable base. Walls should be provided with suitable sanitary-type bumpers or curbs to protect them from damage by handtrucks, carcass shanks, and the like.

35:37-7-28. Ceilings

Ceilings must be of sufficient height—10 feet or more is desirable in workrooms. So far as structural conditions permit, ceilings must be smooth and flat. Ceilings should be constructed of Portland cement plaster or other approved material which is impervious to moisture and easily cleaned. If the ceiling has exposed joists, the joists should be at least 36 inches on center and designed so that there are no excessive ledges or crevices that would be difficult to keep clean.

35:37-7-29. Window ledges

Window ledges should be sloped 45 degrees to promote proper cleaning. To avoid damage to window glass from impact of handtrucks and similar equipment, the windowsills must be at least 3 feet above the floor.

35:37-7-30. Doorways and doors

(a) Doorways through which product is transferred on rails or in handtrucks must be wide enough so that there is not contact between the doorways and the product. In these cases, 5-foot-wide doorways are necessary. For carcasses being transported through doors in which the carcasses are hanging on 11 ft. high rails, 4 1/2- foot-wide doorways are necessary.

(b) Doors in doorways must be constructed of either rust-resistant metal or other approved material. If made of wood, they must be clad on both sides with rust-resistant metal having tightly soldered or welded seams. Doorjambs must be clad with rust-resistant metal securely affixed so as to provide no crevices for dirt or vermin. The juncture at the walls must be effectively sealed with a flexible sealing compound.

(c) For safety reason, double-acting doors must have a reinforced glass or transparent plastic panel at eye level.

35:37-7-31. Screens and insect control

All windows, doorways, and other openings that would admit insects must be equipped with effective insect and rodent control devices (screens, fans, seals, etc.)

35:37-7-32. Rodent proofing

Effective means must be provided to exclude rats and other rodents.

35:37-7-33. Interior woodwork

Dressed lumber may be used for exposed interior woodwork. Any exposed wood surfaces must be painted with a good grade nontoxic oil or plastic base paint or treated with hot linseed oil or a clear wood sealer.

35:37-7-34. Stairs

(a) Stairs in edible product-handling departments must be of impervious construction with solid treads and closed risers and must have side curbs of similar material, 6 inches high measured at the front edge of the treads.

(b) When stiles are used over exposed edible product, the walking surface shall be of solid construction with solid side guards to prevent debris from falling on product below. Alternately, a solid shield completely enclosing the exposed product area may be used.

35:37-7-35. Lighting

Well-distributed and good quality artificial lighting is required at all places where natural light is unavailable or insufficient. The overall intensity of artificial illumination in workrooms must be no less than 30 foot-candles. At all locations where inspections are made or where special illumination is required to enable employees to properly prepare products to meet the requirements of the inspections, the illumination shall be not less than 50 foot-candles. Specific requirements for certain locations in meat plants include:

(1) *General ante-mortem inspection.* Ten foot-candles in the pens, alleys, or area where ante-mortem inspection is performed. Readings are taken 3 feet above the floor.

(2) *Suspect pen.* Twenty foot-candles over the entire suspect pen including restraint facilities if separate. Readings are taken 3 feet above the floor.

- (3) *Head washing cabinet (beef)*. Fifty foot-candles at the level of the head hook.
- (4) *Beef cervical (head rack)*. All areas of head illuminated to 50 foot-candles down to the symphysis of the mandible.
- (5) *Beef cervical (head chain)*. Fifty foot-candles at the lowest inspection point on the hanging heads.
- (6) *Swine cervical*. Fifty foot-candles at the level of the mandibular lymph nodes of the lowest hanging heads.
- (7) *Beef viscera (truck)*. Fifty foot-candles with meter resting at bottom of the pan of lower portion of truck.
- (8) *Viscera (moving top tables)*. Fifty foot-candles with meter resting in pan or on table top. (All species.)
- (9) *Rail inspection*. Fifty foot-candles at levels of the shoulders. (All species.)
- (10) *Final inspection*. Fifty foot-candles at shoulder level, viscera pan, and head rack. (All species.)
- (11) *Carcass holding coolers*. Ten foot-candles at the level of the front shanks of carcasses in the cooler.
- (12) *General work coolers*. Twenty foot-candles general cooler illumination at lowest level of product storage. Fifty foot-candles at packing point and reinspection area.
- (13) *Protective devices*. Light fixtures in rooms where exposed meat or poultry is handled must have a protective shield of suitable non-shattering material to preclude contamination of product with broken glass.

35:37-7-36. Ventilation

Adequate means for ventilation must be provided in workrooms and welfare rooms. This may be accomplished with ventilating-type windows, skylights, or both, or by mechanical means such as air conditioning or a fan-duct system. In locations subject to dust and objectionable odors, such

as those adjoining livestock pens, runways, and inedible departments, windows must be the fixed type.

35:37-7-37. Refrigeration

(a) Sufficient refrigerated space should be provided to handle carcasses and product properly. A maximum temperature of 50° F. [10 C.] must be maintained in such areas.

(b) The type of refrigeration must be indicated on the drawings. If wall coils are installed, a drip gutter, of concrete or other impervious material in the floor and properly connected with the drainage system, must be placed beneath them. Floor-type refrigeration units must be placed within curbed and separately drained areas unless located adjacent to floor drains.

35:37-7-38. Equipment

Equipment intended for use in plants operating under State Inspection must be reviewed, evaluated, and found acceptable by Meat Inspection Services in Oklahoma City. The equipment must be constructed so that it can be readily kept clean. All surfaces contacting product shall be smooth, free from pits, crevices, and scale.

(1) *Acceptable materials.* Excepting equipment as cutting boards, equipment must be constructed either of rust resisting metal, such as 18-8 (300 series) stainless steel, or of plastic approved by Meat Inspection Services. Galvanized metal, although acceptable in certain equipment, is not desirable because it is not adequately resistant to the corrosive action of food products and cleaning compounds. When used, galvanized metal must have the smoothness of high quality commercial hot dip.

(2) *Nonacceptable materials.*

(A) Copper and its usual alloys are not acceptable in equipment used in connection with edible product.

(B) Cadmium is not acceptable in any manner or form in equipment used for handling edible product.

(C) Lead must not be used in equipment contacting edible product, except that it may be employed in dairy solder in an amount not to exceed 5 percent.

(D) Equipment with painted surfaces in product zone is not acceptable.

(E) The use of containers or equipment made of enamelware or porcelain is not acceptable for any purpose in connection with the handling and processing of product.

(3) *Plastics and resins.* Plastic materials and resinous coatings must be abrasion-resistant, heat resistant, shatterproof, nontoxic, and shall not contain a constituent that will migrate to meat or meat product in contact with the material. Materials must be approved by Meat Inspection Services.

(4) *Gaskets and packings.* All gasketing and packing materials must be nontoxic, nonporous, nonabsorbent, and unaffected by food products and cleaning compounds. The materials shall be installed in a manner resulting in a true fit to prevent protrusion of the materials into the product zone or creation of recesses or ledges at the gasketed joints.

(5) *Design and construction of equipment (product zone).*

(A) *Accessibility for cleaning.* All parts of the product zone must be readily accessible to sight and reach for cleaning and inspection.

(B) *Provisions for dismantling.* Where necessary for proper cleaning and inspections, equipment must be easily dismantled. To facilitate this dismantling, quick-opening devices that require no tools or, at most, such simple tools as a mallet and an open-end wrench shall be provided. Bayonet joints, butterfly clamps, spring bolts, and other similar devices are desirable for connecting or closing parts of equipment. Where parts must be retained by nuts and bolts, the design shall provide for fixed stubs with wing nuts, rather than bolts to a tapped hole.

(C) *Bearings.* All bearings must be located outside the product zone, and if adjacent thereto, must be constructed with a readily removable seal at the entrance of the shaft into the product zone.

(D) *Interior corners.* Interior corners of equipment must be provided with radii of a minimum of 1/4 inch, except where greater radii are required to facilitate drainage and cleaning.

(E) *Welded joints.* All welding within the product zone must be continuous, smooth, even, and relatively flush with the adjacent surfaces.

(F) *Freedom from cracks, recesses, ledges, and the like.* All parts of the product zone must be free of recesses, open seams and gaps, crevices, protruding ledges, inside treads, inside shoulders, inside bolts or rivets, and dead ends.

