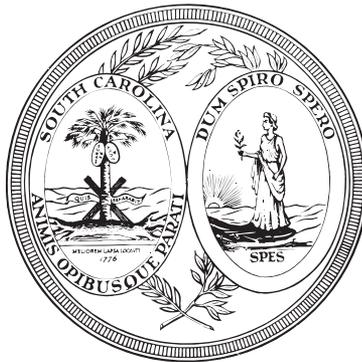


Retail Food Establishments

Regulation 61 - 25



South Carolina Department of Health and Environmental Control
2600 Bull Street, Columbia, South Carolina 29201
Revised - June 23, 1995

TABLE OF CONTENTS

CHAPTER I.	DEFINITIONS	1
CHAPTER II.	FOOD	10
A.	Food Supplies.....	10
1.	General	10
2.	Special foods	10
B.	Food Protection	11
1.	General	11
2.	Emergency occurrences	12
C.	Food Storage, Display, Service, and Transportation	12
1.	General	12
2.	Refrigerated storage	14
3.	Hot storage	16
D.	Food Preparation	16
1.	General	16
2.	Raw fruits and raw vegetables	17
3.	Parasite destruction in fish	17
4.	Cooking potentially hazardous food	18
5.	Whole eggs, and egg products	18
6.	Reheating	19
7.	Thawing potentially hazardous food.....	19
E.	Food Dispensing	20
1.	Dairy and non-dairy dispensing	20
2.	Table dispensing of condiments	20
3.	Ice dispensing and ice-dispensing utensils	20
4.	Dispensing utensils	20
5.	Re-service	21
6.	Family-style service	21
7.	Display equipment	21

CHAPTER III. PERSONNEL	23
A. Employee Health.....	23
B. Disease Transmission Suspected.....	23
C. Personal Cleanliness	24
D. Clothing.....	24
E. Employee Practices	25
CHAPTER IV. EQUIPMENT AND UTENSILS	26
A. Materials	26
1. General	26
2. Solder and flux	26
3. Wood	26
4. Plastics and rubber	26
5. Metals	27
6. Cloth	27
7. Single-service and single-use articles	28
B. Design and Fabrication	28
1. General	28
2. Cleanability	29
3. Thermometers	30
4. Non-food-contact surfaces	30
5. Equipment exhaust systems	30
C. Equipment Installation and Location	31
1. General	31
2. Retail food establishment equipment installation	31

**CHAPTER V. CLEANING, SANITIZATION, AND
STORAGE OF EQUIPMENT AND
UTENSILS32**

A. Equipment and Utensil Cleaning and Sanitization32

- 1. Cleaning frequency32
- 2. Wiping cloths33
- 3. Manual cleaning and sanitizing33
- 4. Mechanical cleaning and sanitizing36
- 5. Recirculation and hot water maintenance41
- 6. Drying41

B. Equipment and Utensil Handling and Storage41

- 1. Handling41
- 2. Storage42
- 3. Pre-set tableware42
- 4. Single-service and single-use articles42
- 5. Prohibited storage areas43

**CHAPTER VI. SANITARY FACILITIES
AND CONTROLS45**

A. Water Supply45

- 1. General45
- 2. Water under pressure45
- 3. Bottled water45
- 4. Hot water45
- 5. Steam46

B. Sewage46

C. Plumbing46

- 1. General46
- 2. Backflow46
- 3. Water reservoir of misting devices, cleaning47
- 4. Drains48

D. Toilet Facilities	48
1. Toilet installation	48
2. Toilet rooms	49
3. Toilet fixtures	49
E. Lavatory Facilities	49
1. Lavatory installation	49
2. Lavatory faucets	50
3. Lavatory supplies	50
4. Lavatory maintenance	50
F. Garbage and Refuse	50
1. Containers	50
2. Storage	51
3. Disposal.....	52
4. Returnables and recyclables	52
G. Insect and Rodent Control	52
1. General	52
2. Openings	52
3. Application of insecticides and rodenticides	53
4. Insect attracting devices	53

CHAPTER VII. CONSTRUCTION AND MAINTENANCE OF PHYSICAL FACILITIES54

A. Maintenance	54
B. Floors	54
1. Floor construction	54
2. Floor carpeting	54
3. Floor drains	54
4. Mats and duckboards	55
5. Floor junctures	55
6. Utility line installation	55

- C. Walls and Ceilings55
 - 1. Construction55
 - 2. Exposed construction56
 - 3. Utility line installation56
 - 4. Attachments57
 - 5. Covering material installation57

- D. Cleaning Physical Facilities57
 - 1. General57
 - 2. Service sink57

- E. Lighting58

- F. Ventilation58

- G. Dressing Rooms and Locker Areas59
 - 1. Dressing rooms and areas59
 - 2. Locker areas59

- H. Poisonous or Toxic Materials59
 - 1. Materials permitted59
 - 2. Labeling59
 - 3. Storage60
 - 4. Retail sale60
 - 5. Use60
 - 6. Containers61
 - 7. First-aid supplies and personal medications61

- I. Premises61
 - 1. General61
 - 2. Living areas62
 - 3. Linens and clothes storage62
 - 4. Cleaning equipment storage62
 - 5. Animals62

CHAPTER VIII. BARBECUE PIT AND PIT-COOKING ROOM CONSTRUCTION	63
A. Room Construction	63
B. Pit Construction	64
C. Ventilation	65
D. Lavatories.....	65
E. Lighting.....	65
CHAPTER IX. OUTDOOR COOKING AND SERVING OF FOOD	66
CHAPTER X. MOBILE FOOD UNITS	68
A. Mobile Food Service.....	68
1. General	68
2. Mobile operations	68
3. Single-service articles	68
4. Water system	68
5. Waste retention.....	69
B. Base of Operation	69
C. Servicing Area and Operations	69
1. Servicing area.....	69
2. Servicing operations.....	70
CHAPTER XI. TEMPORARY FOOD SERVICE	71
CHAPTER XII. SPECIAL EVENTS	74
CHAPTER XIII. TRANSPORTATION OF MEAT AND MEAT PRODUCTS	76

A. General	76
B. Vehicles	76
C. Refrigeration	76
D. Contamination	76
E. Clothing.....	77
F. Mobile meat and seafood sales	77
CHAPTER XIV. COMPLIANCE PROCEDURES	78
A. Permits	78
B. Issuance of permit	78
C. Suspension of permit.....	79
D. Closure of temporary and special event food service establishment.....	80
E. Revocation of permit.....	80
F. Service of notices	82
G. Hearings	82
H. Inspection frequency	82
I. Access	82
J. Report of inspections	82
K. Correction of violations	83

L. Grading of retail food establishments	84
M. Existing equipment	86
N. Training	86
O. Examination and condemnation of food	86
P. Retail food establishments outside jurisdiction of the health authority	87
Q. Submission of plans	88
R. Permit fees	88
S. Enforcement provisions	88
T. Unconstitutionality clause.....	88
APPENDIX I. EQUIPMENT EXHAUST SYSTEM DESIGN AND INSTALLATION.....	89
APPENDIX II. EQUIPMENT INSTALLATION REQUIREMENTS.....	94
APPENDIX III. HOT WATER SIZING REQUIREMENTS.....	97
APPENDIX IV. PEST CONTROL.....	98

REGULATION 61-25: RETAIL FOOD ESTABLISHMENTS

Chapters I - XIV and Appendices 1 - IV

Effective - June 23, 1995

CHAPTER I - DEFINITIONS

- A. The following definitions shall apply in the interpretation and the enforcement of this regulation:
1. “**APPROVED**” - acceptable to the health authority based on a determination of conformity with principles, practices, and generally recognized standards that protect public health.
 2. “**a_w**” - symbol for water activity which measures the free moisture in a food, is the quotient of water vapor pressure of the substance divided by the vapor pressure of pure water at the same temperature.
 3. “**BASE OF OPERATION**” - a permitted retail food establishment which is used for food preparation, storage of supplies, and servicing operations for mobile food units.
 4. “**CATERER**” - a permitted food service establishment that serves food at a remote site for a private group.
 5. “**CORROSION-RESISTANT MATERIALS**” - those materials that maintain their original surface characteristics under prolonged influence of the food to be contacted, the normal use of cleaning compounds and bactericidal solutions, and other conditions of use.

6. **“CRITICAL VIOLATION”** - a provision of this regulation that, if violated, is more likely than other violations to contribute to food contamination, illness, or environmental degradation.
7. **“EASILY CLEANABLE”** - surfaces readily accessible and made of such materials and finishes and so fabricated that residue may be effectively removed by normal cleaning methods.
8. **“EMPLOYEE”** - the permit holder, individuals having supervisory or managerial duties, or any other person working in a retail food establishment.
9. **“EQUIPMENT”** - articles that are used in the operation of a retail food establishment such as stoves, ovens, hoods, slicers, grinders, mixers, scales, meat blocks, tables, food shelving, reach-in refrigerators, freezers, sinks, ice makers, and other similar items. The term does not include utensils.
10. **“FOLLOW-UP INSPECTION”** - an inspection conducted to confirm correction of violation(s) recorded during a previous inspection.
11. **“FOOD”** - any raw, cooked or processed edible substance, ice, beverage, or ingredient used or intended for use or for sale in whole or in part for human consumption.
12. **“FOOD-CONTACT SURFACES”** - those surfaces of equipment and utensils with which food normally comes in contact and those surfaces from which food may drain, drip, or splash back onto surfaces normally in contact with food.

13. **“HEALTH AUTHORITY”** - an authorized representative of the South Carolina Department of Health and Environmental Control.
14. **“HERMETICALLY SEALED CONTAINER”** - a container that is designed and intended to be secure against the entry of microorganisms and, in the case of low acid canned food, to maintain the sterility of its contents after processing.
15. **“IMMINENT HEALTH HAZARD”** - any violation or combination of violations that may immediately jeopardize the health of the public and which the facility does not or is unable to correct immediately.
16. **“KITCHENWARE”** - all multi-use utensils other than tableware.
17. **“LOW VOLTAGE FLY TRAP”** - a trap which emits a low voltage electronic pulse designed to disrupt the insect’s nervous system and trap the insect by adherence to a glue board, rather than electrocuting and exploding the insect.
18. **“MEAT”** - the edible parts of cattle, sheep, swine, goats, fish, seafood, fowl, game animals, etc.
19. **“MEAT PRODUCTS”** - any articles of food, or any articles intended for use as human food, which are derived in whole or in part from any edible portion of meat.
20. **“MOBILE MEAT OR SEAFOOD SALES”** - the retail sale of meat or seafood that is conducted from a vehicle which returns at intervals to its base of operation.

21. “**MOBILE FOOD UNIT**” - a vehicle-mounted food service operation that returns daily to its base of operation.
22. “**PACKAGED**” - bottled, canned, cartoned, securely bagged, or securely wrapped.
23. “**pH**” - a measure of the acidity or alkalinity of a solution.
24. “**POTENTIALLY HAZARDOUS FOOD**”
 - a. Potentially hazardous food is a food that is natural or synthetic and is in a form capable of supporting:
 - (1) The rapid and progressive growth of infectious or toxigenic microorganisms; or
 - (2) The growth and toxin production of Clostridium botulinum.
 - b. Potentially hazardous food does not include:
 - (1) A food with a water activity (a_w) value of 0.85 or less;
 - (2) A food with a hydrogen ion concentration (pH) level of 4.6 or below when measured at 75°F. (24°C);
 - (3) A food, in an unopened hermetically sealed container, that is commercially processed to achieve and maintain commercial sterility under conditions of nonrefrigerated storage and distribution; and

- (4) A food for which laboratory evidence demonstrates that rapid and progressive growth of infectious and toxigenic microorganisms or the slower growth of Clostridium botulinum cannot occur and which is granted a variance by the health authority.

25. **“REDUCED OXYGEN PACKAGING”**

- a. Reduced oxygen packaging is the reduction of the amount of oxygen in a package by mechanically evacuating the oxygen; displacing the oxygen with another gas or combination of gases; or otherwise controlling the oxygen content in a package to a level below that normally found in the surrounding atmosphere, which is 21% oxygen.
- b. Reduced oxygen packaging includes methods that may be referred to as altered atmosphere, modified atmosphere, controlled atmosphere, low oxygen, and vacuum packaging including sous vide.

26. **“RETAIL FOOD ESTABLISHMENT”** - any operation that prepares, packages, serves, processes, or otherwise provides food for human consumption, either on or off the premises, regardless of whether there is a charge for the food. These establishments are further defined as:

- a. Food Service Establishment - operations such as, but not limited to, restaurants, delicatessens, snack bars, catering operations, ice cream parlors, school cafeterias, mobile food units including bases of operations, and temporary food service establishments.

- b. Retail Food Store - operations that process meat, meat products, or other potentially hazardous food, such as, but not limited to, grocery stores, retail meat markets, fish and seafood markets. These establishments may also engage in limited food service operations that comply with applicable requirements of this Regulation. A separate food service facility operating within a retail food store may be evaluated independently from the retail food store.

- c. Retail food establishments do not include:
 - (1) A private home where food is prepared or served for individual family consumption.
 - (2) Churches where the food service is limited to members and their guests.
 - (3) Churches and charitable organizations that prepare and serve food to the public on their own premises and do not exceed four functions in a twelve month period.
 - (4) Retail food establishments or facilities located on United States Government property and regulated by federal authorities.
 - (5) Retail food establishments or facilities operated by the United States Government.
 - (6) Retail food establishments or facilities serving solely as commissaries for interstate carriers.

