

MEMORANDUM

To: All Architects, Owners, and/or Managers of a Food Service Establishment

From: Anne D. Clark, REHS
Environmental Health Supervisor I
Pitt County Environmental Health
adclark@pittcountync.gov

Subject: Food Service Plan Review Application

The intent of this application is to answer questions that are not provided in Food Service Plans regarding the operation of the facility. Your answers to these questions will provide local health department officials with operational procedures you plan to implement when the facility opens.

Please be aware that franchised, chain, and prototypical type facilities plans are required to be submitted to the Environmental Health Services Section; Facility and Plan Review Unit, Parker Lincoln Building, Room 1A109, 2728 Capital Boulevard, Raleigh, NC 27604 for review. For questions related to prototypical and franchised facilities, you may e-mail Kevin.Dodge@ncdenr.gov or call 919-733-2884.

For information concerning facility design and layout you can access the "Guidelines for the Design, Installation and Construction of Food Establishments in North Carolina" by visiting the DENR web page at <http://www.deh.enr.state.nc.us/ehs/food/plan2.htm>.

For all other questions, you may call Pitt County Environmental Health at 252-902-3206.

CONTENTS AND FORMAT OF PLANS AND SPECIFICATIONS

1. The plans should be a minimum of 11 x 14 inches in size, and the layout of the floor plan accurately drawn to a minimum scale of ¼ inches = 1 foot. This is to allow for ease in reading.
2. Information accompanying the plans should include the proposed menu, seating capacity, and projected daily meal volume for food service operation.
3. The plans should show the location and, when requested, elevated drawing of all food service equipment. Each piece of equipment shall be clearly labeled on the plan with its common name.
4. Adequate rapid cooling including ice baths and refrigeration and hot-holding facilities for potentially hazardous food (PHF) should be clearly designated on the plan.
5. When menu dictates, separate food preparation sinks should be labeled and located to preclude contamination and cross-contamination of raw and ready to eat foods.
6. Adequate hand washing facilities used for no other purpose should be designated for each toilet facility and in the immediate area of food preparation and dish washing area.
7. The plan layout should contain room size, aisle space, space between and behind equipment, and the placement of the equipment on the floor.
8. Auxiliary areas such as storage rooms, garbage rooms, toilets, basements and/or cellars used for storage or food preparation should be represented on the plan and all features of these rooms shown as required by the standards.
9. The plans and specifications should also include:
 - a. Entrances, exits, loading/unloading areas and docks;
 - b. Completed finish schedules for each room to include floors, walls, ceilings, and coved juncture bases;
 - c. Plumbing schedule to include location of the floor drains, floor sinks, and water supply lines, overhead wastewater lines, hot water lines, hot water generating equipment with capacity and recovery rate, backflow prevention, and wastewater line connections.
 - d. Electrical layout, electrical panels and disconnects.
10. Lighting Requirements:
 - a. Food contact surfaces = 50 foot candles (540 lux);

- b. Utensil washing area = 50 foot candles (540 lux). Lighting in utensil washing area and on food contact surfaces shall be measured at 30 inches above the floor and/or at the work levels;
 - c. All other areas = 10 foot candles (110 lux). Lighting to be measured at 30 inches above the floor.
 - d. Light bulbs in food preparation, storage, and display areas shall be shatter-proof or shielded so as to preclude the possibility of broken bulbs or lamps falling into food. Shatter-proof or shielded bulbs need not be used in food storage areas where the integrity of the unopened packages will not be affected by broken glass falling onto them and the packages, prior to being opened, are capable of being cleaned. Heat lamps shall be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed in the food preparation area.
11. Insure that all food service/kitchen equipment is National Sanitation Foundation (NSF) listed, Underwriters Laboratories, Inc., Classified for Sanitation or if not NSF or UL listed/classified, be constructed to meet NSF standards as specified according to 15A NCAC 18A .2600, Rule .2617 paragraph (d).
12. Source of water supply and method of sewage disposal. The location of these facilities should be shown, and evidence submitted that State and local regulations are to be complied with.
13. As specified according to 15A NCAC 18A .2600, Rule .2632 "Storage Spaces", all items stored in rooms where food or single-service items are stored shall be at least twelve inches (30.48 cm) above the floor when placed on stationary storage units, or six inches (15.24 cm) above the floor when placed on portable storage units, or otherwise arranged so as to permit thorough cleaning.
14. Ventilation schedule for each room.
15. A mop sink with facilities for hanging wet mops and storage of mop buckets. As specified according to 15A NCAC 18A .2600, Rule .2626, "Disposal of Waste", facilities shall be provided for the washing and storage of all garbage cans and mops. These facilities can be incorporated into a janitor closet.
16. Garbage can washing area/facility. As specified according to 15A NCAC 18A .2600, Rule .2626, "Disposal of Waste", adequate facilities shall be provided for the washing and storage of all garbage cans. The cleaning facilities shall include a combination faucet, hot and cold water, a threaded nozzle and a curbed impervious pad, a minimum recommended size of 36" x 36" x 4" with walls finished being easily cleanable and nonabsorbent to a height of 48 inches. A shelf may also be provided for the storage of

17. cleaning supplies and/or chemicals. ***If the unit is utilized as a combination can wash/mop sink, then the minimum recommended size for this unit is 36" x 48"***.
18. Dumpster pad and location as specified according to 15A NCAC 18A .2600, Rules .2626, "Disposal of Waste."
19. Grease traps and/or grease interceptor location.
20. Grease storage containers and storage location.
21. Cabinets' shelves for storing toxic chemicals.
22. Dressing rooms, locker area, employee rest area, and/or coat rack as required.
23. Completed checklist.
24. Site plan (plot plan).