(G) *Self-draining equipment.* Where necessary for sanitary maintenance, equipment must be constructed and installed so as to be completely self-draining.

(H) *Lubricants.* Care must be taken to prevent contaminating product by lubricants used in overhead motors, gears, and similar devices. If drip pans are necessary to provide such protection, they shall be easily accessible for inspection and removable for cleaning.

(I) *Pumps and pipelines.* Pumps and pipelines used in connection with edible product (including edible brine or vinegar solutions) shall be constructed of 18-8 type stainless steel or approved plastic.

(6) *Design and construction of equipment (nonproduct zone).*

(A) *Safety guards.* All safety or gear guards must be readily removable for cleaning and inspection.

(B) *External surfaces.* All external surfaces that do not contact food product shall be free of open seams, gaps, crevices, and inaccessible recesses.

(7) *Spacing above floor.* All permanently mounted equipment must be installed far enough above the floor to provide access for cleaning (minimum of 1 foot) and inspection, or must be completely sealed (watertight) to the floor.

(8) *Wall-mounted facilities.* Wall-mounted cabinets and electrical connections (such as switch boxes, electrical control panels, conduits, and cables) must be installed at least one (1) inch from equipment or walls, or be completely sealed to the equipment or walls.

(9) *Control of wastewater.* Water-wasting equipment, such as soaking and cooking vats, sausage stuffing tables, can sterilizers, and casing preparation equipment, shall be installed so that wastewater from each unit is delivered through an interrupted connection into the drainage system without flowing over the floor. Valves on drainage lines serving such equipment shall be easily cleanable and mounted flush with the bottom of the equipment. Soaking and cooking vats shall be equipped with overflow pipes at least two inches in diameter. The upper end of each overflow pipe shall be equipped with an open-end cleanout tee to facilitate cleaning.

(10) *Vent stacks from hoods.* Vent stacks from covered cooking vats or hoods over cook tanks shall be so arranged or constructed to preclude drainage of condensate back into the vats.

(11) *Height of worktables.* Working surfaces of tables and other equipment shall be at a height of not more than 34 inches above the floor where employees stand to conduct operations. If tables and equipment have higher working surfaces, suitable metal foot platforms must be provided for employees to stand on.

(12) *Water on worktables.* All tables or other equipment having water on the working surfaces shall be provided with turned-up edges. The height of the turned-up edge depends on the volume of water used and the operations conducted. In no instance shall the turn-up be less than one (1) inch.

(13) *Cutting and boning boards and tables.* Boards used on boning and cutting tables shall be of either an approved plastic or rubber type construction. Boards shall be easily removable from the framework of the table for purposes of cleaning and inspection.

(14) *Equipment washroom or area.* A separate washroom or area shall be provided in a location convenient to the department involved for cleaning curing vats, handtrucks, utensils, and trays. The room or area must have adequate light and ventilation, impervious well-drained floor, impervious walls and ceilings, and an exhaust fan for dispelling steam vapors. In plants using

cages or trees for smoking sausage or other product, facilities for washing and rinsing such equipment are required.

PART 11. HAND WASHING FACILITIES, STERILIZERS, DRINKING FOUNTAINS AND CONNECTIONS FOR CLEANUP HOSES

35:37-7-39. Lavatories

Each processing room or area should have conveniently located handwashing facilities (lavatories) with a bowl large enough to prevent splashing. Lavatories shall be supplied with hot and cold running water delivered through a combination-mixing faucet with outlet at least 12 inches above the rim of the bowl to facilitate washing arms as well as hands; liquid soap; an adequate supply of sanitary towels in suitable dispensers; and a suitable receptacle for used towels. Lavatories in workrooms and welfare rooms must be other than hand operated (usually pedal operated). One lavatory should be provided for every two sausage-stuffing tables, and they shall be convenient to the stuffer operators. Lavatories must be directly connected to the drainage system. On eviscerating lines in poultry plants, a continuous flow or other acceptable handwashing facility must be provided at each inspection station. The supply of water shall be of adequate quantity and at proper temperature.

35:37-7-40. Sanitizers

Sanitizers shall be constructed of rust-resistant metal, and of sufficient size for complete immersion of knives, cleaners, saws, and other implements in 180° F (83° C) water. They should adjoin the lavatories in slaughtering departments and elsewhere as required. Each sanitizing receptacle must be provided with a water line, a steam line or other means of heating, an overflow, and a means for completely emptying the receptacle.

35:37-7-41. Drinking fountains

Sanitary drinking fountains should be provided in large workrooms and in dressing rooms. If desired, they may be located at lavatories and arranged so that the overflow discharges into the bowls of the lavatories. If so located, they shall be placed sufficiently high above the bowls to avoid water and soap splashing on them when the lavatories are used.

35:37-7-42. Hose connections

Adequate and conveniently located hose connections for cleanup purposes shall be provided throughout the plant. The use of long hoses should be avoided. Suitable racks or reels for storing the hose when not in use must be provided.

35:37-7-43. Location of facilities

The location of lavatories, lavatory-sanitizers, drinking fountains, and other similar features must be shown on the drawings.

PART 13. FACILITIES FOR PROCESSING EDIBLE PRODUCT

35:37-7-44. Size of departments

Meat and poultry preparation and processing departments shall be of sufficient size to permit the installation of all necessary equipment with ample space for plant operators and truckways.

35:37-7-45. Flow of operations

For efficiency, the processing departments should be arranged to allow a proper flow of product without undue congestion or backtracking from the time raw materials and supplies are received until the finished product is shipped from the plant. Areas in which raw products are handled (processed) must be separate from areas used for handling (processing) ready-to-eat product.

35:37-7-46. Perishable product departments

Facilities for holding perishable product under refrigeration shall be provided. To insure proper care of product and to prevent growth of molds and bacteria, operations such as beef boning and trimming, deboning or otherwise processing raw poultry, bacon slicing, pork cutting, prepackaging meats, and sausage chopping and mixing should be conducted in departments having a temperature not higher than 50° F (10° C). Such operations should be located in rooms separate from carcass or product holding coolers to avoid contamination of product by cleanup water and condensation during the cleanup time.

35:37-7-47. Freezers

Freezers shall have adequate space and capacity to properly freeze and/or store product. Product must be stored in freezers well above the floor and in such a manner so as to preclude congestion or other conditions that may lead to contamination or adulteration.

35:37-7-48. Incubation room for canned product

A room for incubating samples of fully processed canned meat or poultry product shall be provided in a suitable location in all plants conducting regular canning operations. The room shall have adequate size and equipment for holding the necessary samples. A 7-day recording thermometer should be mounted on the outside wall of the room. The sensitive elements for the thermostat and recording thermometer should be below the bottom shelf. The shelves should be made of expanded metal or heavy gauge (No. 9) wire mesh and be removable for cleaning. The floor in the room shall be pitched to a floor drain equipped with a removable metal screw plug. The door of the room shall be equipped for sealing or locking.

35:37-7-49. Dry storage space for supplies

Suitable and adequate space for holding supplies such as boxes, paper, and cans, shall be provided in a convenient location in each plant. Establishments that slice bacon, slice and prepackage luncheon meat, bread and batter, chicken, and prepare turkey loaves, sandwich steaks, and the like, generally use a large volume of packaging and labeling material. Adequate dry storage space shall be provided for holding such supplies in a location convenient and preferably adjacent to the department where used. Provisions shall be made to store supplies on racks 12 inches above the floor.

35:37-7-50. Truckways within the plant

Truckways shall be unobstructed passageways having a minimum width of 5 feet without overhead storage rails. When truckways are in coolers having overhead rails, a horizontal distance of 7 feet shall be provided between an adjacent wall and the vertical of the nearest rail, Truckways shall be clearly designated on the drawings.

35:37-7-51. Vehicular areas for trucks and railroad track gutters

(a) Concrete-paved or other acceptable hard surface areas, properly drained and extending at least 20 feet from buildings, loading docks, poultry handling docks, or livestock chutes and platforms, shall be provided at places where vehicles are loaded or unloaded.

(b) Railroad track gutters with suitable drainage shall be provided where refrigerated railroad and livestock cars are loaded and unloaded. The top of the gutter shall be below the bottom of the railroad ties unless the entire track area is paved. This feature must be clearly illustrated on the drawings by a typical cross section of the gutter and adjacent railroad ties and rails.