- (7) Retail food establishments or facilities on vehicles or common carriers for hire such as airplanes, trains (including maintenance crew cook cars), ships, and other similar conveyances.
- (8) Retail food establishments or facilities governed by other regulations when such regulations are determined by the health authority to be satisfactory.
- (9) Bake sales, including weekend home bakers who prepare nonpotentially hazardous breads and pastries for friends and neighbors only and who do not advertise or possess a business license.
- (10) Boarding houses when food service is restricted to residents only.
- (11) Bed and breakfast homes, motels and hotels which rent rooms and prepare nonpotentially hazardous breakfast food or serve prepackaged food.
- (12) Permanent food stands that serve nonpotentially hazardous food which requires minimal or no preparation including pretzels, popcorn, sno-cones, cotton candy, candy apples, french fries, soft drinks, draft beer, and similar food.
- (13) Taverns that are primarily engaged in the sale of alcoholic beverages, and do not engage in extensive preparation of nonpotentially hazardous food or preparation of potentially hazardous food.

- (14) Occasional caterers who provide food to a single client and do not exceed four functions in a twelve-month period, do not possess a business license, and do not advertise.
 - (15) Convenience food stores which offer for sale prepackaged food and may engage in limited preparation of nonpotentially hazardous food.
 - (16) Mobile food units which offer for sale prepackaged food and may engage in limited preparation of nonpotentially hazardous food.
 - (17) Businesses selling only prepackaged food.
 - (18) Vending machines.
27. “**ROUTINE INSPECTION**” - an unannounced inspection of a retail food establishment conducted to determine the sanitary conditions within that establishment.
28. “**SAFE MATERIALS**” - articles manufactured from or composed of materials that may not reasonably be expected to result, directly or indirectly, in their becoming a component or otherwise affecting the characteristics of any food.
29. “**SANITIZATION**” - effective bactericidal treatment by a process that provides enough cumulative heat or concentration of chemicals for enough time to reduce the bacterial count, including pathogens, to a safe level on utensils and equipment.
30. “**SEALED**” - free of cracks or other openings which permit the entry or passage of moisture.

31. **“SINGLE-SERVICE ARTICLES”** - any tableware, carry-out utensils, or other items that are designed and constructed for one time, one person use.
32. **“SINGLE-USE ARTICLES”** - utensils and bulk food containers designed and constructed to be used once and discarded.
33. **“SPECIAL EVENT”** - a mass public gathering not to exceed three consecutive days where food is prepared and served to the public, such as community celebrations, festivals, special promotions, or similar events.
34. **“TABLEWARE”** - eating, drinking, and serving utensils for table use such as flatware including forks, knives, spoons, bowls, cups, serving dishes, and plates.
35. **“TEMPORARY FOOD SERVICE ESTABLISHMENT”** - any food service establishment which operates at a fixed location for a period of time not to exceed 14 consecutive days in connection with a fair, carnival, circus, special promotion, or similar event.
36. **“UTENSIL”** - any tableware and kitchenware used in the storage, preparation, conveying, or serving of food.

CHAPTER II - FOOD

A. Food Supplies.

1. General.

All food in retail food establishments shall be from sources approved or considered satisfactory by the health authority; shall be properly labeled; shall be free from spoilage, adulteration, and other contamination; and shall be safe for human consumption.

2. Special foods.

- a. Hermetically sealed food shall be obtained from an approved food processing establishment.
- b. Fluid milk and fluid milk products used or served shall be pasteurized and meet Grade A quality standards. Dry milk and dry milk products shall be made from pasteurized milk and milk products.
- c. Fresh and frozen shucked shellfish (oysters, clams, mussels, and scallops) shall be packed in nonreturnable packages identified with the name and address of the original shellstock processor, shucker-packer, or repacker, and the interstate certification number issued according to law. Shellstock and shucked shellfish shall be kept in the container in which they were received until they are used. Each container of unshucked shellstock (oysters, clams, mussels, and scallops) shall be identified by an attached tag that states the name and address of the original shellstock processor, the kind and quantity of shellstock, and an interstate certification number issued by the State or foreign shellfish control agency. Shellstock source

identification tags or labels shall be kept on file at the establishment for at least 90 calendar days.

- d. Only clean whole eggs, with shell intact and without cracks or checks, or pasteurized liquid, frozen, dry eggs and egg products shall be used. Commercially prepared and packaged hard-boiled eggs may be used.
- e. Wild mushrooms shall not be served or offered for sale.
- f. The sale of processed game and game animals may be approved by the health authority unless otherwise prohibited by wildlife laws.
- g. Infant formula shall not be sold or offered for sale beyond the expiration date.
- h. Except for fish that is frozen before, during, and after packaging, a retail food establishment may not package fish using a reduced oxygen packaging method.

B. Food Protection.

1. General.

Food being transported, stored, prepared, displayed, served, or sold at a retail food establishment shall be protected from dust, flies, rodents, or other vermin, toxic materials, unclean equipment and utensils, unnecessary handling, coughs and sneezes, flooding by sewage, overhead leakage, and all other sources of contamination. Different types of raw animal products, such as beef, fish, lamb, pork, or poultry, shall be separated during storage, processing, and display by use

of different containers, partitions, shelves, or by cleaning and sanitizing the equipment between product use. Raw food products shall be physically separated from ready-to-eat food products during display or storage by storing the raw products below ready-to-eat food products or by using other approved methods. The temperature of potentially hazardous food shall be 45°F. (7.2°C.) or below, or 130°F. (54°C.) or above, at all times, except as otherwise provided in this regulation.

2. Emergency occurrences.

In the event of a fire, flood, power outage, or similar event that might result in the contamination of food, or that might prevent potentially hazardous food from being held at required temperatures, the person in charge shall immediately contact the health authority. Upon receiving notice of this occurrence, the health authority shall take whatever action that is deemed necessary to protect the public health.

C. Food Storage, Display, Service, and Transportation.

1. General.

- a. Except for nuts in the shell and whole, raw fruits and vegetables that are intended for hulling, peeling, or washing by the consumer before consumption, food on display shall be protected from contamination by the use of packaging, counter service line or counter protector devices, display cases, or other methods approved by the health authority.

- b. Containers of food shall be stored a minimum of six inches above the floor in a manner that protects the food from splash and other contamination and that permits easy cleaning of the storage area, except that:
 - (1) Metal pressurized beverage containers and cased food packaged in cans, glass, or other durable and waterproof containers need not be elevated.
 - (2) Containers of food may be stored on the floor in freezers.
 - (3) Containers of food may be stored on dollies or mobile racks.
 - (4) Pallets shall not be used for permanent storage and shall be removed when emptied of delivered contents.
- c. Food and containers of food shall not be stored under exposed sewer lines. The storage of food in toilet rooms is prohibited.
- d. Food not subject to further washing or cooking before serving shall be stored in a way that protects it against cross-contamination from food requiring further preparation.
- e. Packaged food, except for pressurized containers, shall not be stored in contact with water or undrained ice.

- f. Unless the identity is unmistakable, bulk food such as cooking oil, syrup, salt, sugar, or flour shall be stored in a container identifying the food by common name.
- g. Products that are held for credit, redemption, or return to the distributor, such as damaged, soiled, or recalled products, shall be held in designated areas that are separated from food, equipment, utensils, linens, and single-service and single-use articles.
- h. During transportation, food and food utensils shall be kept in covered containers, wrapped, or packaged so as to be protected from contamination. During transportation, including transportation to another location for service or catering operations, food shall meet the requirements of this regulation relating to food protection and food storage.

2. Refrigerated storage.

- a. Adequate refrigeration facilities or effectively insulated facilities shall be provided in a convenient location to assure the maintenance of potentially hazardous food at 45°F. (7.2°C.) or below during display, service, and storage. Each mechanically refrigerated facility storing potentially hazardous food shall be provided with a numerically scaled indicating thermometer accurate to $\pm 3^{\circ}\text{F}$. ($\pm 1.7^{\circ}\text{C}$). Thermometers shall be located to measure the air temperature in the warmest part of the facility and shall be located to be easily readable.

b. Potentially hazardous food requiring refrigeration after preparation shall be rapidly cooled to 45°F. (7.2°C.) by:

- (1) refrigerated storage in shallow containers; or
- (2) stirring food in a container placed in an ice bath; or
- (3) adding ice as an ingredient; or
- (4) using rapid cooling equipment, such as blast chillers; or
- (5) other effective methods.

Potentially hazardous food to be transported shall be prechilled and held at a temperature of 45°F. (7.2°C.) or below unless maintained in accordance with provisions of this regulation for hot food storage.

c. Frozen food shall be kept frozen.

d. Fluid milk, fluid milk products, and reconstituted dry milk and milk products shall be stored at 45°F. (7.2°C.) or below.

e. Ice intended for human consumption shall not be used as a medium for cooling stored food, food containers, or food utensils, except that such ice may be used for cooling tubes conveying beverages or beverage ingredients to a dispenser head.

3. Hot storage.

- a. Adequate and conveniently located hot food storage facilities shall be provided to assure the maintenance of food at the required temperature during storage. Each enclosed hot food facility storing potentially hazardous food shall be provided with a numerically scaled indicating thermometer accurate to $\pm 3^{\circ}\text{F}$. ($\pm 1.7^{\circ}\text{C}$.) Thermometers shall be located to measure the air temperature in the coolest part of the facility and shall be located to be easily readable. Where it is impractical to install thermometers on equipment such as bainmaries, steam tables, steam kettles, heat lamps, cal-rod units, or insulated food transport carriers, a product thermometer must be available and used to check internal food temperature.
- b. The internal temperature of potentially hazardous food requiring hot storage during display, service, and transportation shall be 130°F . (54°C .) or above except that primal cuts of rare roast beef shall be held at a surface temperature of at least 130°F . (54°C .)

D. Food Preparation.

1. General.

- a. Food shall be prepared with the least possible manual contact through the use of suitable utensils.
- b. Food shall be prepared and processed on surfaces that prior to use have been washed, rinsed, and sanitized to prevent cross-contamination.

2. Raw fruits and raw vegetables.

- a. Raw fruits and raw vegetables shall be thoroughly washed with potable water before being cooked or served.
- b. Sulfiting agents shall not be added to fresh fruits and vegetables intended for raw consumption.

3. Parasite destruction in fish.

- a. Before served in ready-to-eat form, raw, marinated, or partially cooked fish, other than shellfish, shall be frozen throughout to a temperature of:
 - (1) -4°F. (-20°C.) or below for 168 hours (7 days) in a freezer; or
 - (2) -31°F. (-35°C.) or below for 15 hours in a blast freezer.
- b. If raw, marinated, or partially cooked fish are served in ready-to-eat form, records shall be kept of the freezing temperature and time to which the fish are subjected and such records shall be retained at the retail food establishment for 90 calendar days beyond the time of service of the fish.
- c. If the fish are frozen by a supplier, a written agreement or statement from the supplier stipulating that the fish supplied are frozen to a temperature and for a time specified under this regulation may substitute for the required records.

4. Cooking potentially hazardous food.

Potentially hazardous food requiring cooking shall be cooked to heat all parts of the food to a temperature of at least 145°F. (63°C.), except that:

- a. Poultry, poultry stuffings, stuffed meats, stuffed pasta, and stuffings containing meat shall be cooked to heat all parts of the food to at least 165°F. (74°C.) with no interruption of the cooking process.
- b. Ground beef and any food containing ground beef shall be cooked to heat all parts of the food to at least 155°F. (68°C.).
- c. Pork and any food containing pork, game animals, and comminuted fish and meat shall be cooked to heat all parts of the food to at least 155°F. (68°C.).
- d. Roast beef shall be cooked to a surface temperature of at least 155°F. (68°C.).
- e. Beef steak shall be cooked to a surface temperature of 155°F. (68°C.) unless otherwise ordered by the immediate consumer.
- f. Raw animal products cooked in a microwave oven shall be rotated during cooking to compensate for uneven heat distribution.

5. Whole eggs, and egg products.

- a. Eggs, including liquid, frozen, and dry eggs, and any food containing egg products, shall be cooked to heat all parts of the food to 145°F. (63°C.); except that, pasteurized eggs shall be used when food products are not cooked to an internal temperature of at least 145°F.

- b. Shell eggs that are broken and prepared shall be cooked to 145°F. (63°C.) unless otherwise ordered by the immediate consumer.

6. Reheating.

If potentially hazardous food that has been cooked and then refrigerated is to be served hot, it shall be reheated rapidly to 165°F. (74°C.) or higher throughout before being served or before being placed in a hot food storage facility. The use of steam tables, bainmaries, warmers, and similar hot food holding facilities for the rapid reheating of potentially hazardous food is prohibited.

7. Thawing potentially hazardous food.

Potentially hazardous food shall be thawed as follows:

- a. In refrigerated units at a temperature not to exceed 45°F. (7.2°C.); or
- b. Under potable running water from the cold water supply with sufficient water velocity to agitate and float off loose food particles into the overflow; or
- c. In a microwave oven only when the food will be immediately transferred to conventional cooking facilities as part of a continuous cooking process or when the entire uninterrupted cooking process takes place in the microwave oven; or
- d. As part of the conventional cooking process.

