

Sec. 21a-61-3. Construction and layout of frozen food plants

(a) **Coverage.** (1) This section covers in general the location, construction and layout of frozen food preparation plants, including construction and design requirements to promote cleaning and sanitary maintenance. (2) The provisions of this section shall be applicable only to those establishments initiating operations subsequent to the first inspection based upon the requirements of these regulations, provided plants in existence on April 10, 1962, shall be subject to the provisions of these regulations when the plant facilities are remodeled or rebuilt subsequent to the adoption of these regulations, or when such plant or plant facility constitutes an immediate health hazard.

(b) **Location.** (1) Food processing plants shall be located in areas reasonably free from objectionable odors, smoke, flying ash and dust or other contamination. (2) Adequate, dust-proof accessways for all vehicular traffic, connecting loading and unloading areas of the plant to the public streets, shall be available. Employee parking areas and access roads close by the food processing plant shall be hard surfaced with a binder of tar, cement or asphalt.

(c) **Separation.** Frozen food preparation plants shall be completely separated from areas used as living quarters by solid, impervious floors, walls and ceilings with no connecting openings.

(d) **Water supply.** (1) The plant shall have an ample volume of potable water available from an approved public or private source. If a nonpotable water supply is necessary, it shall not be used in a manner which will bring it into contact with the product or product zone of equipment. Such nonpotable water systems shall be kept entirely separate from the potable water supply, and the nonpotable water lines shall be positively identified by a distinctive color. (2) All equipment shall be so installed and used that back siphonage of liquids into the potable water lines is precluded. (3) Hot and cold water in ample supply shall be provided for all plant clean-up needs. Hoses used for clean-up shall be stored on racks or reels when not in use.

(e) **Plant waste disposal.** The disposal of liquid wastes shall be to the public sewerage system, if available and permitted by local ordinances, or to a properly designed and installed private facility. Private liquid waste treatment facilities shall be approved by the health authority having jurisdiction.

(f) **General plant layout.** (1) Product preparation and processing (including freezing) departments shall be of sufficient size to permit the installation of all necessary equipment with ample space for plant operations and with unobstructed truckways for conveyances of raw materials and processed products. The plant shall be so arranged that there is a proper flow of product, without undue congestion or backtracking, from the time raw materials are received until the frozen, packaged article is shipped from the plant. (2) Raw material storage rooms and areas where preparatory operations, such as washing and peeling of fruits and vegetables and the evisceration of poultry, are carried on shall be separate from rooms or areas wherein frozen food is formulated, processed and packaged. Doors connecting various rooms or openings to the outside shall be tight fitted, solid and kept in a closed position by self-closing devices. (3) Facilities for holding the product under refrigeration until processed shall be provided. (4) Facilities for quick freezing the processed product efficiently shall be provided and so located as to be convenient to the food processing and packaging departments. Ample freezer storage shall be provided convenient to the quick

freezing facilities; provided, when the frozen product is immediately removed from the establishment, such freezer storage shall not be required. (5) A separate room for storing inedible materials, such as fruit and vegetable peels, feathers and bones, pending removal from the plant shall be provided in a location convenient to the various preparation and processing areas. This waste storage room shall be of sufficient size to permit the proper storage of filled and empty metal or other relatively nonabsorbent refuse containers and their lids. It shall be equipped with an efficient power exhaust ventilation system, hot and cold water outlets and adequate floor drainage. The discharge from the exhaust system shall be located well away from fresh air inlets into the plant. (6) Packaging and labeling materials shall be stored in a separately enclosed space convenient to the packaging department. Packaging and labeling materials shall not be stored in the product processing and packaging departments, except that small quantities of such supplies as are necessary for maintaining continuity of operations is permissible in the processing and packaging departments. (7) Facilities for inedible products and catch basins shall be suitably located so as to avoid objectionable conditions affecting the preparation and handling of edible products. (8) A separate room or area and proper facilities for cleaning equipment such as trays, hand trucks and implements shall be provided in a location convenient to the processing department. A power exhaust system shall be provided to dispel steam and vapors from the room. (9) Dockage areas shall be of adequate size, constructed of impervious materials and so drained as to minimize the entrance into the plant of dust, dirt and other contaminants from the receiving and shipping operations. If live animals are received, a separate dock shall be provided for this purpose. (10) Well located, properly ventilated dressing rooms and toilet rooms of ample size shall be provided for employees. Dressing rooms shall be separated from adjoining toilet rooms by tight, full height walls or partitions. The toilet room shall not be entered directly from a work room, but through an intervening dressing room or a properly ventilated toilet room vestibule. The ventilation and lighting of toilet and dressing rooms; the ratio of toilets, of hand-washing facilities, and of urinals to the number of employees using such facilities, and the type of fixtures used and the manner of installing all plumbing in such rooms shall conform strictly to applicable state and/or local codes governing such matters. (11) Employees shall not eat in the food processing or packaging area.