PART 15. DESIGN, EQUIPMENT, AND OPERATION OF MEAT AND POULTRY SLAUGHTERING DEPARTMENTS AND RELATED AREAS

35:37-7-52. Meat

(a) *Livestock Pens.* To avoid delays in slaughtering operations, pens for ante-mortem inspection should have the capacity for holding the maximum number of animals of the various kinds that will be slaughtered in a single day. The pens, ramps, unloading chutes, and runways must be paved with concrete or brick and be equipped with suitable drainage facilities. Except at gateways, they shall have side curbs of similar impervious material at least 12 inches in height. Water troughs shall be provided with suitable overflows located above or adjacent to pen floor drains.

(b) *Ante-mortem inspection facilities.* To facilitate the antemortem inspection of animals, ample natural or artificial lighting must be available, and a suitable suspect pen with a squeeze chute or gate where the temperature of the animals may be taken, shall be provided. A reasonable proportion of the livestock pens, including the area where the suspect pen and restraining area are located shall be under a weathertight roof to provide an area for proper ante-mortem inspection in inclement weather.

(c) *Location of holding and shackling pens.* To avoid dust and odors, holding and shackling pens should be located outside the slaughtering department or should be separated from the department by full-height partitions of impervious material.

(d) Facilities for crippled animals. Suitable facilities should be furnished for conveying crippled animals into the slaughtering department.

(e) Slaughtering departments. Slaughtering departments must have adequate floor space and be arranged to facilitate the sanitary conduct of operations and efficient inspection. Truckways over which products are conveyed from the slaughtering department to rooms such as the offal cooler, the edible products tank charging room, and the inedible products tank charging level shall be located so that the material is not trucked beneath rails from which dressed carcasses and products are suspended. Personnel traffic shall not move through lines of carcasses.

(f) Maximum rate of slaughter permitted.

(1) The rate of slaughter is dependent on the ability of the establishment to present carcasses, their viscera, and parts in an orderly and clean manner, permitting a complete and efficient inspection without congestion or other objectionable conditions.

(2) The drawings or specifications (for very large plants) should indicate the proposed maximum slaughter rate. Drawings should also indicate if more than one species of animal will be slaughtered simultaneously or consecutively and if the Kosher method of slaughtering will be used.

(g) Facilities for handling viscera. Adequate space and suitable, properly located facilities must be provided for separating and handling the viscera of the various species of animals slaughtered. The cattle paunch-emptying table should be equipped with a power-operated lift. If paunches are saved for edible purposes, the top of the table should extend over the emptying hopper 12 inches, and the sides of the hopper should extend vertically below the top of the table at least 3 1/2 feet, to avoid soiling the paunches.

(h) Edible by-product cooler. Suitable facilities for holding edible organs and parts (offal) under refrigeration in a separate cooler or in a separately drained part of a carcass cooler are required. Such areas must be accessible to the slaughtering departments without passing through a line of carcasses or through a congested cooler.

(i) Carcass chilling coolers—rail requirements.

(1) Rail arrangement. Cooler rails must be placed at least 2 feet from refrigerating equipment, walls, columns, and other fixed parts of the building. To promote cleanliness of product and to protect walls from damage by carcass shanks, it is desirable to place rails (required for main header or traffic rails) at least 3 feet from the walls.

(2) Height of cooler rails. The tops of cooler rails must be at least 11 feet above the highest part of the floor for halves of beef and bison; 9 feet above for headless hog carcasses and calves (trolleys 12 inches long); and 7 1/2 feet above for quarters of beef. Sheep and goat carcasses shall be suspended so that the hooks or gambrels are at least 6 1/2 feet above the floor.

(j) Retaining compartments. A suitable compartment shall be provided in a cooler for holding retained carcasses or parts and retained products in plants that are under Official State Inspection. The compartment may be separated from the remainder of the cooler by partitions of rust-resistant wire screen (No. 9 gauge, 1-inch mesh), or flat expanded metal of comparable gauge and mesh, extending from 2 inches above the floor to the ceiling. The compartment should have a door of similar material at least 4-feet wide, equipped for sealing or locking by the Oklahoma Department of Agriculture. For cattle carcasses retained because of infestation with *cysticercus bovis*, a similar compartment may be provided for holding such carcasses in a freezer at a temperature not higher than 15° F (10° C) for at least 10 days.

35:37-7-53. Poultry

(a) Holding sheds, truck maneuvering areas and loading dock bays.

(1) The holding sheds must be sufficient in size to facilitate the prescribed ante-mortem inspection, to assure a continual smooth flow of poultry into the plant, and to provide for the welfare of birds awaiting slaughter.

(2) Artificial lighting shall be provided in the holding sheds as necessary to facilitate inspection. The roofs must be watertight and the road surfaces should be paved with an impervious material, such as concrete. Any additional truck parking area and the truck maneuvering area should be surfaced with an impervious material such as concrete. The loading dock bays should be surfaced with an impervious material such as concrete which extends outward at least 20 feet. Suitable slope and drainage must be provided on all surfaces to prevent the collection of water or

other obnoxious substances and to facilitate cleanup. Cleanup hose connections shall be well located and adequate for the purpose.

(b) Docks for receiving and hanging live poultry, slaughtering area and picking area.

(1) To prevent dust, feathers, and other obnoxious substances from entering other parts of the plant, the live hanging dock shall be separated from the rest of the plant by full height impervious walls, self-closing impervious doors, and openings limited to those necessary for poultry convey or systems.

(2) The slaughtering area shall be separated from the rest of the plant by full height impervious walls, self-closing impervious doors, and only such other openings as are necessary for conveyance of the poultry. Facilities shall be provided to contain the blood in an area as small as feasible. The picking and scalding operations shall be separated from the eviscerating and other areas of the plant by full height impervious walls, self-closing impervious doors, and openings limited to those necessary for poultry conveyance or other systems.

(c) Maximum rate of slaughter. The rate of slaughter is dependent upon the number of inspectors; the line arrangement; the spacing of birds; the incidence of disease; and the ability of the plant to present carcasses for inspection which are properly dressed and drawn, permitting complete and efficient inspection. The specifications or drawings shall indicate the proposed maximum hourly rate of slaughter for each class of poultry.

35:37-7-54. Facilities for handling animal or fish food

Slaughtering establishments that process certain by-products into inedible animal or fish food shall provide adequate facilities for decharacterizing, chilling, packing, or otherwise preparing the material separate and apart from facilities used in the preparation of edible products. The material must be decharacterized promptly as a part of the dressing or viscera separating operations to avoid extra supervision by inspectors. After the inedible material has been packed in properly marked (labeled) liquid tight container, it may be stored in the edible products freezer, provided it is held separately and does not interfere with handling or storage of edible products.

35:37-7-55. Facilities for handling meat and poultry inedible and condemned materials

(a) Well-arranged and adequate facilities for handling inedible and condemned material must be provided at slaughtering plants. The layout must permit inspectors complete control of condemned material with a minimum of travel and supervision.

(b) Inedible products departments must be separate and distinct from the areas used for edible products, except that one connecting doorway equipped with a solid door completely filling the opening is allowed between the inedible products departments and the slaughtering or eviscerating departments.

(c) If rendering facilities are not located at the establishment, condemned materials must be denatured. Sufficient watertight storage facilities must be provided to hold such materials pending daily removal to a rendering plant (or more frequent removal if deemed necessary by the Circuit or District Supervisor). These storage facilities must be located separate and apart from edible products departments and they must be constructed to prevent insanitary conditions, including attraction or harborage for vermin. Permission to transport condemned material over public streets and highways must be obtained from the State of Oklahoma if the plant wishes to transport said materials themselves,

(d) In large meat plants, the most desirable facilities include hooded, vented, closed chutes that lead directly from the slaughtering department to the hashers or prebreakers. This equipment is also recommended for non-rendering plants to prevent objectionable odors from inedible and condemned product destined for an outside renderer, from entering edible departments.

(e) If other techniques for transferring inedible materials are used (auger), appropriate methods of odor control must be used.

(f) In low-volume slaughter operations where plant personnel perform a number of different duties including the handling of condemned viscera, mechanical devices must be used to eliminate the manual transfer of condemned viscera. Areas for inedible trucks must be paved and enclosed.

PART 17. REQUIRED CATTLE SLAUGHTERING FACILITIES

35:37-7-56. Cattle dressing layouts

(a) Cattle dressing layouts are of three principal types:

(1) double-rail hang-off,

(2) single-rail hang-off, and

(3) "on-the-rail" dressing.