E. Food Dispensing.

1. Dairy and non-dairy dispensing.

- a. Milk and milk products shall be served to the consumer from a commercially filled package or drawn from a commercially filled container stored in a mechanically refrigerated bulk milk dispenser.
- b. Cream, half-and-half, or non-dairy creaming and whitening agents shall be provided in an individual service container, protected pour-type pitcher, or drawn from a refrigerated dispenser designed for such service.

2. Table dispensing of condiments.

Condiments, seasonings, and dressings for table use shall be protected by packaging, covered containers, or by other approved methods.

3. Ice dispensing and ice-dispensing utensils.

Ice for consumer use shall be dispensed with scoops, tongs, or other ice-dispensing utensils, or through automatic self-service, ice-dispensing equipment. Ice-dispensing utensils shall be stored on a clean surface, in the ice with the handle extended out of the ice, or by other approved methods. Between uses, ice transfer receptacles shall be stored in a way that protects them from contamination.

4. Dispensing utensils.

To avoid unnecessary manual contact with food, dispensing utensils with handles shall be used by employees or provided to consumers who serve

themselves. Between use during service, dispensing utensils and malt collars shall be stored as follows:

- a. Stored in the food with the dispensing utensil handle extended out of the food; or
- b. Stored clean and dry; or
- c. Stored in running water; or
- d. When “a” through “c” are impractical, self-service utensils, such as tongs, may be stored in a clean, protected location approved by the health authority.

5. Re-service.

- a. Once served to a consumer, portions of leftover food shall not be served again, except that packaged food, other than potentially hazardous food, that is still packaged and is still in sound condition, may be re-served.
- b. Self-service consumers shall not be allowed to use soiled tableware, including single-service articles, to obtain additional food from the display and serving equipment. Beverage cups and glasses are exempt from this requirement.

6. Family-style service.

Any leftover portions served family style must be discarded when the original seating party leaves.

7. Display equipment.

- a. Display equipment for prepared or processed food shall be designed and constructed to protect food

from consumer contamination by use of counter protector devices, protected display cases, or by other approved methods.

- b. Adequate hot or cold food facilities shall be provided to maintain potentially hazardous food on display at 45°F. (7.2°C.) or below or 130°F. (54°C.) or above.

CHAPTER III - PERSONNEL

A. Employee Health.

The manager shall insure that no person known to be infected with a disease in a communicable form that can be transmitted by food or who is a carrier of organisms that cause such a disease, or while afflicted with a boil, an infected wound, or a respiratory infection when accompanied by fever or diarrhea with fever shall work in a retail food establishment in which there is a likelihood of such person contaminating food or food-contact surfaces with pathogenic organisms or transmitting disease to other persons. Persons coughing or sneezing without fever shall be restricted from food preparation activities. Cut, burns, abrasions, or other wounds shall be properly protected from contaminating food through the use of disposable gloves, finger cots, or other methods approved by the health authority.

B. Disease transmission suspected.

When there is reasonable cause to suspect disease transmission by an employee of a facility, the health authority may secure a medical history of the suspected employee or make any other investigation necessary and shall take appropriate action. The health authority may require any or all of the following measures:

1. The immediate exclusion of the employee from employment in retail food establishments;
2. The immediate closing of the retail food establishment, or any department thereof until, in the opinion of the health authority, no further danger of disease outbreak exists;

3. Restriction of the employee's services to some other activity in the establishment where there would be no danger of transmitting disease;
4. Medical and laboratory examination of the employee;
5. Laboratory examination of food samples and surface swabs from the retail food establishment.

C. Personal Cleanliness.

1. Employees shall thoroughly wash their hands and the exposed portions of their arms with soap and warm water in an approved handwashing facility before starting work, during work as often as is necessary to keep them clean, and after coughing, sneezing, handling soiled utensils or equipment, smoking, eating, drinking, or using the toilet. Employees engaged in food preparation shall keep their fingernails trimmed, filed, and maintained so the edges and surfaces are smooth and cleanable.
2. While preparing food, employees may not wear excessive jewelry on their hands or arms.
3. Disposable gloves and hand sanitizers may be used in addition to proper handwashing. Disposable gloves must be discarded after any possible contamination.
4. Employees shall maintain a high degree of personal cleanliness.

D. Clothing.

1. The clothing of all employees shall be clean.
2. The manager shall insure that food and food-contact surfaces are protected from contamination from hair.

E. Employee Practices.

1. Employees shall not use tobacco in any form while engaged in food preparation, processing, or service, or while in areas used for equipment or utensil washing or for food preparation and processing. Employees shall use tobacco only in approved designated areas.
2. Employees shall conform to good hygienic practices during all working periods in the retail food establishment.
3. Employees shall not eat or drink in food preparation, food processing, or utensil washing areas; except that, an employee may drink from a covered beverage container, provided the container is handled in a manner that prevents contamination.

CHAPTER IV - EQUIPMENT AND UTENSILS

A. Materials.

1. General.

Multi-use equipment and utensils shall be constructed and repaired with safe materials, including finishing materials; shall be corrosion resistant and nonabsorbent; and shall be smooth, easily cleanable, and durable under conditions of normal use. Single-service and single-use articles shall be made from clean, sanitary, safe materials. Equipment, utensils, and single-service and single-use articles shall not impart odor, color, taste, or contribute to the contamination of food.

2. Solder and flux.

If solder or flux is used, it shall be composed of safe materials and be corrosion resistant.

3. Wood.

Cutting blocks, cutting boards, bakers' tables, and paddles shall be of hard maple or equivalent material which is nontoxic, smooth, and free of cracks, crevices, and open seams. Cutting boards shall be easily removable. Wicker, rolling pins, doughnut dowels, spoons, and paddles may be made from wood, and shall be maintained in good repair. Wicker may be used only when suitably lined.

4. Plastics and rubber.

Safe plastic, rubber, or rubber-like materials that are resistant under normal conditions of use to scratching, scoring, decomposition, crazing, chipping and distortion, that are of sufficient weight and thickness to

permit cleaning and sanitizing by normal dishwashing methods, and which meet the general requirements set forth in the provisions of this chapter, are permitted for repeated use.

5. Metals.

- a. Galvanized metal shall not be used for utensils or food-contact surfaces of equipment that are used for beverages, moist food, or acidic food.
- b. Cast iron may be used as a surface for cooking. Cast iron may also be used in utensils for serving food if the utensils are used only as part of an uninterrupted process from cooking through service. Cast iron may not be used as a storage unit for acidic food.
- c. Copper and copper alloys, such as brass, shall not be used in contact with acidic food or for fittings or tubing downstream from either a check valve or a backflow device exposed to carbon dioxide.
- d. Lead content of utensils and equipment shall not exceed safe limits.
- e. Pewter may not be used as a food-contact surface; however, imitation pewter meeting the requirements for multi-use utensils may be used as a food-contact surface.

6. Cloth.

Linens and napkins shall not be used as food-contact materials, except that they may be used to line containers used for the service of food if they are replaced each time the container is refilled for a new consumer.

7. Single-service and single-use articles.

Single-service and single-use articles shall not be reused.

B. Design and Fabrication.

1. General.

All equipment and utensils, including plasticware, shall be designed and fabricated for durability under conditions of normal use and shall be resistant to denting, buckling, pitting, chipping, and crazing. Plastic, rubber, and rubber-like utensils used for heating or cooking food shall be designed specifically for that purpose. All equipment and utensils shall be maintained in good repair.

- a. Food-contact surfaces shall be easily cleanable, smooth, and free of breaks, open seams, cracks, chips, pits, and similar imperfections, and free of difficult-to-clean internal corners and crevices. Threads subject to food contact shall be designed to facilitate cleaning.
- b. Only food-grade lubricants shall be used on equipment designed to receive lubrication on or within food-contact surfaces. Equipment containing bearings and gears requiring unsafe lubricants shall be designed and fabricated so that the lubricant cannot leak, drip, or be forced into food or onto food-contact surfaces.
- c. Tubing conveying beverages or beverage ingredients to dispensing heads may be in contact with stored ice, provided that such tubing is fabricated from safe materials, is grommeted at

entry and exit points to preclude moisture (condensation) from entering the ice machine or the ice storage bin, and is kept clean. Drainage or drainage tubes from dispensing units shall not pass through the ice machine or the ice storage bin.

d. Sinks and drainboards shall be self-draining.

2. Cleanability.

a. Unless designed for in-place cleaning, food-contact surfaces shall be accessible for cleaning and inspection as follows:

(1) Without being disassembled; or

(2) By disassembling without the use of tools; or

(3) By easy disassembling with the use of only simple tools such as a mallet, a screwdriver, or an open-end wrench kept available near the equipment.

b. Equipment intended for in-place cleaning shall be designed and fabricated so that:

(1) Cleaning and sanitizing solutions can be circulated throughout a fixed system using an effective cleaning and sanitizing procedure; or

(2) Cleaning and sanitizing solutions will contact all interior food-contact surfaces; and

(3) The system is self-draining or capable of being completely drained.

3. Thermometers.

Indicating thermometers required for immersion into food shall be of metal stem-type construction, numerically scaled, accurate to $\pm 3^{\circ}\text{F}$. ($\pm 1.7^{\circ}\text{C}$.), capable of measuring from 45°F . (7.2°C .) to 165°F . (74°C .), shall be provided and used to assure the attainment and maintenance of proper cooking, holding, or refrigeration temperatures of all potentially hazardous food.

4. Non-food-contact surfaces.

Surfaces of equipment not intended for contact with food, but which are exposed to splash or food debris or which otherwise require frequent cleaning, shall be designed and fabricated to be smooth, washable, free of unnecessary ledges, projections, or crevices, and readily accessible for cleaning.

5. Equipment exhaust systems.

Ventilation hoods and devices shall be designed to prevent grease or condensation from collecting on walls and ceilings and from dripping into food or onto food-contact surfaces. Filters or other grease extracting equipment shall be readily removable for cleaning and replacement if not designed to be cleaned in place. Effective make-up air shall be provided as necessary. Intake and exhaust air ducts shall be designed to prevent the entrance of dust, dirt, and other contaminating materials. (See Appendix I -Equipment Exhaust Systems Design And Installation.)

C. Equipment Installation and Location.

1. General.

Equipment, including ice makers, refrigerators, and freezers, shall be installed in enclosed rooms and shall not be located under exposed sewer lines, open stairwells, or other sources of contamination; except that, walk-in coolers and freezers may be located on the exterior of the establishment when used to store packaged or otherwise protected food products. (See Appendix II - Equipment Installation Requirements.)

2. Retail food establishment equipment installation.

Retail food establishment equipment shall be installed in accordance with the equipment installation requirements as defined in Appendix II.

CHAPTER V - CLEANING, SANITIZATION, AND STORAGE OF EQUIPMENT AND UTENSILS

A. Equipment and Utensil Cleaning and Sanitization.

1. Cleaning frequency.

- a. Tableware shall be washed, rinsed, and sanitized after each use.
- b. Kitchenware and food-contact surfaces of equipment shall be washed, rinsed, and sanitized:
 - (1) Each time there is a change in processing between types of raw animal products such as beef, fish, lamb, pork, and poultry; or
 - (2) Each time there is a change from raw to ready-to-eat food; or
 - (3) At any time during the operation when contamination may have occurred.
- c. Where equipment and utensils are used for the preparation of food on a continuous or production-line basis, utensils and the food-contact surfaces of equipment shall be washed, rinsed, and sanitized as often as necessary.
- d. The food-contact surfaces of grills, griddles, and similar cooking devices shall be cleaned at least once a day, except that this shall not apply to hot oil cooking equipment and hot oil filtering systems. The food-contact surfaces of all cooking equipment shall be kept free of encrusted grease deposits and other accumulated soil.

- e. Non-food-contact surfaces of equipment shall be cleaned as often as necessary to keep the equipment free of accumulation of dust, dirt, food particles, and other debris.

2. Wiping cloths.

- a. Cloths used for wiping food spills on tableware, such as plates or bowls being served to the consumer, shall be clean, dry, and used for no other purpose.
- b. Cloths or sponges used for cleaning surfaces of equipment, counters, dining table tops, and shelves shall be clean and shall be rinsed in an approved sanitizing solution used for no other purpose. In-use cloths and sponges shall be stored in an approved sanitizing solution.

3. Manual cleaning and sanitizing.

- a. For manual washing, rinsing, and sanitizing of utensils and equipment, a sink with no less than three compartments shall be provided and used. Sink compartments shall be large enough to immerse at least two-thirds of the largest piece of equipment or utensil to be cleaned, and each compartment of the sink shall be supplied with hot and cold potable running water. In establishments where the only utensils to be washed are limited to spatulas, tongs, and similar devices, and when the only equipment to be cleaned is stationary and does not require disassembly for proper cleaning, a one-compartment sink may be approved by the health authority for this purpose. Fixed equipment, utensils, and equipment too large to be washed, rinsed, and sanitized in sink compartments, shall be washed, rinsed, and sanitized in place or through pressure spray methods.

