South Carolina Department of Agriculture

Consumers Services Division Food Safety & Compliance

Bulletin

"Guidelines for Food Storage Warehouses"

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South Carolina Department of Agriculture Guidelines for Food Storage Warehouses

SECTIONS:

- 1. Definitions
- 2. Warehouse Exterior and Grounds
- 3. Warehouse Construction and Design
- 4. Sanitary Storage and Protection of Foods
- 5. General Housekeeping and Waste Disposal
- 6. Transportation Vehicles
- 7. Miscellaneous

(Pursuant to Section 39-25-180(a) of the South Carolina Food and Cosmetic Act.)

Section 1 Definitions.

The definitions and interpretations contained in **Section 39-25-20** of the South Carolina Food and Cosmetic Act are applicable to such terms when used in these regulations. The following definitions shall also apply:

- (1) "Department" means the South Carolina Department of Agriculture.
- (2) "Employee" means any person working in a Food Storage Warehouse.
- (3) "Equipment" means storage cases, tables, counters, shelving, pallets, refrigerators, freezers, lifts, packaging equipment, and any other items used in the operation of a Food Storage Warehouse for packaging, handling, displaying, or storing food for sale.
- (4) **"Easily cleanable"** means readily accessible and of such material and finish, and so fabricated that residues may be completely removed by normal cleaning methods.
- (5) **"Food"** means (1) articles used for food or drink for man or other animals, (2) chewing gum, and (3) articles used for components of any such article.
- (6) "Hazardous substances" is a substance or mixture of substances which is toxic, corrosive, an irritant, flammable, or which generates pressure through heat, decomposition or other means; or which has been designated by the U. S. Consumer Product Safety Commission as a strong sensitizer, or a radioactive material or which "may cause substantial personal injury or substantial illness during or as a proximate result of any reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children."
- (7) "Operator" means any person, partnership, corporation, association, cooperative or other business unit having the direct and primary responsibility for the construction, maintenance and operation of any food storage warehouse.
- (8) "Perishable food" means any food of such type or in such condition or physical state as it may spoil or otherwise become unfit for human consumption.

- (9) "Potentially hazardous food" means any perishable food which consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, or other ingredients capable of supporting rapid and progressive growth of infections or toxigenic microorganisms.
- (10) **"Safe temperatures"** as applied to potentially hazardous food, mean air temperatures of 45 degrees F. or below and 140 degrees F. or above.
- (11) "Sanitize" means effective treatment of physically clean surfaces of equipment, walls, refrigerators and utensils by a process which has been approved by the Department as being effective in destroying microorganisms including pathogens.
- (12) "Wholesome" means food in sound condition, clean, free from adulteration and otherwise fit for human consumption.

Section 2 Warehouse Exterior and Grounds.

The grounds around a food storage warehouse under the control of the operator or owner shall be free from conditions, which may result in the contamination of food including, but not limited to, the following:

- (1) Improperly stored equipment, litter, waste, refuse, uncut weeds, or grass within the immediate vicinity of the warehouse, which may constitute an attractant, breeding place, or harborage for rodents, insects, or other vermin.
- (2) Inadequately drained areas and excessively dusty roads, yards, or parking lots which may constitute a source of contamination to food products by providing a breeding place for insects, microorganisms, or other vermin.
- (3) Inadequate and open garbage bins, containers, or cans used for disposal which may allow pilferage and/or which may be an attraction for insects, rodents, or other animals.

Section 3 Warehouse Construction and Design.

Warehouse buildings shall be suitable in size, construction, and design to facilitate maintenance and sanitary operations of a food storage warehouse. Also,

- (1) Facilities shall be so designed, fabricated, and finished as to minimize the entrance of insects, birds, rodents, dogs, cats, and other pests.
- (2) All necessary ventilation doors, windows, louvers, or other openings shall be effectively screened against insects, rodents, and birds.
- (3) All service connections through the exterior wall of the establishment, including water, gas, electrical, and refrigerator connections, shall be grommeted or sealed to prevent the entrance of insects, rodents, and birds.
- (4) Cracks, crevices, tunnels, or other openings at floor-wall junctions, floor moldings, pipes, and windows caused by poor construction, settling, or any other reason which will provide easy entrance or harborage of insects, rodents, or other vermin shall be repaired.
- (5) All parts of the food storage warehouse shall be lighted so as to permit the activity for which the premises are used to be carried on safely and to permit effective cleaning and inspection of the premises.

- (6) Where needed and appropriate, rooms shall have sufficient ventilation to prevent any undue condensation of water vapor or objectionable odors.
- (7) Floors shall be constructed of easily cleanable and reasonably smooth material. They shall be kept clean and in good repair.
- (8) Walls and ceilings shall be kept reasonably free of dirt, dust, cobwebs and shall be in good repair.
- (9) Floor drains shall have effective traps or screens to prevent the entrance of rodents and insects through drainage lines.

Section 4 Sanitary Storage and Protection of Foods.