(b) Principal minimum rail heights and floor space, is included and should be carefully followed in preparing layouts.

35:37-7-57. Requirements for various types of cattle slaughtering layouts

(a) *Stunning or kosher shackling pens.* Efficient facilities shall be provided for confining animals for stunning before bleeding or, if Kosher operations are conducted, for confining animals for shackling.

(b) *Dry landing area.* A dry landing area at least 7 feet wide should be provided in front of the stunning pen to receive stunned animals ejected from the pen. The area should be separately drained and sufficiently removed from the bleeding area. The dry landing area should be constructed of rust-resistant metal pipes and may be installed either as upright pipes 16 inches on center without crossrails, or, if desired, crossrails may be used and the number of upright pipes reduced to the number necessary for adequate and proper support. NOTE: In very small layouts in which only one animal at a time will be slaughtered and dressed, the dry landing area and bleeding area can be the same provided the area is thoroughly washed and dried/squeezed between each animal.

(c) *Bleeding area.* A curbed-in bleeding area of adequate size shall be provided. It shall be located so that blood will not be splashed on stunned animals lying on the dry landing area or on carcasses being skinned on the siding beds.

(d) *Bleeding and dressing rails.* The top of the bleeding rail must be at least 16 feet above the floor or the metal grating over the bleeding area. Dressing rails must be at least 11 feet above the

floor. When moving-top viscera inspection tables are used, dressing rails must be at least 12 feet, 3 inches high.

(e) Facilities for handling heads.

(1) Suitable facilities and adequate floor space must be provided for dehorning, flushing, washing, and inspecting heads; for storing heads on racks or trucks after removal from carcasses; and for head workup.

(2) If conveyors are used for cattle head inspection, the heads must be spaced 2 feet on centers, and a distance of 4 1/2 feet must be provided between the bottom of the head hooks and the inspector's foot platform. (The details of construction of this equipment should be shown on the drawings.)

(f) Hide chute or other system of hide removal. In large plants, a properly constructed hide chute should be provided near the point where hides are removed from carcasses. The chute should have a hood of substantial rust-resistant metal with a push-in door closely fitting a metal frame inclined so as to be self-closing by gravity. A vent pipe at least 10 inches in diameter should extend from the hood vertically to a point above the roof. If hides are removed by means other than a chute, the facilities should be designed so as to create no problem of sanitation.

(g) Carcass washing and shrouding facilities. A separately drained area or an area of sufficient size sloped 1/2 inch- per foot to a floor drain shall be provided where carcasses are either washed or shrouded. A platform to permit proper washing shall be provided.

(h) Header rail—clearance. At least 3 feet shall be provided between the header rail and the adjacent wall for the clearance of dressed carcasses transferred on the rail.

(i) Trim rails. In large slaughtering establishments, the kill floor layout should be designed so that carcasses railed out for trimming or touchup will be reintroduced onto the carcass line prior to the rail inspection position so that a final rail inspection can be performed.

(j) Retain rail. In plants operating under inspection, a suitable space for holding retained carcasses for final disposition will be provided along with the necessary platforms and handwashing facilities.

(k) *Floor drainage.* Efficient drainage facilities must be provided for the entire slaughtering department.

35:37-7-58. Requirements for double-rail and single-rail hangoff dressing systems

(a) *Space between bleeding area and dressing beds.* In plants which slaughter more than one animal at a time, the pritch plates or cradles shall be located at least 5 feet from the curb around the bleeding area.

(b) *Space between drop-off to dressing beds and evisceration hoists.* For layouts of two dressing beds, a distance of 16 feet should exist between the vertical of the drop-offs to the pritch plate area and the vertical of the line of the hoists where carcasses are eviscerated. For three or more beds, a distance of 18 feet or more should exist between the verticals. This is necessary to provide space for the evisceration of carcasses and trucking of product and for the inspections made at this point.

35:37-7-59. Requirements for "on-the-rail" dressing systems

(a) *Disposal of feet and udders.* An efficient method must be provided for disposing of feet and udders removed from carcasses. Chutes to a lower level are highly desirable, if structurally possible.

(b) *Metal foot platforms.* Metal foot platforms installed for establishment employees performing various carcass-dressing operations may be either stationary or the elevating type. If elevating, they must be located so as not to contact skinned portions of carcasses. If stationary platforms are used, they must be set far enough away from the dressing rail and be constructed with the legs sufficiently set in to prevent contact with the forelegs of cattle. Alternatively, they may be suspended from overhead structures.

(c) *Spacing of carcasses on dressing rails when powered conveyor or gravity flow rails are used.*

(1) To prevent contact between carcasses and to provide adequate space for operation, cattle carcasses shall be separated by fingers at least 5 feet on center on conveyor type dressing rails or by rail "stops" 5 feet on center on gravity-flow dressing rails, except that such spacing shall be at least 8 feet on center alongside the viscera inspection table (if used).

(2) When a down hide puller is used, the area of the hide puller, head drop and head removal shall be curbed and drained. Also, sufficient space must be provided between hide pulling and carcass evisceration to permit cervical inspection prior to viscera inspection.

35:37-7-60. Viscera inspection facilities

(a) *Viscera trucks for small layouts.* In small layouts with a limited rate of slaughter, viscera are usually placed in a specially designed hand-truck for inspection. Such trucks shall be constructed of stainless steel. An inspection pan at least 24 1/2 by 26 by 3 inches in size is required for inspecting hearts, lungs, livers, and spleens. This pan should be placed with its bottom 34 inches above the floor. A compartment designed to facilitate evisceration and large enough to contain paunches and intestines is required beneath the inspection pan. The bottom of the lower compartment should be about 14 inches above the floor.

(b) *Viscera truck cleaning and sterilizing facilities.* When viscera inspection trucks are used, a separately drained area at least 7 by 8 feet in size is required for washing and sanitizing such equipment. The facilities should be located at or near the point where condemned material is discharged from the trucks. When placed where splash might contaminate edible product, the truck washing area must have walls 8 feet or more in height. The floor in the area should be pitched at least 1/2 inch-per-foot to a drain in a rear corner. A hose with an ample volume of water at a temperature of at least 180° F (83° C) is required for washing trucks in the washing area. The hot water shall be obtained from a central supply rather than by mixing steam and water at or near the hose connection. A dial-type thermometer with its temperature-sensitive element located in the hot water line near the hose connection is required.

(c) *Flight-top inspection tables for medium or large layouts.*

(1) *Construction.* In layouts handling 30 or more cattle per hour, viscera is usually placed on a flight-top table for inspection. (Moving tables are required when the rate of slaughter is 40 or more per hour.) The table must be constructed with stainless steel flights about 5 feet wide. The table shall be of sufficient length for efficient evisceration, inspection, and viscera removal.

(2) *Washing and disinfection.*

(A) Cold water sprays shall be provided beneath the discharge (unloading) end of the table to remove blood and animal tissues and fluids. A suitable compartment- type sanitizer is required at the loading end that is vented to the outside air. The vent duct should be at least 10 inches in diameter and constructed of rust- resistant metal. Additional cold-water sprays are necessary to cool the flights after the exit from the sanitizing compartment.

(B) A thermometer is required with its sensitive element in the hot water line as the water enters the sanitizing compartment. The temperature recording scale of the thermometer must be located so that it can be readily observed by the inspector working alongside the inspection table.

(3) *Synchronization with carcass conveyer.* The movement of the inspection table must be carefully synchronized with the movement of the carcass conveyer. To accomplish this, the table and the carcass conveyer should be motivated by the same drive with the table propelled by a shaft or worm mechanism.

(4) *Control for movement of table.* A stop button for controlling the movement of the carcass conveyer and the viscera inspection table shall be provided in a location convenient to the inspector.

(5) *Location of the table.* The viscera inspection table shall be located over a separately drained floor area. A floor drain is required beneath the sanitizing chamber.

(6) *Eviscerator's facilities.* A foot platform, hand-washing facilities, a hand tool sanitizer, a boot washing cabinet, and a boot storage locker are required for the eviscerator alongside the loading end of the table.

PART 19. REQUIRED SHEEP, GOAT, AND CALF SLAUGHTERING FACILITIES

35:37-7-61. Bleeding rail

The top of the bleeding rail must be at least 11 feet above the floor for handling sheep, goats, or calves. If only sheep are handled in the bleeding section, the bleeding rail may be only 9 feet.