- b. Drainboards, overshelves, or mobile dish carts of adequate size shall be provided for proper handling of soiled utensils prior to washing and for cleaned utensils following sanitizing and shall be located so as not to interfere with the proper use of the dishwashing facilities. Sinks and drainboards shall be self-draining.
- c. Equipment and utensils shall be preflushed or prescraped and, when necessary, presoaked to remove gross food particles and soil.
- d. Sinks, drainboards, dishtables, and mobile dish carts shall be cleaned prior to use.
- e. Except for fixed equipment and utensils too large to be washed, rinsed, and sanitized in sink compartments, manual washing, rinsing, and sanitizing shall be conducted in the following sequence:
 - (1) Equipment and utensils shall be thoroughly washed in the first compartment with a hot detergent solution that is kept clean; and
 - (2) Equipment and utensils shall be rinsed free of detergent and abrasives with clean water in the second compartment; and
 - (3) Equipment and utensils shall be sanitized in the third compartment.
- f. After sanitization, all equipment and utensils shall be air-dried.

g. Equipment and utensils shall be sanitized according to one of the following methods:

(1) Hot water sanitizing:

- (a) Immersion for at least 30 seconds in clean, hot water at a temperature of at least 170°F. (77°C.); and
- (b) The sanitizing compartment of the sink shall be capable of maintaining the water at a temperature of at least 170°F. (77°C.); and
- (c) A numerically scaled indicating thermometer, accurate to $\pm 3^{\circ}\text{F}$. ($\pm 1.7^{\circ}\text{C}$.), shall be provided as an integral part of the sink or heating device for frequent checks of water temperature; and
- (d) Dish baskets shall be of such size and design to permit immersion of the tableware, kitchenware, and equipment in hot water.

(2) Chemical sanitizing:

- (a) Immersion for at least 30 seconds in a clean solution containing between 50 - 100 parts per million of available chlorine as a hypochlorite; or
- (b) Immersion for at least 30 seconds in a clean solution containing between 12.5 - 25 parts per million of available iodine and having a pH no higher than 5.0 and at a temperature of at least 75°F. (24°C.); or

- (c) Immersion for at least 30 seconds in a clean solution containing between 200 - 400 parts per million of quaternary ammonium at a temperature of at least 75°F. (24°C.); or
- (d) Immersion in a clean solution containing any other chemical-sanitizing agent which has been demonstrated to the satisfaction of the health authority to be effective and nontoxic under use conditions, and for which a suitable field test is available. Such sanitizing agents in use solutions shall provide the equivalent bactericidal effect of a solution containing at least 50 parts per million of available chlorine for 30 seconds; or
- (e) Equipment too large to be treated by methods (a) through (d) above may be treated by spraying or swabbing with an approved sanitizing solution.
- (f) When chemicals are used for sanitization, a test kit or device that accurately measures the parts per million concentration of the solution shall be accessible and used.

4. Mechanical cleaning and sanitizing.

- a. Warewashing machines shall meet the approval of the National Sanitation Foundation (NSF) or must otherwise comply with the requirements of this regulation for mechanical warewashing. A warewashing machine shall be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine's design and operating specifications.

Warewashing machines shall routinely render equipment and utensils clean to sight and touch, and provide effective bactericidal treatment as demonstrated by an average plate count per utensil surface examined (according to standard methods) of no more than 100 colonies.

- b. Warewashing machines and devices shall be properly installed and maintained in good repair. A warewashing machine and its auxiliary components shall be operated in accordance with the machine's data plate and other manufacturer's instructions. Utensils and equipment placed in the machine shall be exposed to all cycles. Detergents shall be automatically dispensed and dispensers shall be properly installed and maintained. When drying agents are automatically dispensed, dispensers shall be properly installed and maintained.
- c. The pressure of final rinse water supplied to warewashing machines shall be controlled by a pressure regulating valve and shall not be less than 15 or more than 25 pounds per square inch (PSI) in the water line immediately adjacent to the final rinse control valve. Final rinse pressure shall be measured by an approved pressure gauge. A gauge cock one-fourth inch Iron Pipe Size (IPS) valve shall be provided immediately upstream from the final rinse control valve to permit checking the flow pressure of the final rinse water. This requirement does not apply to a warewashing machine that uses a pumped sanitizing rinse.
- d. Booster heaters for warewashing machines shall be either built-in or installed within five feet of the machine.

- e. Machine or water line mounted numerically scaled indicating thermometers, accurate to $\pm 3^{\circ}\text{F}$. ($\pm 1.7^{\circ}\text{C}$.), shall be provided to indicate the temperature of the water in each tank of the machine and the temperature of the final rinse water as it enters the manifold.
- f. Rinse water tanks shall be protected by baffles, curtains, or other effective means to minimize the entry of wash water into the rinse water. Conveyors in dishwashing machines shall be accurately timed to assure proper exposure times in wash and rinse cycles in accordance with manufacturers' data plate specifications.
- g. Drainboards shall be provided and be of adequate size for the proper handling of soiled utensils prior to washing and of cleaned utensils following sanitization, and shall be so located and constructed as not to interfere with the proper use of the dishwashing facilities. This does not preclude the use of mobile dish carts or overselves for the storage of soiled utensils or for the storage of clean utensils following sanitization.
- h. Facilities shall be provided for equipment and utensils to be prerinsed, flushed, scraped, or when necessary, soaked to remove gross food particles and soil prior to being washed in a warewashing machine unless a prewash cycle is a part of the machine operation. Equipment and utensils shall be placed in racks, trays, or baskets, or on conveyors, in a way that food-contact surfaces are exposed to the unobstructed application of detergent wash and clean rinse water and that permits free draining.

- i. Warewashing machines using chemicals for sanitization may be used, provided that:
 - (1) The temperature of the wash water shall be in accordance with manufacturers data plate, but not be less than 120°F. (49°C.); and
 - (2) The wash water shall be kept clean; and
 - (3) Chemicals added for sanitization purposes shall be automatically dispensed; and
 - (4) Utensils and equipment shall be exposed to the final chemical sanitizing rinse in accordance with manufacturers' specifications for time and concentration; and
 - (5) The chemical sanitizing rinse water temperature shall be no less than 75°F. (24°C.) or less than the temperature specified by the machine's manufacturer; and
 - (6) Chemical sanitizers used shall be approved by the health authority; and
 - (7) A test kit or device that accurately measures the parts per million concentration of the solution shall be accessible and used.

j. Warewashing machines using hot water for sanitizing may be used provided that wash water and pumped rinse water shall be kept clean and water shall be maintained at no less than the temperatures stated below:

(1) Single-tank, stationary-rack, dual-temperature machine:

Wash temperature 150°F. (66°C.)

Final rinse temperature 180°F. (82°C.)

(2) Single-tank, stationary-rack, single-temperature machine:

Wash temperature 165°F. (74°C.)

Final rinse temperature 165°F. (74°C.)

(3) Single-tank, conveyor machine:

Wash temperature 160°F. (71°C.)

Final rinse temperature 180°F. (82°C.)

(4) Multiple-tank, conveyor machine:

Wash temperature 150°F. (71°C.)

Pumped rinse temperature 160°F. (66°C.)

Final rinse temperature 180°F. (82°C.)

(5) Single-tank, pot, pan, and utensil washer (either stationary or moving rack):

Wash temperature 150°F. (66°C.)

Final rinse temperature 180°F. (82°C.)

(6) Final rinse temperature for hot water sanitation shall not exceed 195°F. (91°C.).

- k. All warewashing machines shall be thoroughly cleaned at least once a day, or more often when necessary to maintain them in a satisfactory operating condition.

5. Recirculation and hot water maintenance.

When a booster heater for a warewashing machine is located more than 25 pipe feet from the primary water heater, the hot water supply line to the machine's booster heater shall be mechanically recirculated, equipped with an approved self-regulating heat tape, or be capable of maintaining the required water temperature by other methods approved by the health authority. This requirement shall also apply to water lines that supply hot water for sanitization directly from the water heater to the warewashing machine.

6. Drying.

After sanitization, all equipment and utensils shall be air-dried.

B. Equipment and Utensil Handling and Storage.

1. Handling.

Cleaned and sanitized equipment and utensils shall be handled in a way that protects them from contamination. Spoons, knives, and forks shall be touched only by their handles. Cups, glasses, bowls, plates, and similar items shall be handled without contact with inside surfaces or surfaces that contact the user's mouth.

2. Storage.

- a. Cleaned and sanitized utensils and equipment shall be stored at least six inches above the floor in a clean, dry location in a way that protects them from contamination by splash, dust, and other means. The food-contact surfaces of fixed equipment shall also be protected from contamination.
- b. Utensils shall be air-dried before being stored, or shall be stored in a self-draining position.
- c. Utensils that have been air-dried may be polished with cloths that are maintained clean and dry.
- d. Stored glasses, cups, and utensils shall be covered, inverted, or protected from contamination by other effective methods. Knives, forks, and spoons that are not prewrapped shall be presented so that only the handles are touched by employees and by consumers.

3. Pre-set tableware.

Where presetting of tableware is practiced, all unused and unprotected tableware shall be washed, rinsed, and sanitized after any place at a table has been occupied.

4. Single-service and single-use articles.

- a. Single-service and single-use articles, including those offered for sale, shall be stored a minimum of six inches above the floor in a manner that protects these articles from splash and other contamination,

and that permits easy cleaning of the storage area, except that:

- (1) Containers of single-service and single-use articles may be stored on dollies, mobile racks, or in enclosed cabinets.
- (2) Pallets shall not be used for permanent storage, and shall be removed when emptied of its delivered contents.

- b. Single-service and single-use articles shall be handled, and dispensed in a manner that prevents contamination of surfaces which may come in contact with food or with the mouth of the user.
- c. Single-service knives, forks, and spoons packaged in bulk shall be inserted into holders or be wrapped by employees who have washed their hands immediately prior to sorting or wrapping the utensils. Unless single-service knives, forks, and spoons are prewrapped or prepackaged, holders shall be provided to protect these items from contamination and present the handle of the utensil to the employee or consumer.
- d. Reuse of single-service and single-use articles is prohibited.

5. Prohibited storage area.

- a. Cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be stored:
 - (1) In locker rooms; or
 - (2) In toilet rooms; or
 - (3) In garbage rooms; or
 - (4) In mechanical rooms; or
 - (5) Under sewer lines, including leaking automatic fire sprinkler heads, or under lines on which water has condensed; or
 - (6) Under open stairwells; or
 - (7) Under other sources of contamination.

CHAPTER VI - SANITARY FACILITIES AND CONTROLS

A. Water Supply.

1. General.

The water supply shall be adequate, safe and from a source approved by the health authority.

2. Water under pressure.

Water under pressure shall be provided to all fixtures and equipment that use water. Water supplied in response to a temporary interruption of water need not be under pressure when no health hazard exists and when approved by the health authority.

3. Bottled water.

Bottled or packaged potable water shall be obtained from a source that complies with all laws and shall be handled and stored in a way that protects it from contamination. Bottled or packaged potable water shall be dispensed from the original container.

4. Hot water.

Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands of at least 140°F. (60°C.) throughout the retail food establishment, except handwashing lavatories shall be provided with at least 110°F. (37.8° C.). (See Appendix III - Hot Water Sizing Requirements.)

5. Steam.

Steam used in contact with food or food-contact surfaces shall be free from any materials or additives other than those products approved by the health authority as safe.

B. Sewage.

All sewage, including liquid waste, shall be disposed of in a public sewage system, private sewage system, or other method approved by the health authority. When required and when installed, grease traps and interceptors shall be located to be easily accessible for maintenance.

C. Plumbing.

1. General.

All plumbing shall be sized, installed, and maintained in accordance with applicable state and local plumbing laws, ordinances, and regulations. There shall be no cross-connection between the potable water supply and any nonpotable or questionable water supply or any source of pollution through which the potable water supply might become contaminated.

2. Backflow.

A backflow or back-siphonage prevention device installed on a water supply system shall meet American Society of Sanitary Engineers (ASSE) or American National Standards Institute (ANSI) standards for construction, installation, maintenance, inspection, and testing for that specific application and type of device.

- a. An air gap between the water supply inlet and the flood level rim of the plumbing fixture, equipment,

or nonfood equipment shall be at least twice the diameter of the water supply inlet and may not be less than one inch.

- b. A plumbing system shall be installed to preclude backflow of a contaminant into the water supply system at each point of use at the retail food establishment, including on a hose bibb if a hose is attached. This can be achieved by providing an approved air gap or by installing an approved backflow prevention device.
- c. A backflow prevention device shall be properly installed and accessible for inspection and maintenance.

3. Water reservoir of misting devices, cleaning.

- a. A reservoir that is used to supply water to a device such as a produce mister shall be:
 - (1) Maintained in accordance with manufacturer's specifications; and
 - (2) Cleaned in accordance with manufacturer's specifications or according to the procedures specified under C.3.b. below, whichever is more stringent.
- b. Cleaning procedures shall include at least the following steps and shall be conducted at least once a week:
 - (1) Draining and complete disassembly of the water and aerosol contact parts; and
 - (2) Brush-cleaning the reservoir, aerosol tubing, and discharge nozzles with a suitable detergent solution; and

- (3) Flushing the complete system with water to remove the detergent solution and particulate accumulation; and
- (4) Rinsing by immersing, spraying, or swabbing the reservoir, aerosol tubing, and discharge nozzles with an approved sanitizing solution.