Food Establishment Plan Review Application

Type of Construction: NEW EXISTING

Name of Establishment: _____

Address: _____

City: _____ Zip Code: _____ County: _____

Phone (if available): ___ - ___ - ___ Fax: ___ - ___ - ___

Owner or Owner's Representative: _____

Address: _____

City & State: _____ Zip Code: _____

Telephone: ___ - ___ - ___ Fax: ___ - ___ - ___

E-mail Address: _____

Applicant: _____

Address: _____

City & State: _____ Zip Code: _____

Telephone: ___ - ___ - ___ Fax: ___ - ___ - ___

E-mail Address: _____

Title (owner, manager, architect, etc.): _____

I hereby certify that the information in this application is correct, and I understand that any deviation without prior approval from this Health Regulatory Office may nullify plan approval.

Signature: _____
(Owner or Responsible Representative)

Hours of Operation:

Sun _____ Mon _____ Tue _____ Wed _____ Thu _____ Fri _____ Sat _____

Projected number of meals to be served between product deliveries:

Breakfast: _____ Lunch: _____ Dinner: _____

Number of seats: _____ Facility total square feet: _____

Projected start date of construction: _____ Projected completion date: _____

TYPE OF FOOD SERVICE:

CHECK ALL THAT APPLY

Restaurant

Sit-down meals

Food Stand

Take-out meals

Drink Stand

Catering

Commissary

Single-service (disposable): Plates Glassware Silverware

Meat Market

Multi-use (reusable): Plates Glassware Silverware

Other (explain): _____

Check categories of Potentially Hazardous Food (PHF) to be prepared and served:

- 1. Meat
- 2. Seafood
- 3. Poultry
- 4. Other (explain): _____

COLD STORAGE

Provide the method used to determine cold storage requirements: _____

Provide total cubic-feet of space dedicated to walk-in cold storage:

- a) Walk-in Refrigeration storage _____
- b) Walk-in freezer storage _____

Provide total cubic-feet of space dedicated to reach-in cold storage:

- a) Reach-in refrigeration storage _____
- b) Reach-in freezer storage _____

Number of refrigeration units: _____

Number of freezer units: _____

THAWING

Indicate by checking the appropriate box how potentially hazardous food (PHF) in each category will be thawed. If “Other” is checked indicate type of food: _____

Thawing Process	Meat	Seafood	Poultry	Other
Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Running Water less than 70 ⁰ F (21 ⁰ C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cooked Frozen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microwave	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HOLDING

How will hot potentially hazardous food (PHF) be maintained at 140⁰ F (60⁰ C) or above during holding for service? Indicate type and number of hot holding units.

How will cold potentially hazardous food (PHF) be maintained at 45⁰ F (7⁰ C) or below during holding for service? Indicate type and number of cold holding units.

List any food that will be held between 45⁰F (7⁰C) and 140⁰F (60⁰C) for any of the following that apply, and indicate how long the food will be held in each category.

STORAGE:**DISPLAY:****SERVICE:****COOLING**

Indicate by checking the appropriate box how potentially hazardous food (PHF) will be cooled to 45⁰ F (7⁰ C) within 6 hours. If “Other” is checked indicate type of food: _____

Cooling Process	Meat	Seafood	Poultry	Other
Shallow Pans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ice Baths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapid Chill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How will ingredients for cold ready-to-eat foods such as tuna, mayonnaise and eggs for salads and sandwiches be pre-chilled before being mixed and/or assembled? _____

FOOD PREPARATION PROCEDURES

The food preparation procedures should include:

- Types of food prepared or handled
- Time of day food is prepared or handled
- Equipment used for preparation or handling

If your company has developed food preparation procedures, they should be submitted.

1. PRODUCE PREPARATION PROCEDURE

- Will produce be washed, rinsed or otherwise handled prior to use? Yes No
- Is there a location used for washing, rinsing or handling produce? Yes No
- Will it be used for other operations? Yes No

Indicate location of produce washing or handling equipment and describe the procedure. Include time of day and frequency of produce preparation, and menu items that contain produce.