35:37-7-62. Dressing rails

Dressing rails shall be of such height that gambrels or leg hooks from which carcasses are suspended are at least 7 1/2 feet above the floor of the inspector's platform. If calves are slaughtered by the kosher method and dressed with the skin on, space is required for removing the heads before the carcasses are washed, and for placing the heads on a head truck after they are flushed and washed for transfer to the viscera inspection station. An unobstructed route for conveying the heads to the point of inspection shall also be provided.

35:37-7-63. Dressing space and operations

Adequate space must be provided along the rail for skinning legs and for skinning and removing calf heads before carcasses are transferred from shackles to gambrels. (The transfer point and the places where the principal dressing operations are performed must be indicated on the drawings.) If a moving carcass conveyor and combination viscera and head inspection table are used in the calf-dressing layout, and if the carcasses are suspended high enough to prevent contamination of the heads through contact with the floor or splash from the floor, the head skinning, removal, flushing, and washing should be deferred until the carcass reaches a point adjacent to the charging end of the inspection table. Heads from koshered calves, however, should be handled as described in 35:37-7-62.

35:37-7-64. Calf washing facilities

If calf carcasses are dressed with the hides on, proper facilities must be provided for washing the hides before any incisions (except the sticking wounds) are made.

35:37-7-65. Calf head handling facilities

Suitable facilities must be provided for flushing, washing, inspecting, and storing calf heads.

35:37-7-66. Carcass washing facilities

Suitable facilities must be provided for washing unopened sheep carcasses after pelts have been removed and for washing the internal surfaces, breasts, and necks of calf, sheep, or goat carcasses after inspection has been completed.

35:37-7-67. Viscera, head, and carcass inspection facilities

(a) When the rate of slaughter is less than 20 calves, sheep, or goats per hour, facilities for the inspection of viscera and calf heads should consist of a hopped metal stand of the proper size to accommodate an inspection unit of two pans.

(1) The height of the stand should be that the bottom of the pans are 34 inches above the floor or the inspector's foot platform. The stand must be directly connected to the drainage system through a deep seal trap, or it may discharge through a waste pipe directly into a floor drain. The stand should be placed 2 feet from the vertical of the dressing rail, with the smaller of the two pans nearest the rail.

(2) The large pan for the inspection of abdominal viscera must be at least 24 by 36 by 3 inches; the small pan for thoracic viscera (or heads, if calf heads are placed on the table for inspection) must be at least 12 by 36 inches. The pans must be located so they do not interfere with the movement of the inspector and eviscerator alongside the stand. The pans should have handles or hand holes for convenient removal and a perforated bottom with the holes 1/4 inch in diameter, spaced 3 inches on centers. If calves are dressed on the layout, the smaller pan must be provided with a suitable device for holding the head immobile in an upright position for inspection. If only sheep or goats are dressed on the layout, the pans may be 24 by 24 by 3 inches and 12 by 24 by 3 inches in size. A conveniently located receptacle (sanitizer) must be provided for sanitizing the inspection pan.

(b) When the rate of slaughter is more than 20 sheep, goats, or calves per hour, a moving pan type inspection table and a carcass conveyor are required. The pan must conform to the previously listed standards, and the table must conform to the requirements described in the section for moving hog viscera and head inspection facilities.

35:37-7-68. Floor drainage

A drip valley 24 inches wide is required beneath the dressing rail from the bleeding area to the point where viscera inspection is completed.

PART 21. REQUIRED HOG SLAUGHTERING FACILITIES FOR LARGE PLANTS THAT SCALD HOGS

35:37-7-69. Location of certain operations

The following equipment and operations should be located in an area or areas entirely separated from the carcass dressing room, except for the necessary openings for access and the passage of carcasses: hoisting, sticking, and bleeding; scalding vat; de-hairing machine located within a curbed area having nonclogging drainage outlet; gambrelling table; facilities for dipping carcasses in a rosin mixture as a depilatory aid (if installed); and singeing operations.

35:37-7-70. Scalding vat

The scalding vat should be constructed of rust-resistant metal and of sufficient size to accommodate the rate of production.

35:37-7-71. Space for operations and truckways

Adequate space and facilities must be provided for the proper conduct of operations and the efficient performance of inspection. The layout must preclude the need to walk, truck, or otherwise convey product through a line of carcasses suspended from the dressing rail.

35:37-7-72. Floor drainage

A drip valley 24 inches wide should be provided in the floor. It should be pitched to drainage inlets properly located in the valley and extend from the point where carcasses leave the gambrelling table to the point where carcass inspection is completed. The floor may be sloped to drain to the drip valleys.

35:37-7-73. Shaving and carcass washing facilities

In very large hog slaughtering layouts, a shaving rail of adequate length and a separately drained cabinet-type carcass washer are essential. The carcass washer should be located at a point after completion of the shaving operations and before the head dropper's station. A throw-out rail prior to head dropping should be provided so that unclean hogs can be removed from the dressing line for cleaning. No shaving is permitted after heads are dropped.

35:37-7-74. Inspection facilities needed for very large slaughter layouts

In a plant in which the slaughter rate will consistently be in excess of 20-hogs-per-hour, it is recommended that a moving carcass conveyor and a pan-type moving inspection table be used. Moving viscera and head inspection tables for hogs must conform to the following specifications: the pans of the moving top viscera inspection table shall be constructed of stainless steel. The guardrail should be omitted from the section of the viscera inspection table opposite the eviscerator's station. A suitable pan sanitizer is required at the loading end of the table. The sanitizer should be without bottom and the sides should extend upward from 2 inches above the floor. In all other details, hog viscera inspection tables shall conform to specifications already listed under cattle.

PART 23. REQUIRED HOG SLAUGHTERING FACILITIES FOR SMALL PLANTS

35:37-7-75. General specifications

In smaller meat packing plants, the hog-slaughtering department is usually located in an area in which all species of livestock are slaughtered. In general, the minimum specifications for cattle slaughter will meet the requirements for the slaughter of swine as well, with the exceptions of:

- (1) Scalding vats and related equipment (if hogs are to be scalded rather than skinned).
- (2) Additional drainage lines for these pieces of equipment.
- (3) Additional inspection trays, pans, tables, sanitizers, etc., if needed.
- (4) Additional rail space or different rail layout, if necessary.
- (5) Additional stunning area and/or facilities if necessary.
- (6) Additional equipment and/or facilities for handling inedible and condemned materials if needed.

PART 25. REQUIRED POULTRY SLAUGHTERING FACILITIES

35:37-7-76. Eviscerating and chilling areas

The eviscerating department must have adequate floor space and be arranged to facilitate sanitary operations and efficient inspection. All eviscerating operations shall be readily accessible. Lines that cross over walkways, equipment, or work stations, shall be of sufficient height to protect the product, and drip pans shall be installed underneath them. Truckways and walkways shall be of sufficient width to preclude encroachment on evisceration and inspection operations. Eight feet of space shall be provided for each inspection station. The chillers shall be located so that all sides can be inspected, and all meters and chiller settings shall be readily accessible so the inspector is not required to assume an awkward or unsafe position.

35:37-7-77. Conveyors

The poultry conveyors shall be constructed of metal or other acceptable material and designed to present each carcass and its parts so as to permit adequate and efficient inspection. A trough or other acceptable facility shall be provided beneath the conveyor line. Its length shall not be less than from the point where the carcass is opened or inspected to the point where all viscera have been completely removed. It must be continually water flushed or otherwise kept in an acceptable sanitary state. At a point after complete removal of viscera and before poultry enters the chilling system, a water spray washing system shall be provided with sufficient water pressure to thoroughly and efficiently wash the inside and outside of each carcass. A control button for stopping and starting the poultry conveyor system shall be within easy reach of the inspector.

35:37-7-78. Facilities for processing giblets

The facilities must be sufficient to allow the giblet processing to keep pace with the slaughter rate. The operation must result in adequate and proper removal, preparation, inspection, and washing of giblets prior to pumping and entry into the chilling system. The location and construction of these facilities must provide adequate safeguards against contamination by, and of, other plant operations.

35:37-7-79. Facilities for handling inedible offal

In poultry plants, the facilities for handling inedible offal, whether trough or otherwise, shall be large enough to allow clean and orderly removal during processing, without a pileup and without cross-contamination of edible product.