4. Drains.

There shall be no direct connection between the sewerage system and any drains connected to equipment in which food, portable equipment, or utensils are placed, except that:

- a. An interior floor drain of walk-in cooler shall be equipped with an approved backwater valve which is accessible for inspection and maintenance.
- b. When a warewashing machine is located within five feet of a trapped floor drain serving the machine, the machine waste outlet may be connected directly on the inlet side of the properly vented floor drain.
- c. If not prohibited by local plumbing officials, a warewashing or food preparation sink may have a direct trapped connection.

D. Toilet Facilities.

1. Toilet installation.

Toilet facilities shall be conveniently located, and shall be accessible to employees at all times.

2. Toilet rooms.

Toilet rooms shall be completely enclosed and shall have tight-fitting, self-closing doors, provided that public toilet facilities may be constructed with alcove entrances in lieu of self-closing doors when approved by the health authority. Toilet room doors opening to the exterior of the establishment shall not be required to be self-closing.

3. Toilet fixtures.

Toilet fixtures shall be kept clean and in good repair. A supply of toilet tissue shall be provided at each toilet at all times. Easily cleanable receptacles shall be provided for waste materials. Toilet rooms used by women shall have at least one covered waste receptacle.

E. Lavatory Facilities.

1. Lavatory installation.

- a. Lavatories shall be adequate in number and shall be so located to permit convenient use by all employees in food preparation, food processing, equipment-washing, and utensil-washing areas. In all new and extensively remodeled establishments, lavatories shall be conveniently located within food preparation and utensil washing areas.
- b. Lavatories shall be accessible to employees at all times.
- c. Lavatories shall also be located in or immediately adjacent to toilet rooms or vestibules. Sinks used for food preparation or for washing equipment or utensils shall not be used for handwashing.

2. Lavatory faucets.

- a. A handwashing lavatory shall be equipped to provide water at a temperature of at least 110°F. (37.8°C.) through a mixing valve or combination faucet.
- b. A self-closing, slow-closing, or metering faucet shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet.

3. Lavatory supplies.

A supply of hand cleaning-liquid, powder, or bar soap shall be available at each lavatory. A supply of sanitary towels for hand-drying shall be conveniently located near handwashing lavatories in food preparation and utensil washing areas; a supply of sanitary towels or a hand-drying device providing heated air shall be conveniently located near all other lavatories. Common towels are prohibited. If disposable towels are used, easily cleanable waste receptacles shall be conveniently located near the handwashing facilities.

4. Lavatory maintenance.

Lavatories, soap dispensers, hand-drying devices and all related fixtures shall be kept clean and in good repair.

F. Garbage and Refuse.

1. Containers.

- a. Garbage and refuse shall be kept in durable, easily cleanable, insect-proof, and rodent-proof containers that do not leak and do not absorb liquids. Plastic bags and wet-strength paper bags may be used to

line these containers. The containers may be used for storage inside the retail food establishment.

- b. Containers used in food preparation, food processing, equipment-washing, and utensil-washing areas shall be kept covered when filled or stored or when not in continuous use.
- c. Containers, other than dumpsters, stored outside the establishment shall be cleanable, provided with lids, doors, or covers, and shall be kept covered.
- d. There shall be a sufficient number of containers to hold all the garbage and refuse that accumulates.
- e. Soiled containers shall be cleaned at a frequency to prevent insect and rodent attraction. Each container shall be thoroughly cleaned on the inside and outside in a way that does not contaminate food, equipment, utensils, or food preparation areas. Liquid waste from compacting or cleaning operations shall not create a nuisance.

2. Storage.

- a. Garbage and refuse shall be stored in a manner that does not create a nuisance. Cardboard or other packaging material not containing garbage or food wastes need not be stored in covered containers.
- b. Garbage or refuse storage rooms, if used, shall be kept clean, and shall be insect-proof and rodent-proof.
- c. Outside storage areas or enclosures shall be large enough to store the garbage and refuse containers and shall be kept clean. Garbage and refuse

containers located outside, excluding dumpsters and grease containers, shall be stored on a rack or on concrete or asphalt that is kept clean and maintained in good repair.

3. Disposal.

- a. Garbage and refuse shall be disposed of often enough to prevent the development of odor and the attraction of insects and rodents.
- b. Where garbage or refuse is burned on the premises, it shall be done in such a manner that does not create a nuisance. Areas around incineration facilities shall be kept clean.

4. Returnables and recyclables.

Storage areas, enclosures, and containers for returnables and recyclables shall be clean and maintained in good repair.

G. Insect and Rodent Control.

1. General.

The presence of rodents, flies, cockroaches, and other insects on the premises shall be effectively controlled. The premises shall be kept in such condition as to prevent the harborage or feeding of insects or rodents.

2. Openings.

Openings to the outside shall be effectively protected against the entrance of rodents. Outside openings shall be protected against the entrance of insects by tight-fitting, self-closing doors, closed windows, screening,

effective air curtains, or other means. Drive-thru windows and other exterior service windows shall be equipped with approved fly fans, self-closing devices, or free falling windows or screens. Screens for windows, doors, skylights, transoms, intake and exhaust air ducts, and other openings shall be tight-fitting and free of breaks, and screening material shall not be less than 16 mesh to the inch.

3. Application of insecticides and rodenticides.

Insecticides and rodenticides shall not be used in a way that contaminates food, equipment, or utensils; or in a way that constitutes a hazard to employees or other persons; or in a way other than in full compliance with the manufacturer's labeling. (See Appendix IV - Pest Control.)

4. Insect attracting devices.

Insect attracting devices shall be installed in a way that prevents contamination of food and food-contact surfaces. (See Appendix IV - Pest Control.)

CHAPTER VII - CONSTRUCTION AND MAINTENANCE OF PHYSICAL FACILITIES

A. Maintenance.

Floors, walls, and ceilings, including doors, windows, skylights, screens, and similar closures, shall be maintained in good repair.

B. Floors.

1. Floor construction.

Floors and floor coverings of all food preparation, food storage, equipment-washing, and utensil-washing areas, and the floors of all walk-in refrigeration units, storage rooms, dressing rooms, locker rooms, toilet rooms, vestibules, and garbage storage rooms shall be constructed of a smooth, nonabsorbent, and durable material. Nothing in this section shall prohibit the use of anti-slip floor coverings in areas where necessary for safety reasons.

2. Floor carpeting.

Carpeting shall be properly installed, easily cleanable, and maintained in good repair. Carpeting is prohibited in food preparation, equipment-washing, and utensil-washing areas, food storage areas, and toilet room areas where urinals or toilet fixtures are located.

3. Floor drains.

Properly installed, trapped floor drains shall be provided in floors that are water-flushed for cleaning, or that receive discharges of water or other fluid waste from equipment, or in areas where pressure spray

methods for cleaning equipment are used. Such floors shall be constructed only of sealed concrete, terrazzo, ceramic tile, or similar materials and shall be graded to drain.

4. Mats and duckboards.

Mats and duckboards shall be designed to be removable and easily cleanable.

5. Floor junctures.

All junctures between floors and walls shall be sealed. Sealed concrete, terrazzo, ceramic tile, or similar flooring materials shall have junctures coved and sealed if water-flushed.

6. Utility line installation.

Exposed utility service lines and pipes shall be installed in a way that does not obstruct or prevent cleaning of the floor. Installation of exposed horizontal utility lines and pipes on the floor is prohibited.

C. Walls and Ceilings.

1. Construction.

- a. The walls of food preparation areas, walk-in refrigeration units, equipment-washing and utensil-washing areas, toilet rooms, handwashing areas, and garbage storage rooms shall have smooth, nonabsorbent, easily cleanable surfaces and shall be washable up to at least the highest level reached by splash or spray. Concrete blocks or other masonry products used for wall construction in these areas shall be trowelled, skim coated, or receive sufficient

coats of full strength block filler to render a smooth surface prior to the application of a washable paint. Walls of rooms used for the storage of food, single-service and single-use articles, utensils, and equipment shall be sealed or painted; except that, rooms used only for the storage of unopened packages or containers shall be exempt from this requirement.

- b. The ceilings of food preparation areas, walk-in refrigeration units, equipment-washing and utensil-washing areas shall be smooth, nonabsorbent, and easily cleanable; except that, this requirement does not apply to suspended, lay-in ceiling panels, provided they are kept clean and maintained in good repair. Ceilings of food storage rooms, toilet rooms, dressing rooms, and bar areas not installed with suspended, lay-in ceiling panels shall be sealed or painted. Rooms used for the storage of unopened packages or containers shall be exempt from this requirement.

2. Exposed construction.

Studs, joists, and rafters shall not be exposed in walk-in refrigeration units, food preparation areas, equipment-washing and utensil-washing areas, toilet rooms, and vestibules. If exposed in other rooms or areas, they shall be finished to provide an easily cleanable surface.

3. Utility line installation.

Exposed utility service lines and pipes shall be installed in a way that does not obstruct or prevent cleaning of the walls and ceilings. Utility service lines and pipes shall not be unnecessarily exposed on walls or ceilings in walk-in refrigeration units, food preparation areas,

equipment-washing and utensil-washing areas, toilet rooms, and vestibules.

4. Attachments.

Light fixtures, vent covers, wall-mounted fans, decorative materials, and similar equipment attached to walls and ceilings shall be easily cleanable and shall be maintained in good repair.

5. Covering material installation.

Wall and ceiling covering materials shall be attached and sealed to be easily cleanable.

D. Cleaning Physical Facilities.

1. General.

Floors, mats, duckboards, walls, ceilings, attached equipment, and decorative materials shall be kept clean. Cleaning of floors and walls shall be done during periods when the least amount of food is exposed to avoid contamination. This requirement does not apply to cleaning that is necessary due to a spill or other accident. Cleaning methods shall not contaminate food or food-contact surfaces.

2. Service sink.

At least one service sink or curbed cleaning facility equipped with hot and cold water shall be conveniently located and used for the disposal of mop water or similar liquid wastes. This facility may also be used for the cleaning of garbage and refuse containers. The use of lavatories, equipment-washing and utensil-washing sinks, or food preparation sinks for this purpose is prohibited.

E. Lighting.

1. At least 20 foot-candles of light shall be required on all working surfaces in food preparation areas, equipment-washing and utensil-washing areas, handwashing areas, and in toilet rooms.
2. At least 10 foot-candles of light at a distance of 30 inches from the floor shall be required in walk-in refrigeration units, dry food storage areas, and in all other areas. This shall also include dining areas during cleaning operations.
3. Bulbs located over or within food storage areas, food preparation areas, food display areas, food service areas, equipment and utensil cleaning areas, equipment and utensil storage areas, and food equipment shall be shielded, coated or otherwise shatter-resistant. Shielded, coated, or otherwise shatter-resistant bulbs need not be used in areas used only for storing food in unopened packages, provided that the packages will not be affected by broken glass falling onto them and are capable of being cleaned of all debris prior to being opened. An infrared or other heat lamp shall be protected against breakage by a shield surrounding and extending beyond the bulb so that only the face of the bulb is exposed.

F. Ventilation.

All rooms shall be adequately ventilated, and ventilation facilities shall be maintained and operated so that all areas are kept reasonably free of grease, excessive heat, steam, condensation, vapors, smoke, and fumes. Effective air recovery shall be provided as necessary. Ventilation systems shall discharge in such manner as not to create a nuisance. Intake and exhaust air ducts shall be maintained to prevent the entrance of dust, dirt, and other

contaminating materials. (See Appendix I - Equipment Exhaust Systems Design And Installation.)

G. Dressing Rooms and Locker Areas.

1. Dressing rooms and areas.

If employees routinely change clothes within the establishment, rooms or areas shall be designated and used for that purpose and shall be kept clean. These designated rooms or areas shall not be used for food preparation, food service and storage, or for equipment-washing, utensil-washing, or storage.

2. Locker areas.

Lockers or other suitable facilities for the storage of personal items shall be provided and located in a designated room or area where contamination of food, equipment, utensils, linens, and single-service and single-use articles cannot occur.

H. Poisonous or Toxic Materials.

1. Materials permitted.

Only those poisonous or toxic materials that are required for operation and maintenance shall be allowed in a retail food establishment. This requirement does not apply to packaged poisonous or toxic materials and medicines that are offered for retail sale.

2. Labeling.

Containers of poisonous or toxic materials shall be prominently and distinctly marked or labeled for easy identification of contents.

3. Storage.

Poisonous or toxic materials shall be stored so that they shall not contaminate food, equipment, utensils, linens, and single-service and single-use articles. These materials shall be stored by:

- a. Separating the poisonous or toxic materials by spacing or partitioning; and
- b. Locating the poisonous or toxic materials in an area that is not above food, equipment, utensils, linens, and single-service and single-use articles. This paragraph does not apply to equipment and utensil cleaners and sanitizers that are stored in warewashing areas for availability and convenience if the materials are stored to prevent contamination of food, equipment, utensils, linens, and single-service and single-use articles.

4. Retail sale.

Poisonous or toxic materials stored or displayed for retail sale shall not be stored above food, single-service articles, or single-use articles, and shall be separated from these items by spacing or partitioning.