(g) **Plant construction.** (1) Floors shall be constructed of durable material which is easily cleanable and skid resistant. Where floors are wet cleaned, they shall be sloped to drain. (2) Interior walls shall be of a smooth and washable surface applied to a suitable base. (3) Coves with radii sufficient to promote sanitation shall be installed at the juncture of floors and walls in all rooms. (4) Ceilings shall be of adequate height and of smooth, washable material. (5) Window ledges shall be sloped at least 45° to the interior to promote sanitation. (6) Frozen food plants and warehouses shall be so constructed as to be rodent resistant. (7) All exterior window and door openings shall be equipped with effective insect and rodent screens. Where doors in outside walls or food handling areas are used for loading or unloading, "fly chaser" fans and ducts or other effective means shall be provided at such doors to prevent the entrance of insects. (8) Dressed lumber shall be used for exposed interior woodwork. (9) All exposed wood surfaces shall be finished with nontoxic oil or plastic paint or treated with hot linseed oil or clear wood sealer. (10) Stairs in product

handling departments shall be constructed with solid treads and closed risers and shall have side curbs of similar material, six inches high measured at the front edge of the tread. (11) Refrigerator doors and jambs shall be covered with rust-resisting metal securely affixed to the doors and jambs. Joints necessary for installation shall be welded, soldered or otherwise effectively sealed. The juncture of the metal covering on jambs and walls shall be sealed with a flexible type sealing compound. Doorways through which the product is transferred on overhead rails or hand trucks shall be sufficiently wide to permit free passage of the largest trucks or widest suspended product without contact with the jambs.

(h) **Plumbing and floor drainage.** (1) The minimum slope of the floor for drainage shall be one-eighth inch to one-quarter inch per foot toward a properly located drain. Floor drains shall be provided at the rate of one drain for each four hundred square feet of floor area. The type and size of floor drains and sanitary sewage lines used and the method of installing such facilities and other plumbing equipment shall conform strictly to state or local codes. (2) Hand-washing facilities shall be provided convenient to all locations where the product is prepared and processed. Each lavatory shall be supplied with hot and cold or warm running water; powdered or liquid soap in a suitable dispenser; an ample supply of single service towels and a suitable receptacle for used towels. Lavatories in work-rooms and toilet rooms shall be pedal operated. (3) Where sterilizers are required, they shall be of a size that will permit complete immersion of tools and other implements. Such sterilizing receptacle shall be equipped with a water line, means for heating the water, an overflow outlet and means for emptying the receptacle.

(i) **Lighting; ventilation.** (1) Work-rooms and employee dressing rooms shall have means for furnishing adequate natural light (approximately twenty-five per cent of the floor area in windows and/or skylights) and ventilation or an efficient air conditioning or mechanical ventilation system and adequate artificial lighting shall be provided. (2) Fresh air intakes for mechanical ventilation systems shall be equipped with effective replaceable filters to prevent the entrance of air-borne contaminants. Fresh air intakes shall be located well away from power exhaust system discharges and other sources of air-borne contaminants. (3) The general light intensities in product preparation, processing and packaging areas shall be not less than twenty foot-candles measured thirty inches above the floor. Where detailed visual tasks are required to assure a safe, wholesome product, the intensity of light on the surface of the product or product container shall be not less than fifty foot-candles. At least ten foot-candles of light shall be provided in all dressing and toilet rooms and at least five foot-candles in all other areas of the plant.

(Effective July 27, 1984)