35:37-7-80. Semi-dry poultry offal system

(a) *Materials.* All materials used in the system within the eviscerating rooms must be constructed of noncorrosive and nontoxic materials.

(b) *Design.*

(1) For young chickens, the water rail should range from 34 to 36 inches in height above the standing surface and be positioned 7 to 10 inches horizontally from the vertical line of the shackle.

(2) For turkeys, the water rail should range from 34 to 36 inches in height above the standing surface and be positioned 13 to 15 inches horizontally from the vertical line of the shackle.

(3) Handwashing facilities must be within easy reach of each worker and should be movable when operational adjustments require a change in a worker's position. (If the worker must walk to reach such facility, it is improperly located.)

(4) The floor gutter shall be distinct, with vertical sides sufficiently inside the post supporting the water rail (a minimum of 6 inches is suggested to prevent worker's feet from being in the gutter). Gutters must also be wide enough to catch all material dropping from the carcass.

(5) Splash protectors in the form of flat sheets made of acceptable material shall be installed at all points along the eviscerating line where splashing by employees occurs.

(6) Pipes for conveying offal shall be constructed to permit daily cleaning and positioned so that sanitation will not be a problem, i.e., no pipes lying on the floor or bottom of a gutter.

(7) Side walls of hoppers must have sufficient pitch to assure that material deposited in the hopper will slide to the point where the offal is being mechanically conveyed.

(c) *Wax dipping.* When wax dipping is used, metal troughs shall be provided to catch the wax removed from dipped poultry. Acceptable facilities and methods shall be used to reclaim the wax.

PART 27. WELFARE FACILITIES FOR PLANT EMPLOYEES

35:37-7-81. Dressing rooms and equipment

Well-located dressing rooms, properly separated from toilet rooms, are required for employees of each sex (unless only one sex is employed at the plant). The number of employees using each dressing room should be indicated on the specifications accompanying the drawings. If multiple shifts of employees use the facilities, this should also be indicated on the plans.

35:37-7-82. Lockers

(a) In larger plants, each employee shall be provided with a metal locker at least 15 by 18 by 60 inches to facilitate cleaning beneath the lockers, they shall be placed on legs or other supports 16 inches above the floor. The lockers must have sloping tops to facilitate orderliness and cleaning of the dressing room. Seats should be plastic or wood planks about 12 inches wide, mounted in front of and below the doors of the lockers on an extension of the framework supporting the lockers. If preferred, the seats may be unattached to the lockers and located in the aisle between the lockers. They should be plastic or wooden planks securely fastened to the floor by a minimum number of pipe leg supports.

(b) The aisle between the rows of lockers must be a minimum of 7 feet wide when attached seats are used (5 feet between rows of seats) and a minimum of 6 feet wide with centrally located seats.

(c) Alternate means of storing work clothing and equipment will be considered if it is accomplished in an orderly and sanitary manner.

35:37-7-83. Shower-bath facilities

Suitable shower-bath facilities should be provided in locker rooms (not in toilet rooms) at establishments where slaughtering operations are conducted. Such facilities are also desirable in processing plants. The shower-bath stall should have an 8-inch high curb of impervious material, unless entry is through an individual dressing room with a floor sloped to drain into the shower.

35:37-7-84. Toilet rooms

(a) Toilet rooms shall be separated from adjoining dressing rooms by tight, full-height walls and self-closing doors. Toilet rooms may not be entered directly from a workroom, but entrance through an intervening dressing room or ventilated toilet room vestibule is permissible. Toilet rooms and toilet room vestibules must have solid, self-closing doors completely filling the openings except as described in the paragraph under Part F. of OAC 35:37-7-95.

(b) A sufficient number of elongated water closets with open front seats should be provided. The following formula should be used to determine the number of toilet bowls required in meat and poultry plants:

(1) For 1 to 15 employees (persons of the same sex): 1

(2) For 16 to 35 employees (persons of the same sex): 2

(3) For 36 to 55 employees (persons of the same sex): 3

(1 urinal may be substituted for toilet bowls but only up to 1/3 of the total number of bowls required)

(4) For 56 to 80 employees (persons of the same sex): 4 (1 urinal may be substituted for toilet bowls but only up to 1/3 of the total number of bowls required)

(5) For each additional 30 employees in excess of 80 (persons of the same sex): 1 (1 urinal may be substituted for toilet bowls but only up to 1/3 of the total number of bowls required)

(c) Two feet of trough urinal is considered equivalent to one individual urinal. In both meat and poultry plants, it is desirable to provide urinals in toilet rooms for men. If stall type urinals are used, the floor must slope to drain in to the urinals. If wall-hung type urinals are used, floor drains must be provided immediately beneath such fixtures.

35:37-7-85. Handwashing facilities

A sufficient number of modern-type (other than hand operated) handwashing basins (lavatories) are required in welfare rooms. In small plants with a limited number of employees, lavatories may be located in toilet rooms. However, plants with large dressing rooms must have handwashing facilities, in addition to those located in the toilet rooms.

35:37-7-86. Ventilation of welfare rooms

Toilet and dressing rooms which are not air-conditioned and which are located where no natural light and ventilation is available, must be equipped with an exhaust fan (activated by a common switch with the lighting in the area) and a duct leading to the outside air. Doors to dressing and toilet rooms ventilated in this manner should have a louvered section 12 inches by 12 inches minimum in the lower panel.

35:37-7-87. Lunch facilities

To avoid unsanitary conditions usually associated with employees eating lunch in edible processing departments, adequate lunch facilities must be provided when plant cafeterias or nearby eating-places are not available. There will be no objection to providing lunch facilities in dressing rooms if there is sufficient space to avoid congestion. Otherwise, a separate room or area is required.

35:37-7-88. Welfare facilities for employees working in inedible product areas

In large volume establishments, separate welfare facilities must be provided for employees of the hide cellar, inedible products department, live poultry dock, and the like.

PART 29. INSPECTOR'S OFFICE AND WELFARE FACILITIES

35:37-7-89. General

(a) In official establishments (those under inspection), a well-located inspector's office is required. The office shall be easily accessible without having to pass through or under eviscerating lines, plant offices, locker rooms, toilets or similar such detriments to access. It shall be supplied with suitable furniture including, but not limited to, a desk, chairs, a metal clothing locker at least 15 inches by 18 inches by 60 inches, and a metal filing cabinet with provisions for locking with an Oklahoma Department of Agriculture padlock. The minimum acceptable floor space is 70 square feet. However, if inspection supplies must be stored in this room, a minimum of 100 square feet must be provided.

(b) In larger plants where more than one inspector is routinely assigned, additional office space must be provided. A minimum of 40 square feet of floor space for the first inspector and at least 15 additional square feet for each additional inspector is required. When the USDA grader (in

poultry plants) also occupies this office, at least 40 additional square feet of floor space is needed. Additional desks, chairs, storage lockers, file cabinets, etc., shall be supplied in sufficient quantity for the number of inspectors assigned to the plant.

35:37-7-90. Dressing facilities

Adequate dressing facilities to accommodate both sexes shall be provided in plants where more than two full-time inspectors are routinely assigned.

35:37-7-91. Toilet room

A common toilet room can be utilized when more than two inspectors are assigned to the plant if access is not through either locker (dressing) room.

35:37-7-92. Shower-bath facilities

Suitable shower-bath facilities shall be provided in or connected to locker rooms (not in toilets) in establishments where slaughter operations are conducted.

35:37-7-93. Lighting and ventilation

A minimum of 20 foot-candles of lighting is required in locker rooms and toilets. A minimum of 30 foot-candles is required in the offices except on desk surfaces where a minimum of 50-foot candles is required. Facilities that provide adequate ventilation and maintain an even comfortable temperature are required. Adequate janitorial services and supplies are to be maintained.

PART 31. SUGGESTED NOTES ON SPECIFICATIONS TO ACCOMPANY DRAWINGS

35:37-7-94. Use of suggested notes

The following suggestions are intended to be of assistance in preparing specifications that must accompany prints or drawings.

The complete set of suggestions may not include all specifications to be submitted nor will any given plant necessarily use each suggestion listed. For example, a slaughter plant that does no processing would not use purely processing suggestions and a processing plant that does not slaughter would not use purely slaughtering suggestions. Suggestions that are applicable should

be used in a manner that results in information about the plant as it is, as it will be when under inspection, or, as it will be when revisions are completed. Therefore, persons preparing plans for approval are urged to be selective and accurate in making use of the following specifications notes.