5. Use.

- a. Bactericides, cleaning compounds, or other compounds intended for use on food-contact surfaces shall not be used in a concentration that leaves a toxic residue on such surfaces or that constitutes a hazard to employees or other persons.
- b. Poisonous and toxic materials shall not be used in a way that contaminates food, equipment, utensils,

linens, and single-service and single-use articles, or in a way that constitutes a hazard to employees or other persons, or in a way other than in full compliance with the manufacturer's labeling.

6. Containers.

A container previously used to store poisonous or toxic materials may not be used to store, transport, or dispense food.

7. First-aid supplies and personal medications.

First-aid supplies and personal medications shall be stored in a way that prevents them from contaminating food and food-contact surfaces.

I. Premises.

1. General.

- a. Retail food establishments and all parts of property used in connection with their operations shall be kept free of litter and equipment that is nonfunctional.
- b. The walking and driving surfaces of all exterior areas of retail food establishments shall be maintained in a nuisance-free manner.
- c. The traffic of unnecessary persons through the food preparation, equipment-washing, and utensil-washing areas is prohibited.
- d. Controlled visits and tours may be authorized by the person in charge.

2. Living areas.

No operation of a retail food establishment shall be conducted in any room used as living or sleeping quarters. These operations shall be separated from any living or sleeping quarters by complete partitioning and solid, self-closing doors.

3. Linens and clothes storage.

- a. Clean clothes and linens shall be stored in a clean place and protected from contamination until used.
- b. Soiled clothes and linens shall be stored in non-absorbent containers or washable laundry bags until removed for laundering.

4. Cleaning equipment storage.

Maintenance and cleaning tools such as brooms, mops, vacuum cleaners, and similar equipment shall be maintained and stored in a way that does not contaminate food, equipment, utensils, or linens and shall be stored in an orderly manner.

5. Animals.

Live animals, including birds and turtles, shall be excluded from areas where food is stored, prepared, displayed, or served, provided that a location may be approved where, in the opinion of the health authority, no contamination risk exists. This exclusion does not apply to edible fish, crustacea, shellfish, or to fish in aquariums. Patrol dogs accompanying security or police officers, or support animals accompanying persons with a disability, shall be permitted in dining areas.

CHAPTER VIII - BARBECUE PIT AND PIT-COOKING ROOM CONSTRUCTION

A. Room Construction.

Pit-cooking rooms built according to these minimum construction requirements shall be restricted to barbecue cooking equipment and barbecue cooking activities only. No additional food preparation or processing activities shall be permitted in these rooms unless there is full compliance with all construction requirements pertaining to food preparation rooms. Remaining areas of the establishment shall comply with all applicable requirements of this regulation.

1. Pit-cooking rooms shall be conveniently located to the food service establishment when not physically attached. Approved covered containers shall be used to protect meats conveyed to and from a remote pit-cooking room.
2. All sides and ceiling of the pit room shall be completely enclosed. Screening may be used above wainscot height (4 to 5 feet) on walls and must be at least 16 mesh. All outside openings shall be protected against insects by tight-fitting, self-closing doors, closed windows, screening, approved air curtains, or other means. Canvas flaps or other effective devices may be required to protect against blowing contamination.
3. Floors of pit-cooking rooms, excluding pit floors, shall be constructed of smooth, durable materials such as sealed concrete, quarry tile, vinyl floor covering, or other approved material which shall be maintained in good repair. Floors approved for water flushing, such as quarry tile or sealed

concrete, must be graded to floor drains, and must have junctures between walls and floors sealed.

4. Interior walls shall have smooth, easily cleanable, and washable surfaces to at least wainscot height. If screening is used above wainscot, studs and other exposed bracing shall be sealed or painted. Concrete blocks or other masonry products used for wall construction shall be trowelled, skim-coated, or receive sufficient coats of full strength block filler to render a smooth surface prior to the application of a washable paint.
5. Ceilings shall be finished to provide a smooth, nonabsorbent, and easily cleanable surface. Trusses and rafters shall not be exposed. Ceiling joists shall be properly sealed.

B. Pit Construction.

1. Pit floors may consist of a solid base of compacted clay with a top layer of clean sand to absorb grease drippings. Sand must be replaced as necessary to maintain a safe and sanitary condition. Pit floors may also be constructed of concrete, fire brick, or other material which can be cleaned and maintained.
2. Pit walls (exterior sides only) shall be smooth, easily cleanable, and washable. Concrete blocks or other masonry products used for pit construction must be trowelled, skim coated, or receive sufficient coats of full strength block filler applied to the exterior wall prior to the application of a washable paint.

3. Pit grills, grates, and other supports shall be constructed of smooth, easily cleanable, nonabsorbent, and non-toxic material and shall be in sections that are easily removable for cleaning. Expanded metal and cast iron grating are recommended materials which can be cleaned and maintained. Hog wire, chicken wire, hardware cloth, and similar materials are permitted for single-use only and must be discarded after each cooking period.
4. Pit covers shall be single-use or shall be constructed of a smooth, easily cleanable, nonabsorbent, and non-toxic material.

C. Ventilation.

Pit-cooking rooms shall be ventilated and kept reasonably free of excessive heat, vapors, smoke, and fumes by ventilating the pit itself or by ventilating the room. Pit ventilation can be achieved by a chimney or duct using dampers, pit doors, or other devices to control air flow. Pit-cooking rooms may be ventilated by a cathedral ceiling with screened roof-ridge vents, mechanical exhaust fans, or other effective methods when pits are not directly vented to the outside.

D. Lavatories.

A handwashing lavatory supplied with hot and cold water, mixing faucet, soap, and sanitary towels shall be provided in the pit room.

E. Lighting.

At least 20 foot-candles of light shall be provided on all working surfaces including the handwashing lavatory.

CHAPTER IX - OUTDOOR COOKING AND SERVING OF FOOD

The following requirements, together with all other applicable provisions of this Regulation, shall apply to outdoor cooking and serving of food:

- A. The permanent retail food establishment must possess a valid permit.
- B. The establishment must be adequately equipped and capable of cooking and serving food on the outside in a safe and sanitary manner. In order to cook/serve on the outside, the food service establishment must be capable of performing similar types of cooking/serving inside the establishment. Outdoor cooking/serving of food shall not exceed the volume of food production inside the establishment.
- C. The outdoor cooking site selected shall be in the immediate vicinity of and convenient to the permitted facility, and the method of cooking/serving of food shall be approved by the health authority.
- D. The serving of displayed food must be completed within two hours for any single function or activity. The cooking/serving of food without display shall not be restricted to time limitation.
- E. Only the cooking/serving of food will be allowed outside. All food preparation (i.e., breading, chopping, mixing, etc.) must be accomplished within the permitted establishment.
- F. All utensils/equipment used in outdoor cooking/serving of food must be returned to the permitted establishment for

proper cleaning; however, in-place cleaning may be allowed for grills, steamers, and similar equipment. Sufficient quantities of utensils shall be provided to conduct the activity.

- G. Cooking equipment shall be provided with durable and cleanable lids or covers. Covers or lids may be removed only for monitoring, stirring, or adding additional ingredients.
- H. Food must be protected from contamination during transportation and storage by covered containers, wrapping, or other acceptable methods.
- I. Counter-protector devices shall not be required on food displays. Food shall be kept covered except during times of continuous serving. Leftover portions of displayed food shall be discarded.
- J. Potentially hazardous cold food must be held at 45°F. (7.2°C.) or below and potentially hazardous hot food must be held at 130°F. (54°C.) or above. These temperatures must be maintained during storage, transportation, display, and service. A product thermometer shall be provided and used to assure the attainment and maintenance of proper internal cooking and holding temperatures of all potentially hazardous food.
- K. An approved handwashing lavatory shall be located in the immediate outdoor cooking/serving area or suitable utensils must be provided and used so that there is no hand contact with food. An approved handwashing lavatory shall be provided at outdoor cooking sites that operate on a routine basis.

CHAPTER X - MOBILE FOOD UNITS

A. Mobile Food Service.

1. General.

A mobile food unit shall comply with all provisions of this regulation which are applicable to its operation, provided that the health authority may impose additional requirements when needed to assure the service of safe food, may prohibit the sale of certain potentially hazardous food, and may modify specific requirements for physical facilities when, in the opinion of the health authority, no health hazard will result.

2. Mobile operations.

Mobile food units preparing food shall have preparation and display areas completely enclosed with a solid material, and doors shall be kept closed when not in use. These units shall be provided with a handwashing lavatory equipped with hot and cold water under pressure, soap and disposable towels, an approved waste water tank, and may prepare such foods as hot dogs, corn dogs, pizza, soft ice cream, and other similar foods approved by the health authority.

3. Single-service articles.

Mobile food units shall provide only single-service articles for use by the consumer.

4. Water system.

A mobile food unit requiring a water system shall have a potable water system, under pressure, from an approved water supply system. The system shall be of sufficient capacity to furnish hot and cold water for

handwashing as well as for any food preparation, equipment and utensil cleaning, and sanitizing when these operations are conducted within mobile food units. The water inlet shall be located so that it will not be contaminated by waste discharge, oil, or grease, and it shall be kept capped unless being filled. Water supply hoses shall be clearly identified, kept clean, and used for no other purpose.

5. Waste retention.

Liquid waste from a mobile food unit shall be stored in a permanently installed retention tank that is of at least 15 percent larger capacity than the water supply tank. The waste connection shall be located lower than the water inlet connection to preclude contamination of the potable water system.

B. Base of Operation.

1. A permitted base of operation shall be provided for mobile food units and shall be constructed and operated in compliance with the requirements of this regulation.
2. Mobile food units shall operate from a permitted base of operation and shall return at least daily to such location for all supplies and for all cleaning and servicing operations.

C. Servicing Area and Operations.

1. Servicing Area.

- a. A mobile food unit servicing area shall be provided and shall include at least overhead protection for any supplying, cleaning, or servicing operation. This servicing area will not be required where only packaged food is placed on the mobile food unit.

- b. The surface of the servicing area shall be constructed of a smooth material, such as concrete or asphalt, and shall be maintained in good repair, kept clean, and be properly drained.
- c. The construction of walls and ceilings in the servicing area is exempt from the provisions of this regulation.

2. Servicing operations.

- a. Approved potable water containers shall be installed, stored, and handled in a manner that protects the water and equipment from contamination.
- b. The mobile food unit liquid waste retention tank shall be thoroughly flushed and drained during the servicing operation, and shall be discharged into a sanitary sewerage disposal system.

CHAPTER XI - TEMPORARY FOOD SERVICE

- A. A temporary food service establishment may be permitted to operate at a fair, carnival, circus, special promotion, or similar event for a period of time not to exceed 14 consecutive days. These establishments shall comply with all applicable sections of this regulation, except as outlined in this chapter. The health authority may augment such requirements when needed to assure the service of safe food, may prohibit the sale of certain potentially hazardous food, and may modify specific requirements for physical facilities when, in their opinion, no health hazard will result. Those establishments engaging in only the dispensing of nonpotentially hazardous beverages or non-potentially hazardous prepackaged food are exempt from this regulation.

- B. Floors shall be constructed of concrete, asphalt, tight wood, or other similar cleanable material and shall be kept clean and in good repair.

- C. Walls of the food preparation room shall be constructed of a solid, easily cleanable material up to the serving counter. The upper portion (serving counter height to ceiling) shall be enclosed using either a solid material or screen wire of at least 16 mesh. Where screen wire is used, additional protection may be required to prevent contamination. Studs and joists may be exposed, provided they are sealed. Where cotton candy, candy apples, popcorn, beverages, and similar food are prepared in an approved, enclosed room or machine, and are wrapped or packaged for display, the service area will not be required to be screened or enclosed.

- D. Counter-service openings shall be equipped with approved fly fans, self-closing windows, or free-falling windows or screens. Where fans are used, the size of the openings shall be limited so that the fans effectively prevent the entrance of flying insects.

- E. Ice shall be obtained from an approved source in closed single-service bags or approved covered containers and shall be protected from contamination. Styrofoam containers are prohibited.
- F. Ice and beverages may be dispensed in the service area if protected from contamination. This area must be sheltered but is not required to be screened or enclosed.
- G. Homemade cakes and pies may be offered for sale only if they are nonpotentially hazardous. Slicing of pies and cakes shall be conducted in the food preparation area only.
- H. Adequate facilities shall be provided for washing fresh fruits and vegetables. Graded, polished apples shall not require further washing prior to preparation.
- I. Sinks used for washing, rinsing, and sanitizing of equipment and utensils shall be equipped with hot and cold running water under pressure.
- J. Depending upon the size and number of equipment and utensils to be washed, rinsed, and sanitized, at least a one-compartment sink or other approved method shall be provided, except in those establishments engaged only in the dispensing of prepackaged food. Sink compartment requirements are as follows:
 - 1. One-compartment sink - establishments where only spatulas, tongs, forks, or similar devices are used; or
 - 2. Two-compartment sink - establishments using spatulas, tongs, forks, insert pans, and limited food storage containers; or
 - 3. Three-compartment sink - establishments engaged in the preparation, storage, display, or service of

potentially hazardous food that involves an assortment of stock pots, roasters, and other multi-use utensils.