- (1) The operator or manager shall take reasonable measures to protect all areas where food is kept or stored in a food storage warehouse against the entrance, breeding, or harborage or rodents, birds, flies, roaches, weevils, and other vermin.
- (2) No dogs, cats, fowl, birds, or other type animals shall be permitted in a food storage warehouse.
- (3) All hazardous substances including, but not limited to, corrosive and caustic chemicals, lighter fluids, insecticides, rodenticides, liquid detergents, bleaches, and dyes shall be stored in a separate area from food products in such a manner as to preclude any possible contamination of the stored foods.
- (4) Rodenticides shall be placed in covered bait boxes (tamperproof) to prevent spillage or possible contamination to stored foods and danger to employees. The bait boxes shall be properly labeled with a warning notice. All rodenticide baits shall be applied in such manner as to prevent contamination of stored food products. Rodent/insect control program to be handled by a properly certified individual or firm.
- (5) All pesticides used for control of vermin shall be of approved type and shall be applied in such a manner as to protect stored foods.
- (6) Cleaning materials, pesticides, rodenticides or any other such hazardous substances or chemicals used in the operation of a warehouse shall be stored in properly labeled containers and away from food products.
- (7) When a licensed pest control service is employed, the service shall file at the warehouse a diagram of the bait station locations and the rodenticide in use. If a service is not contracted, the operator shall designate and employee to be responsible for the pest control program being used.
- (8) There shall be no overhead waste pipes or other piping that may cause undue condensation problems unless equipped with protective shields to preclude possible contamination of foods stored below.
- (9) Storage methods shall be used which will minimize deterioration and prevent contamination of stored food products. Shelves, cabinets, and pallets shall be used to protect food products from contamination and deterioration. All food items, except those stored on shelves, cabinets and metal racks shall be stored at least twelve inches away from the wall.

- (10) Bagged animal feeds shall be stored so as not to be intermingled with the storage of human food products. Storage on separate pallets is acceptable.
- (11) A program of stock rotation including adequate identification of each lot shall be maintained to assure rapid and proper rotation of goods.
- (12) Old tires, trash, unused equipment, or any other material or condition which may potentially provide a harborage for insects, birds, and/or rodents shall be removed from a food storage warehouse.
- (13) Each cold storage room shall be equipped with an accurate and easily visible thermometer with the sensing device at least five feet above the floor.
- (14) Perishable and potentially hazardous food shall be stored at a Temperature (45 degrees or lower) in keeping with good trade practices to insure that food is safe and fit for human consumption.
- (15) Temperature recording devices may be used and may be in other parts of the building.
- (16) All frozen food shall be held at an air temperature of 0 degrees F. or lower except during defrost cycles, loading and unloading, or for other temporary conditions beyond the control of the operator under whose care the food is held. The internal product temperature shall not exceed 10 degrees F. at any time.
- (17) Freeze floors shall be constructed of material that can be kept easily cleaned, sanitary and in good repair.
- (18) Walls and ceilings shall be reasonably smooth, clean and in good repair.
- (19) During defrosting of overhead coils, stored food shall be effectively protected from contamination by condensation, drip, or leakage.
- (20) The operator of a food storage warehouse shall provide a morgue area for the accumulation and holding of all damaged foods or foods which are or may be unwholesome.
- (21) The operator shall maintain a program of timely and proper disposal of unwholesome food to prevent development of insanitary conditions or feeding and harborage areas for vermin.
- (22) The warehouse shall be provided with a conveniently located toilet which shall be kept clean and in good repair. The toilet room shall be completely enclosed and well lighted. Any window opening to the outside shall be screened to prevent entrance of insects.
- (23) A hand washing facility shall be provided adjacent to or in the toilet room and shall be kept clean and in good repair.
- (24) A sign directing employees to wash their hands before returning to work shall be placed in all toilet rooms.

Section 5 General Housekeeping and Waste Disposal

- (1) The warehoused shall be free of unnecessary litter and rubbish, such as paper, empty containers, or other materials which may serve as a harborage for rodents and other vermin.
- (2) All food wastes held for disposal shall be kept in leak-proof nonabsorbent, easily cleanable containers so as to be inaccessible to rodents and other vermin.
- (3) The operator shall require that all garbage and rubbish be disposed of at regular intervals and of sufficient frequency as to prevent the creation of objectionable conditions.
- (4) Packages, cases, or lots containing leaking cans, torn bags, or other damage which may be an attractant to rodents, birds, insects, or other vermin shall be repaired or removed.
- (5) Trash, spillage, excess paper, and other debris shall be removed, swept, and /or vacuumed to prevent an accumulation of dirt and rubbish.

Section 6 Transportation Vehicles.

All cars, trucks, or other vehicles used in the transportation of processed food products shall be kept clean at all times. Refuse, dirt, and waste products subject to decomposition should be removed daily. Food products shall be handled in such a manner as to protect all food from deterioration while in transit. Foods while in transit shall be protected in such manner as to preclude being contaminated by hazardous substances.

Section 7 Miscellaneous.

These provisions relating to food storage warehouses are in addition to and not in lieu of all other applicable laws or regulations relating to this type of business of operation. The Department shall at any time, when necessary, take other procedures or steps to insure that food handled, stored, offered for sale or sold, is wholesome and unadulterated.