35:37-7-95. Building construction

(a) Finish of walls, floors, doors, and ceilings must be indicated.

(b) All exposed wood surfaces are painted with a good grade of oil or approved plastic paint or treated with hot linseed oil or a clear wood sealer.

(c) All window, door, and other openings that would admit insects are provided with effective screens or fly chaser fans. Effective means are also provided to preclude rodents and other vermin from entering buildings.

(d) Rails are placed not less than 2 feet from walls, posts, and other fixed parts of the building. Header rails are spaced at least 3 feet from adjacent walls and columns.

(e) For plants, which are to slaughter and operate under inspection, the drawings should indicate a retaining compartment for holding carcasses and parts in a cooler. The compartment should be constructed of rust-resistant No. 9 gauge wire or comparable material extending from the floor to the ceiling with doors equipped for locking or sealing by the Oklahoma Department of Agriculture. Poultry and processing plants under inspection should also provide for suitable retaining facilities.

(f) All doors of toilet rooms and dressing rooms and toilet room vestibules are solid, self-closing, and completely fill the openings, except as otherwise allowed for purposes of adequate ventilation (1 foot by 1 foot, louvered area located near the bottom of the door, etc.).

(g) Suitable coves to facilitate sanitary maintenance are provided at junctions between walls and floors.

(h) Stairs are of impervious material and have solid treads, closed risers, and side curbs six (6) inches high measured at the front edge of the step.

(i) The livestock pens are paved with impervious material, such as concrete or brick, and pitched to suitable drainage facilities. Curbs at least 12 inches high and constructed of impervious material such as concrete, are installed around the borders of the livestock pen area, except at entrances, to confine liquids and fecal material. In plants under inspection, a suitable suspect pen and squeeze chute or gate are provided in locations shown on the drawings. Good natural or artificial lighting is provided in the livestock pen area for the performance of ante-mortem inspection at times when there is insufficient daylight. Well-located hose connections are provided for the cleanup of the livestock pens. Watering troughs are located above or adjacent to pen floor drains and are equipped with suitable overflow outlets. For plants under inspection, a reasonable portion of the livestock pens, including the area with the suspect pen and squeeze gate, has a weathertight roof.

(j) Floor openings and for stairways except at entrances have curbs of impervious material, such as concrete or metal, at least 12 inches high to exclude floor drainage.

35:37-7-96. Water supply, plumbing, drainage, and refrigeration

(a) The potable water supply is obtained from (indicate source of supply, e.g., private well, City of), and is effectively protected from pollution.

(b) An ample supply of hot water is available at adequate temperature and under suitable pressure and is properly distributed throughout the plant. Hose connections for supplying hot and cold water are provided in the various workrooms at the approximate locations shown on the drawings. Hot water of at least 180°F. at hose outlets is supplied for cleaning the slaughtering, inedible and similar departments, and for sanitizing equipment such as cattle viscera inspection trucks. A thermometer with an easily read dial-type scale is provided on the common water line at the place where viscera trucks are cleaned and sanitized.

(c) Only clean, and not re-circulated, water is used in the hog dehairer or poultry scalding. (In large volume swine establishments, clean water is required in at least the last six (6) feet of the dehairer.)

(d) Each lavatory (handwashing basin) is supplied with hot and cold water delivered through a combination-mixing faucet with outlet 12 inches above the rim of the bowl, liquid soap, an

adequate supply of sanitary towels in suitable dispensers, and a suitable receptacle for used towels. Lavatories are other than hand operated (knee or pedal operated).

(e) In larger plants, sanitary drinking fountains are provided in the slaughtering and processing departments and in the dressing rooms. If placed adjoining a lavatory, they are located high enough to avoid splash from the lavatory.

(f) All equipment washing water is installed so that wastewater is delivered into the drainage system without flowing over the floor. Drainage from edible products handling equipment such as sausage tables, cook tanks, tripe scalders, etc., is delivered to the drainage system by means of uninterrupted connections.

(g) Effective means have been taken to prevent back-siphonage of liquids into the potable water supply or steam lines. Back-siphonage of liquids into potable water supply is prevented by placing water lines to equipment, such as cooking or soaking vats and the like, higher than the highest level reached by liquids in the vats, or by other acceptable means such as mechanical antisiphonage devices.

(h) The sewage from the plant is discharged into the city sewer system (furnish description of facilities if other method of disposal is employed).

(i) Toilet soil lines are separate from house drainage lines to a point outside of the building and bypass the grease catch basin (if there is one at the plant).

(j) Floor drainage lines inside the building are metal with an inside diameter of at least 4 inches and are properly vented to the outside air to a point above the roof. Each drainage inlet is equipped with a deep seal trap. All floor drains and vent lines are equipped to exclude rodents.

(k) Discharge lines for paunch contents are cast iron or steel pipe at least eight (8) inches in diameter. The paunch material is discharged into a tank for dewatering. The solid material is then discharged into a watertight truck for removal from the plant. Hog stomach content lines are at least six (6) inches in diameter. The paunch contents are removed daily or more often as may be necessary and are disposed of in a manner that does not create a nuisance or other objectionable condition. The area adjoining the tank where the truck stands during loading is paved with

concrete (or other acceptable impervious material) and provided with suitable drainage facilities. A hose connection for supplying hot water for cleanup is provided nearby. The capacity of the dewatering tank is sufficient for holding the paunch contents from the maximum daily slaughter of cattle. At least 2 1/2 cubic feet of capacity per animal is provided. Paunch and stomach contents lines are not connected to the regular drainage lines within the plant.

(l) Blood drains are provided with longneck deep-seal traps properly vented to a point about the roof.

(m) Blood is discharged into a metal receiving tank and transferred by gravity or pump or blowline to a metal truck for removal from the plant or to processing equipment in the plant. (Use appropriate statement, if either is applicable.)

(n) The grease catch basin is not located in or near an edible department and is constructed so that it can be completely drained of its contents for daily cleaning. It is without ground cover (debris and clutter) for ready inspection. Grease skimmed from the basin is placed in watertight containers and promptly removed from the plant. (Use appropriate statement.) A conveniently located hose connection is provided for supplying hot water to clean the basin and adjacent area. The area around the basin is paved with concrete and equipped with drainage facilities. The location and construction of the basin are shown on detailed drawings.

(o) A means is provided in un-refrigerated workrooms to dispel steam and vapor which would interfere with inspection.

(p) Refrigerated rooms are maintained at a temperature no higher than 50°F.

(q) The coolers are refrigerated by means of (select appropriate statement below):

(1) overhead refrigeration units with insulated drip pans beneath them properly connected to the drainage system;

(2) floor-type refrigeration units placed within curbed and separately drained area unless located adjacent to floor drains;

(3) wall refrigeration coils with drip gutters installed beneath them; the gutters are constructed of impervious material such as concrete and are properly connected to the drainage system.

35:37-7-97. Equipment

(a) Product handling equipment is designed and constructed in a manner acceptable to the Oklahoma Department of Agriculture, Food, & Forestry and is located in conformity with the guidelines in this Handbook.

(b) Chutes for the transfer of product are constructed so they can be readily cleaned. Chutes are round in shape or otherwise have well-rounded corners. Those leading from edible to inedible products departments are effectively hooded and vented to dispel odors.

(c) Cooking vats and similar equipment are equipped with overflow pipes at least 2 inches in diameter with open-end cleanout tees at the upper ends and are connected to the drainage system by means of interrupted drains. Valves on drainage lines leading from such equipment are located flush with the bottom of equipment for complete drainage.

(d) A suitable room or space and facilities for washing gambrels, beef hooks, trolleys, etc., are provided in a convenient location as shown and an exhaust fan is installed for dispelling steam.

(e) The hog-scalding vat is constructed of metal.

(f) Platforms for eviscerators, openers, giblet harvesters, etc., are constructed of suitable metal, of a type that can be readily cleaned (not subway type grating). Foot platforms for employees performing such operations as hind-legging, crotch opening, udder removal, etc., in "on-the-rail" cattle or calf slaughtering departments are constructed with legs sufficiently set-in to prevent contact between the forelegs of the cattle and the platform legs or such platforms can be suspended from the ceiling.