- K. Equipment shall be installed in a manner that allows it to be maintained in a sanitary condition.
- L. Mechanical ventilation of cooking equipment is not required.
- M. Water supply hoses shall be clearly identified, kept clean, and used for no other purpose.
- N. All temporary establishments shall have a handwashing lavatory, equipped with hot and cold water under pressure through a mixing valve or combination faucet, which is located in the food preparation room. All handwashing facilities shall be provided with soap and sanitary towels.
- O. Water heaters shall be provided in facilities which prepare and serve potentially hazardous food. Other water heating devices may be used where nonpotentially hazardous food is prepared and served.
- P. Liquid waste which is not directly discharged into an approved sewage system shall be kept in a closed container and discharged into an approved sewage disposal system.
- Q. Toilet and service sink facilities are not required in a temporary food service establishment.

CHAPTER XII - SPECIAL EVENTS

- A. Food preparation and service may be permitted for a period of time not to exceed three consecutive days at community celebrations, festivals, special promotions, or similar events. Food preparation and service units shall comply with all applicable sections of this regulation except as outlined in this chapter. The health authority may augment such requirements when needed to assure the service of safe food, may prohibit the sale of certain potentially hazardous food, and may modify specific requirements for physical facilities when in the opinion of the health authority no health hazard will result. Establishments engaged only in the dispensing of nonpotentially hazardous beverages or nonpotentially hazardous prepackaged food are exempt from this regulation.
- B. All food including ice and water must be obtained from sources approved or considered satisfactory by the health authority.
- C. Walls, floors, ceilings, screening, or other structural requirements to control insects and blowing contamination may be waived or modified only when adequate measures for food protection are provided.
- D. An approved probe thermometer shall be required if the menu includes potentially hazardous food.
- E. All food items must be protected from contamination during storage, cooking, display, and service.
- F. All food must arrive ready to be served or ready to be cooked, and when cooked, must require minimal preparation to be served, unless the food service activity is conducted in an approved, enclosed facility.

- G. Equipment shall be installed in a manner that allows it to be maintained in a sanitary condition.
- H. Utensils and single-service articles shall be clean, protected during storage, and in sufficient quantities to conduct the activity.
- I. Mechanical ventilation of cooking equipment is not required.
- J. Water supply hoses shall be clearly identified, kept clean, and used for no other purpose.
- K. Adequate methods must be taken to ensure clean hands. When a handwashing lavatory is not available, a container of water with a spigot, soap, and disposable towels shall be provided. Use of disposable food-handling gloves, moist-type single-service towels, and hand sanitizers is encouraged in addition to handwashing.
- L. Hot water requirements are waived from special events.
- M. Liquid waste which is not directly discharged into an approved sewage system shall be kept in a closed container and discharged into an approved sewage disposal system.
- N. Used cooking oil shall be disposed of in an approved manner.
- O. Toilet and service sink facilities are not required in a food service unit at a special event.

CHAPTER XIII - TRANSPORTATION OF MEAT AND MEAT PRODUCTS

A. General.

Meat and meat products shall be protected from contamination by use of packaging or covered containers while being transported. All food being transported shall meet the requirements of this regulation relating to approved source, food protection, and food storage.

B. Vehicles.

All meat and meat products shall be transported in vehicles so constructed as to protect the meat and meat products from contamination. The storage portion of each vehicle shall be washed and cleaned as often as necessary to prevent contamination.

C. Refrigeration.

All fresh meat and meat products shall be transported so as to maintain a temperature of 45°F. (7.2°C.) or below during the transportation period. Vehicles need not be refrigerated if meat and meat products reach their destination at 45°F. (7.2°C.) or below.

D. Contamination.

Meat and meat products shall be protected from contamination when transported with other products. Meat and meat products shall not be left by delivery personnel where contamination may occur.

E. Clothing.

Meat and meat products shall be delivered by persons with clean hands and wearing clean clothing.

F. Mobile Meat and Seafood Sales.

The mobile sale of prepackaged frozen meat, fish, and seafood, or fresh unprocessed fish and seafood other than shrimp, shall be evaluated under sections of this regulation concerning food supplies, food protection, food storage, and sanitary control of liquid waste. These prepackaged products shall be processed and packaged in an approved facility and shall be sold by the package or case.

CHAPTER XIV - COMPLIANCE PROCEDURES

A. Permits.

No person shall operate a retail food establishment who does not have a permit issued by the health authority. Only a person who complies with the requirements of this regulation shall be entitled to receive or retain such a permit. A permit shall be posted in every retail food establishment at a place designated or approved by the health authority.

B. Issuance of Permit.

1. Any person desiring to operate a retail food establishment shall make written application for a permit on forms provided by the health authority. Such application shall include the name and address of each applicant, the location and type of the proposed retail food establishment, and the signature of each applicant.
2. Prior to approval of an application for a permit, the health authority shall inspect the proposed retail food establishment to determine compliance with the requirements of this regulation.
3. The health authority shall issue a permit to the owner of record if the inspection reveals that the proposed retail food establishment complies with the requirements of this regulation. Permits are not transferable. When a change of ownership occurs, the new owner may be granted a 10-day grace period to comply with the permit and permit fee requirements of this regulation, provided there are no existing conditions that constitute a health hazard.

4. When permits for temporary food service establishments are issued, permits shall be issued for a period of time not to exceed 14 consecutive days.
5. When permits for food service at special events are issued, permits shall be issued for a period of time not to exceed three consecutive days.

C. Suspension of Permit.

1. Permits may be suspended temporarily by the health authority for repeated violations, a routine inspection score below 70, total number of violations, failure to pay permit renewal fee, refusal to complete required training or testing, violation of a hold order, or interference with the health authority in the performance of duty. Prior to permit suspension, the health authority shall notify, in writing, the permit holder, or an employee, of the specific reasons for which the permit is to be suspended and that the permit shall be suspended at the end of the 15 days following service of such notice unless a written request for a hearing is filed with the health authority by the permit holder within such 15-day period. If no written request is filed within 15 days, the permit is suspended and food service operations shall immediately cease. If the hearing upholds the findings of the health authority, the permit shall be suspended until the reasons for the suspension have been corrected.
2. The health authority may, without prior notice or hearing, suspend the permit to operate a retail food establishment when it is determined that the operation of the retail food establishment constitutes an imminent hazard to public health. Following immediate permit suspension, all food service operations shall immediately cease. The health authority shall promptly

notify, in writing, the permit holder, or an employee, of the specific reasons for which the permit was suspended, and that an opportunity for a hearing will be provided if a written request for a hearing is filed with the health authority by the permit holder within 15 days. If no written request for a hearing is filed within 15 days, the suspension is sustained. During the hearing process, the permit shall remain suspended unless the imminent health hazard has been corrected.

3. The suspension of permits provided for in this chapter shall be conducted in accordance, where applicable, with the South Carolina Administrative Procedures Act, Sections 1-23-310 et seq., 1976 Code of Laws of South Carolina as amended, and applicable rules and regulations.

D. Closure of Temporary and Special Event Food Service Establishment.

When the health authority determines that a Temporary or Special Event Food Service Establishment is in repeated violation of applicable provisions of this regulation, the health authority may issue a written order directing the establishment to stop operations until the violations identified are corrected and verified. The period of closure under such an order may not exceed four hours. If the repeated violations have not been corrected in such four-hour period, the health authority may take other enforcement action as it may deem appropriate.

E. Revocation of Permit.

1. The permit may be revoked after an opportunity for a hearing has been provided by the health authority for repeated critical violations of any of the requirements of this regulation, or for interference with the health authority in the performance of duty.

2. A permit may be revoked when three consecutive routine inspections have a rating score of below 70. On the second routine inspection, the health authority shall be accompanied by a supervisor for verification of violations. When the second routine inspection results in a score below 70, the health authority will note on the inspection report that if the next routine inspection score is less than 70, action will be initiated to revoke the permit. In addition, the health authority shall notify the permit holder, by letter, of the stated intentions. On the third routine inspection, the health authority shall be accompanied by a representative of the Division of Food Protection. If the third consecutive routine inspection results in a score below 70, the health authority shall issue a grade C and note on the inspection report that revocation shall be initiated.
3. Notwithstanding any other provisions of this regulation, the permit shall be revoked if the health authority is threatened with bodily harm or physical interference in the performance of inspectional duties.
4. Prior to revocation, the health authority shall notify, in writing, the permit holder, or an employee, of the specific reasons for which the permit is to be revoked and that the permit shall be revoked at the end of the 15 days following service of such notice unless a written request for a hearing is filed with the health authority by the permit holder within such 15-day period.
5. When a permit has been revoked, the holder of the revoked permit may make written application for a new permit; however the health authority may deny a new permit based upon past history.
6. The revocation of a permit provided for in this chapter shall be conducted in accordance with the South Carolina Administrative Procedures Act.

F. Service of Notices.

A notice provided for in this regulation is properly served; when it is delivered to the permit holder, or an employee; or when it is sent by registered or certified mail, return receipt requested, to the last known address of the permit holder; or when it is delivered to an employee designated to be or actually in charge of the facility.

G. Hearings.

The hearings provided for in this regulation shall be conducted in accordance with the South Carolina Administrative Procedures Act.

H. Inspection frequency.

A routine inspection of a retail food establishment shall be performed at least annually. Additional inspections of the retail food establishment shall be performed as often as necessary for the enforcement of this regulation.

I. Access.

Representatives of the health authority, after proper identification, shall be permitted to enter any retail food establishment at any reasonable time for the purpose of making inspections to determine compliance with this regulation. The representatives shall be permitted to examine the records of the establishment to obtain information pertaining to food and supplies purchased, received, or used.

J. Report of Inspections.

When an inspection of a retail food establishment is made, the inspection shall be conducted thoroughly and

completely, and must accurately reflect the sanitary conditions at the time of the inspection. The findings shall be recorded on the inspection report, and upon completion of the inspection, the weighted sum of the items in violation shall be totaled and subtracted from 100 to determine the numerical score. A copy of the completed inspection report form shall be furnished to the permit holder, or an employee, at the conclusion of the inspection.

K. Correction of Violations.

The completed inspection report form shall specify a reasonable period of time for the correction of the violations found, and correction of the violations shall be accomplished within the time periods specified in the following provisions:

1. If an imminent health hazard exists such as, but not limited to, complete lack of refrigeration or the backup of sewage into the establishment or as determined by the health authority, the permit shall be immediately suspended and the establishment shall immediately cease food service operations. Operations shall not be resumed until authorized by the health authority.
2. All violations of four or five point weighted items shall be corrected as soon as possible but, in any event, within 10 days following the inspection. A follow-up inspection shall be conducted to confirm correction.
3. When the rating score of the establishment is in the Grade A or B range, all operational violations of one or two points shall be corrected as soon as possible. Verification of correction will be made at the time of the next routine inspection or earlier if deemed necessary by the health authority.

4. When the rating score of the establishment is in the Grade C range (70-77 points), all operational violations of one or two points shall be corrected within a period of time not to exceed 30 days. A follow-up inspection may be conducted to confirm correction.
5. Structural violations of one or two points should be corrected by the next routine inspection; however, additional time may be granted when such allowances present no immediate health hazard.
6. Other than occurrences where a third consecutive inspection is rated below 70 as described in E.2. of this chapter, when the rating score of the establishment is less than 70, the establishment shall be downgraded to a grade C, and action may be initiated to suspend the permit. Immediate corrective action on all identified items shall be initiated, and a follow-up inspection shall be conducted within 72 hours and as often as necessary to assure correction. If the establishment fails to score 70 or above on the follow-up inspection, action to suspend the permit must be initiated.
7. Correction on-the-spot (COS) of violations may be allowed and points not deleted when:
 - a. The violation is recorded, and
 - b. The violation is not a consecutive violation, and
 - c. Correction of the item is documented on the inspection form.

L. Grading of Retail Food Establishments.

1. Grades of establishments shall be as follows:
 - a. Grade A. An establishment having a rating score of 88-100 points.

- b. Grade B. An establishment having a rating score of 78-87 points.
 - c. Grade C. An establishment having a rating score of 70-77 points.
2. Notwithstanding the grade criteria established above, when a consecutive violation of the same item is discovered, the permit may be suspended or the establishment may be downgraded to the next lower grade, or the health authority may schedule appropriate follow-up inspections to confirm correction. Immediately following each inspection, the health authority shall post the appropriate grade of the establishment, except as outlined below, and shall furnish a copy of the completed inspection report to the permit holder, or an employee of the establishment. When the rating score of the establishment is 78 or above, there are circumstances and conditions under which the grade posted may differ from the numerical score of the inspection report:
- a. The establishment has maintained an average routine inspection rating score of 88 within the past 12 months from the date of the inspection.
 - b. A notation is made on the inspection report that a follow-up inspection will be made within 10 days;
 - c. At the time of the follow-up inspection, the grade appropriate to the inspection report score shall be posted.
3. The permit holder or operator of any establishment in which the grade has been lowered may at any time request an inspection for the purpose of regrading the establishment. Within 10 days following receipt of a

request, including a signed statement that the conditions responsible for the lowering of the grade have, in the applicant's opinion, been corrected, the health authority shall make an inspection, and thereafter as many additional inspections as deemed necessary to assure that the applicant is complying with the higher grade requirements, and if the findings indicate compliance, shall award the higher grade.