(g) The pans (or flights) of the moving top viscera inspection table are constructed of stainless steel or similar rust-resistant metal. A suitable pan (or flight) sanitizer is provided at the loading end of the table. The sanitizer is without bottom and the sides extend upward from two (2) inches above the floor. The sanitizing chamber is vented to the outside air with a rust-resisting metal vent pipe, at least ten (10) inches in diameter. A thermometer is provided with the sensitive

element in the hot water line as it enters the sanitizer and with the temperature recording scale located so that it can be easily read by the inspector working alongside the viscera inspection table. A floor drain is provided beneath the sanitizer. The area in which the viscera inspection table is located has separate drainage. Cold-water sprays are provided at both ends of the table. The movement of the viscera inspection table is synchronized with the movement of the carcass conveyor. The viscera inspection table is driven by a shaft and worm device and the carcass conveyor and the viscera inspection table are motivated by the same drive. A stop button for controlling the movement of the carcass conveyor and the viscera inspection table is provided in a location convenient for use by the inspector.

(h) Acceptable booths for flushing and washing cattle and calf heads are provided. Facilities are provided for sanitizing saws and knives used to remove horns and pieces of hide from cattle and calf heads before washing. Similar facilities are provided for sheep and goats if the heads are saved for edible purposes.

(i) The paunch-emptying table is constructed of rust-resistant metal. The end of the table overhangs the emptying hopper 12 inches to avoid soiling the cut and serous surfaces of paunches. The sides of the hopper extend vertically below the top of the table at least three and one-half (3 1/2) feet and then converge to a discharge opening at least eight (8) inches in diameter.

(j) Edible offal is placed on cages with removable metal drip pans beneath or on suitable trucks equipped with similar drip pans, and conveyed to the offal cooler. If offal is packed in the coolers, suitable facilities, including a table and lavatory, are provided.

(k) Suitable mechanical equipment is provided for transferring condemned soft material to metal containers or hasher and washer without manual handling of this material.

(l) The rendering units and driers in the inedible products rendering department are equipped with effective condensers to suppress objectionable odors. Rendering units are equipped for Oklahoma Department of Agriculture sealing.

(m) Curing containers are constructed of stainless steel or other materials approved by the Oklahoma Department of Agriculture.

(n) Pipelines and pumps used in connection with edible product (including edible brine and pickling solutions) are demountable and made of stainless steel or other approved materials.

(o) The cages or trees used for smoked meats and sausage are designed to provide a clearance of at least twelve (12) inches between the product and the floor of the smokehouses and hanging rooms.

(p) Smoke-making equipment, ducts, and smokehouses are located and designed so that all outer and inner surfaces can be readily cleaned.

(q) In large establishments, a suitable room or separately drained area is provided for washing handtrucks, boxes, trays, demountable parts of sausage stuffing equipment, etc. Two suitable compartments with entrance rails are provided for washing smokehouse cages and trees. The first compartment is used for washing cages and trees with a detergent solution and the second for rinsing this equipment with clean water to remove all detergent solution. The washing compartment has a suitable exhaust duct extending to a point outside the building.

(r) In plants with canning operations, a room for incubating samples of fully processed canned meat product is provided. The room is of adequate size and properly equipped for incubation. The room is equipped with a 7-day recording thermometer located on an outside wall and visible from outside the room. The shelves are made of expanded metal and are removable. The sensitive elements of the thermostat and recording thermometer are below the bottom shelf. The floor in the room is pitched to a floor drain equipped with a removable screw plug. The door of the room is equipped for sealing.

(s) A designated area is indicated and properly equipped for the reinspection of received carcasses and other products.

(t) A suitable rust-resistant metal table is provided in an unobstructed space in a cooler for holding returned product for inspection.

(u) Each employee is provided with a metal locker at least 15 by 18 by 60 inches, having a sloping top and elevated on legs 16 inches long. removable plastic or wood seats 12 inches wide are provided in front of and below the doors of the lockers (or, a single plastic or wooden seat 12

inches wide securely attached to the floor by a minimum number of pipe leg supports is located 2 1/2 feet in front of the lockers). The dressing room will be used by not more than (give number and sex of employees). Alternate means of storing work clothing or equipment will be considered if this can be accomplished in an orderly and sanitary manner.

(v) The inspector's office is provided with suitable furniture, including a desk and chairs, a metal clothing locker (at least as large as that provided for employees) for each inspector, a metal cabinet equipped with a lock for the storage of supplies, and lavatory and toilet facilities.

(w) A suitable room or space for storage of supplies, such as wrapping paper, cartons and containers, is provided in a convenient location. All supplies are placed on racks 12 inches above the floor.

35:37-7-98. Operations

(a) The rate of slaughter is dependent upon the ability of the establishment to present carcasses, their viscera, and parts in an orderly and clean manner, permitting complete and efficient inspection at all times without congestion or other objectionable conditions. Therefore, give the maximum rate expected under optimum conditions. The estimated maximum rate of slaughter is: (give rate for each species or class).

(b) Animals (are or are not) slaughtered by the Kosher method,

(c) Hides are not spread for inspection in the slaughtering room.

(d) Calves of such large size that:

(1) there is not a clearance of at least 12 inches between the carcass and the floor, and

(2) the viscera cannot be readily transferred by the eviscerator manually and unaided from carcasses to the viscera inspection pan are not slaughtered on the calf inspection layout. Large calves are skinned and eviscerated as cattle.

(e) In large volume slaughtering plants, duplicate tags are provided to identify cattle and/or calf heads with corresponding carcasses.

(f) Sinks are provided for washing pieces of meat individually and not in batches, under running water.

(g) Hog hair is removed from the slaughtering room in watertight metal containers at the end of the day's operations and

(1) removed from the plant in a watertight metal truck and disposed of in a manner that does not create objectionable conditions such as fly breeding or odors; or

(2) conveyed to suitable equipment for processing in the plant. (Use appropriate statement.)

(h) Condemned and inedible material is transferred to the inedible products department in suitable watertight metal containers or conveyors

(1) for processing in the department; or

(2) for removal from the plant daily or more often if deemed necessary by the inspector-in-charge, to an outside rendering plant for disposal. (Use appropriate statement.) Suitable facilities are provided for washing the containers used for such materials.

(i) Animals found dead on the premises are disposed of by prompt removal

(1) to a rendering plant; or

(2) to inedible products rendering department at the establishment. (Use appropriate statement.)

(j) Empty cans in canning department are washed in an inverted position using water at a temperature of at least 180°F., or they are cleaned by an approved jet-vacuum device immediately before filling. If hot water is used for cleaning, an easily read dial type thermometer is provided in the hot water line of the sanitizer.

(k) Retorts drain into curbed and drained areas or pits or are connected to the drainage system by interrupted drains.

(l) Sausage material grinding and chopping, bacon slicing, boning, cutting, and similar operations are conducted in departments having a temperature no higher than 50°F. If conducted

in areas warmer than this, a mid-shift cleanup will be performed. Such departments are not located in areas where hanging carcasses or exposed product are stored.

(m) Vegetables are stored in bulk in a suitable separate room and are handled so as to avoid dissemination of dust. Suitable facilities in a location separate from the processing area are provided for the preliminary preparation of vegetables used in product. Vegetables such as celery and potatoes are thoroughly washed before being cut.

(n) Sawdust is conveyed to smokehouses in metal containers with tightly fitting lids (when it is necessary to transport through processing departments). Ashes are removed from smokehouses in the same manner.

35:37-7-99. General

(a) Each workroom is provided with artificial lighting of good quality having an intensity of at least 50 foot-candles at places where inspections are performed and where plant operations require establishment employees to prepare products of any character to meet inspection requirements. Other work surfaces should have at least 30 foot-candles of light.

(b) Outer clothing of employees, shroud clothes, etc., are laundered at

(1) the plant laundry; or

(2) an outside laundry. (Use appropriate statement.)

(c) Roadways on the premises adjoining the plant are hard surfaced, with a binder of asphalt, tar, or cement, and are properly drained.

(d) Wall-mounted cabinets, electrical control panels, and the like have a clear space of at least one (1) inch between the mounted units and the wall.

(e) Light fixtures in rooms where exposed meat is handled or processed have a protective shield of suitable non-shattering material.

(f) A set of specifications must be submitted with each set of drawings. A minimum of two (2) sets of drawings and two (2) sets of specifications are required for plants not under inspection,

and three (3) sets of drawings and three (3) sets of specifications are required for plants that will be under State Inspection.