M. Existing Equipment.

Retail food establishments in operation prior to the effective date of this regulation, but which do not fully comply with all the construction, equipment, and physical requirements of this regulation, shall be deemed acceptable provided they are capable of being maintained in a sanitary condition. This shall not apply to equipment installed or construction begun after the effective date of this regulation.

N. Training.

If an establishment has been downgraded on two occasions during a 12-month period, or if the permit has been suspended, the manager shall attend a training session in food sanitation conducted by the health authority or satisfactorily complete an examination based on this regulation. Failure to adhere to this requirement shall be deemed a violation of this regulation and handled in accordance with enforcement provisions relative to permit suspension.

O. Examination and Condemnation of Food.

Food may be examined or sampled by the health authority as often as necessary for enforcement of this regulation. The health authority may, upon written notice to the permit holder, or an employee, specifying the reasons therefor,

place a hold order on any food which is believed to be in violation of CHAPTER II - FOOD of this regulation. The health authority shall tag, label, or otherwise identify any food subject to the hold order. No food subject to a hold order shall be used, served, or moved from the establishment. The health authority shall permit storage of the food under conditions specified in the hold order, unless storage is not possible without risk to the public health, in which case immediate destruction shall be ordered and accomplished. The hold order shall state that a request for a hearing may be filed within 15 days and that if no hearing is requested the food shall be destroyed. If a request for a hearing is received, the hearing shall be held within 15 days after receipt of the request. Should the hold order be violated, action may be initiated to suspend the permit. On the basis of evidence produced at that hearing, the hold order may be vacated or the permit holder or person in charge of the food may be directed by written order to denature or destroy such food or to bring it into compliance with the provisions of this regulation. When laboratory analysis is not practical to establish the wholesomeness of food, the health authority may condemn, forbid the sale of, or cause to be removed or destroyed, any food which is determined unwholesome or adulterated.

P. Retail Food Establishments Outside Jurisdiction of the Health Authority.

Food from retail food establishments outside the jurisdiction of the health authority of the State of South Carolina may be sold within the State of South Carolina if such retail food establishments conform to the provisions of this regulation or to substantially equivalent provisions. To determine the extent of compliance with such provisions, the health authority may accept reports from responsible authorities in other jurisdictions where such retail food establishments are located.

Q. Submission of Plans.

When a retail food establishment is constructed or extensively remodeled and when an existing structure is converted to use as a retail food establishment, properly prepared plans and specifications should be submitted to the health authority for review and approval. The plans and specifications should indicate the proposed layout, arrangement, mechanical plans, and construction materials of work areas, and the type and model of proposed fixed equipment and facilities. The health authority shall approve the plans and specifications if they meet the requirements of this regulation. In the absence of plan approval, issuance of the retail food establishment permit shall be determined by compliance with all applicable requirements of this regulation.

R. Permit Fees.

Permit owners must meet the requirements of statutes or regulations requiring fees for retail food establishment permits. Failure to meet such requirements will result in initial permits not being issued or existing permits being suspended.

S. Enforcement Provisions.

This regulation is issued under the authority of Section 44-1-140, 1976 Code of Laws of South Carolina, and subsequent legislation, and shall be enforced by the health authority.

T. Unconstitutionality Clause.

Should any chapter, paragraph, sentence, clause, or phrase of this regulation be declared unconstitutional or invalid for any reason, the remainder of said regulation shall not be affected thereby.

APPENDIX I - EQUIPMENT EXHAUST SYSTEMS DESIGN AND INSTALLATION

A. General.

Exhaust systems for food service equipment shall be designed using the following criteria, except that other engineered systems may be accepted.

B. Hood Size.

1. Canopy hoods shall have a minimum depth of 2 feet (‘) and shall extend at least 6 inches (“) beyond any equipment being ventilated, except that no overhang will be required on sides where aprons are installed. Canopy hoods shall be installed so that the bottom of the hood is between 6’6” and 7’0” above the finished floor.
2. Ventilator hoods shall extend from the wall a minimum of 16”, and shall be installed so that the distance from the top of the equipment to the bottom of the ventilator hood is no more than 24”. Equipment placed under a ventilator hood shall not extend beyond the sides of the hood or more than 36” from the back of the hood.
3. Pants-leg exhaust systems for conveyor cooking equipment and warewashing machines shall be sized to effectively ventilate the equipment served.
4. Eyebrow hoods shall effectively ventilate the door openings of the equipment served.

C. Exhausted Air.

The amount of air exhausted by the equipment exhaust system shall be determined using the following criteria:

1. Canopy hoods.

- a. Standard square foot method.

Hood length x hood width = square feet (ft.²) of hood opening.

Ft.² of hood opening x factor from Table I = cubic feet per minute (CFM) of air exhausted

TABLE I.

<u>Exposed Sides</u>	<u>Factor</u> <u>(CFM/ft.² of hood opening)</u>
4 (central island hood)	125
3 (wall hung hood)	100
2 (corner hung hood, or fitted with aprons)	85
Steam or heat exhaust only	70

- b. Exposed linear foot method.

Exposed linear footage of hood x factor from Table II
= CFM of air exhausted

TABLE II.

<u>Application</u>	<u>Factor (CFM linear foot of hood)</u>
Light duty (no grease, light grease)	150 to 250 CFM
Medium duty fryers and griddles	250 to 350 CFM
Heavy duty (Heavy grease, charbroiler)	350+ CFM

c. Square feet of cooking surface method.

Ft.² of cooking surface of each piece of equipment
(length x width) x the updraft velocity factor from the Table III
= CFM of exhaust required for each piece of equipment

TABLE III.

<u>Application</u>	<u>Updraft Velocity Factor</u>
Steam kettles, ranges, conventional ovens, non-grease producing equipment.....	50 feet per minute (fpm)
fryers/griddles, grease producing equipment	85 fpm
charboilers, high heat and grease producing equipment	150 fpm

Total CFM of air exhausted = the sum of exhaust for all
pieces of equipment.

2. Ventilator and backshelf hoods.

Linear footage of hood x ventilator exhaust factor from
Table IV = CFM of air exhausted

TABLE IV.

<u>Application</u>	<u>Ventilator Exhaust Factor</u>
Light Duty (non-grease producing)	200 CFM
Medium duty (light grease producing)	275 CFM
Heavy duty (heavy grease producing)	350 CFM

D. Duct Size.

Duct area required (in ft.²) = Volume of air exhausted (CFM) ÷ Duct velocity (fpm)

Long hoods with multiple ducts shall have ducts located no closer than 6' apart and no further than 12' apart. Duct velocity shall be a minimum of 1500 fpm.

E. Grease Filter Area Required.

Filter area needed (ft²) = Volume of air exhausted (CFM) ÷ Operating velocity of the filter (fpm)

Space in the hood filter bank not covered by filters shall be fitted with sheet metal blanks. The operating velocity of filters shall be no less than 200 fpm.

F. Static Pressure.

The static pressure against the exhaust fan (measured in inches) = the sum of the resistance of the filters, hood entrance loss, wind pressure on the duct opening, accelerating pressure, and the exhaust ducting from the table below.

TABLE V.

<u>Type of resistance</u>	<u>Average amount of resistance</u>
filter20 inches
hood entrance loss10 inches
wind pressure15 inches
accelerating pressure20 inches
Duct resistance	
Straight duct0025 inches per linear foot
Angles - 90°20 inches each
45°10 inches each
30°05 inches each

G. Fan Size.

The exhaust fan shall be sized to remove the amount of air to be exhausted at the required static pressure.

H. Make-up Air.

Mechanically introduced make-up air shall be supplied as part of the exhaust system when the amount of air to be exhausted exceeds 1500 CFM.

APPENDIX II - EQUIPMENT INSTALLATION REQUIREMENTS

A. General.

Food service equipment shall be installed as follows:

1. Counter-mounted equipment on 4” legs, sealed to counter, or portable.
2. Floor-mounted equipment on 6” legs, casters, or sealed to floor.
3. Equipment not on casters or not portable shall be sealed to the wall and/or adjoining equipment, or spaced to facilitate cleaning.
4. Portable equipment and equipment installed on casters shall be installed with flexible utility lines and/or quick-disconnect couplings.

The above criteria shall be applied to permit all exposed areas of equipment and adjacent surfaces to be accessible for cleaning. If an item of equipment is not portable, is not installed on casters, or is not otherwise easily moved, it shall be (1) sealed to adjoining surfaces with an approved sealant or metal flashing, or (2) provided with sufficient space between and behind the equipment to allow easy access.

B. Counter and Under-counter Installation.

Food equipment which is not readily movable because of size, weight, or rigid utility connections shall be installed on counters or tables as follows:

1. on 4” sanitary legs; or

2. sealed to the counter; or
3. properly spaced to facilitate cleaning; or
4. equipped with an integral lift lever, pivoting foot, polyethylene wear strip, or a similar device which permits easy access under and around the equipment for cleaning.

Under-counter equipment not equipped with casters or sanitary skids shall be installed on 6” sanitary legs, sealed to adjacent surfaces, or properly spaced to facilitate cleaning.

C. Portable Equipment.

Food equipment that is small and light enough to be easily moved by one person shall be considered portable and shall be exempt from these requirements.

D. Spacing Requirements for Food Equipment.

1. Provided access is available from both ends of the equipment and the equipment length is 4’ or less, the equipment shall be spaced at least 6” from walls.
2. Provided access is available from both ends of the equipment and the equipment length is over 4’ but less than 8’, the equipment shall be spaced at least 12” from walls and other equipment.
3. When the equipment length is 8’ or more, the equipment shall be spaced at least 18” from walls and other equipment.
4. A minimum of 6” of space shall be provided between items of equipment to allow access for cleaning. Additional space may be required for large equipment when 6” is not adequate to provide access.

5. When the distance between the top of a walk-in cooler/freezer or canopy hood and the ceiling is 24" or less, an approved enclosure shall be required.
6. Obstruction of the access opening between and/or behind equipment by a chase or rigid utility connection may require additional spacing.

E. Counter-Protector Devices.

Counter-protector devices shall be designed and installed to intercept the direct line between the customer's mouth and the food based upon an average adult mouth height of 54" to 60"; except that in elementary schools which offer self-service to small children, counter heights shall be between 27" and 29" to allow effective counter-protector devices. When tray slides are provided, counter-protector devices may require adjustments to be effective.

APPENDIX III - HOT WATER SIZING REQUIREMENTS

The hot water system shall be sized to meet the peak hot water demand for all fixtures in accordance with the following table:

TABLE		
<u>FIXTURE</u>	<u>GALLONS PER HOUR</u> <u>140°F. (60°C.) WATER</u>	<u>TOTAL</u>
Vegetable Sink	10	_____
1-Compartment Utensil Sink	20	_____
3-Compartment Utensil Sink (paper service)	60	_____
3-Compartment utensil Sink (full service).....	90	_____
Pre-rinse Sink.....	45	_____
3-Compartment Bar Sink	30	_____
*Lavatory..(hand sink)	05	_____
Service Sink..(mop sink, can wash	20	_____
Washer..(_____ gals/hr final rinse x 70 percent)		_____
	+	
	TOTAL DEMAND =	_____

* Shall be at least 110°F. (37.8°C.)

The water heater’s capability to meet peak demand shall be the sum of its storage capacity and recovery capacity at a 100°F. (37.8°C.) rise.

APPENDIX IV - PEST CONTROL

A. Pesticides - Automatic Dispensers.

Automatic pyrethrin-dispensing devices may be used in retail food establishments provided they meet the following criteria for installation and operation.

1. The device shall be installed and operated in compliance with the registered label of the Environmental Protection Agency.
2. Only one dispensing unit per 6,000 cubic feet shall be permitted in food preparation areas, dining areas, or other areas where food contamination or exposure of employees and patrons may occur.
3. The device shall not be installed directly over exposed food, food-contact surfaces, or within 12 horizontal feet of exposed food in front of the device.
4. The dispenser shall be suspended a minimum of 7' from the floor.
5. The insecticidal formulations will not exceed 1 percent concentration of pyrethrins with a 10 percent synergist by weight.
6. This device shall be calibrated to dispense a maximum of 100 milligrams of total material every 15 minutes over a 24 hour period.

B. Insect electrocutors and Low Voltage Fly Traps.

Insect electrocutors and low voltage fly traps used in retail food establishments shall meet the following criteria for installation and operation.

1. Insect electrocutors.

- a. In food preparation and serving areas, meat preparation and produce preparation areas, utensil and equipment washing areas, and clean utensil and equipment storage areas, devices shall be installed as follows:
 - (1) Only wall-mounted units shall be used,
 - (2) Units must be installed so that the center of the device is not more than 3' above the floor.
 - (3) These devices shall not be installed closer than 5' from exposed food, food-contact surfaces, or clean equipment and utensils.
- b. Devices mounted higher than 3' above the floor, including ceiling hung units, are acceptable in bulk storage rooms, stock rooms, receiving areas, corridors, and refuse areas.
- c. Catch trays of insect electrocutors must be emptied as often as necessary.

2. Low voltage fly traps.

Devices used to trap insects by low voltage and/or adherence shall not be installed above exposed food, clean equipment, utensils, and linens, or unwrapped single-service and single-use articles.

Printed May 2010

Total Printing Cost – \$
Total Number of Documents – 2,500
Cost Per Unit – \$



South Carolina Department of Health
and Environmental Control

Environmental Health
Food Protection
www.scdhec.gov/food