2. SEAFOOD PREPARATION PROCEDURE

- Will seafood be washed, rinsed or otherwise handled prior to use? Yes No
- Is there a location used for washing, rinsing or handling seafood? Yes No
- Will it be used for other operations? Yes No

Indicate location of seafood washing or handling (cutting, marinating, shelling, shucking, etc.) equipment and describe the procedure. Include time of day and frequency of seafood preparation, and menu items that contain seafood.

3. POULTRY PREPARATION PROCEDURE

- Will poultry be washed, rinsed or otherwise handled prior to use? Yes No
- Is there a location used for washing, rinsing or handling poultry? Yes No
- Will it be used for other operations? Yes No

Indicate location of poultry washing or handling (cutting, marinating, etc.) equipment and describe the procedure. Include time of day and frequency of poultry preparation, and menu items that contain poultry.

4. PORK and/or RED MEAT PREPARATION PROCEDURE

- Will meat be washed, rinsed or otherwise handled prior to use? Yes No
- Is there a location used for washing, rinsing or handling pork and/or red meat? Yes No
- Will it be used for other operations? Yes No

Indicate location of pork/red meat washing or handling (cutting, marinating, aging, etc.) equipment and describe the procedure. Include time of day and frequency of pork and/or red meat preparation, and menu items that contain pork/red meat.

DRY STORAGE

Provide information on the frequency of deliveries and the expected gross volume that is to be delivered each time: _____

Provide total square feet of shelf space dedicated to dry storage: _____

Where will dry goods be stored? _____

FINISH SCHEDULE

Indicate floor, wall and ceiling finishes (i.e., quarry tile, stainless steel, vinyl coated acoustic tile)

Area	Floor	Base	Walls	Ceiling
Kitchen				
Bar				
Food Storage				
Dry Storage				
Toilet Rooms				
Dressing Rooms				
Garbage & Refuse Storage				
Mop Service Basin Area				
Other				
Other				

WATER SUPPLY- SEWAGE

1. Is water supply: Municipal Well Is sewer: Municipal Septic
2. Will ice: be made on premises or purchased
3. Water heater make and model: _____
4. Water heater storage capacity: _____ gallons.
5. Water heater recovery rate (gallons per hour at 100°F temperature rise): ____ gallons per hour.
(See **Water Heater Calculation Worksheet – Page 9** to calculate recovery rate needed)
6. Check the appropriate box for indicating equipment drains:

Plumbing Fixtures	Indirect Waste			Direct Waste
	Floor sink	Hub Drain	Floor Drain	
Dishwasher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garbage Grinder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ice Machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ice Storage Bins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food Prep Sinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utensil/Pot Wash Sinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steam Tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dipper Wells	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potato Peeler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DISHWASHING FACILITIES

a. Hand dishwashing

- Number of sink compartments:
Size of sink compartments (inches): Length: _____ Width: _____ Depth: _____
Length of drainboards (inches): Right: _____ Left: _____
- What type of sanitizer will be used?

Chlorine Iodine Quaternary Ammonium Hot Water

Other (specify):

b. Mechanical dishwashing

- Will a Dishmachine be used? Yes No

Dishmachine manufacturer and model:

- Type of sanitization: Hot water (180°F) Chemical

c. General

- Describe the procedure of how cooking equipment, cutting boards, counter tops and other food contact surfaces that cannot be submerged in sinks or put through a dishwasher will be cleaned and sanitized?

- Describe location and type (drainboards, wall-mounted or overhead shelves, stationary or portable racks) of air drying space

Provide total square feet of air drying space: _____

HANDWASHING/TOILET FACILITIES

Is there a hand washing sink (with soap and hand-drying device) in each food preparation and warewashing area? Yes No

EMPLOYEE AREA

Is space provided for employee's personal items? Yes No

If so, describe location:

GARBAGE AND REFUSE

1. Will refuse be stored inside? Yes No
If so, where: _____
2. Provision for garbage disposal: Dumpster Compactor
3. Provision for cleaning dumpster/compactor: On-site Off-site
If off-site cleaning, provide name of cleaning contractor: _____
4. Describe location for storage of recyclables: (cooking grease, cardboard, glass, etc.)

CLEANING FACILITIES

1. Specify location and size of area for washing of garbage cans and storage of mops:

2. Is a separate mop basin provided? Yes No
If so, describe type and location: _____
3. Indicate location of cleaning chemical system and chemical storage:

INSECT AND RODENT

1. Are all outside doors self-closing with rodent-proof flashing? Yes No
2. How is fly protection provided on all outside doors?
Self-closing door Fly Fan Screen Door
3. How is fly protection provided on windows?
Self-closing Fly Fan Screening
4. Indicate location of insecticide/rodenticide storage:

5. Location of clean linen storage:

6. Location of dirty linen storage:

WATER HEATER SIZING

Water Heater Calculation Worksheet					
Equipment	Quantity	Times	Size		GPH
One-Comp. Sink (See Note)		X	x x	=	
Two-Comp. Sink (See Note)		X	x x	=	
Three-Comp. Sink (See Note)		X	x x	=	
Four-Comp. Sink (See Note)		X	x x	=	
One-Comp. Prep Sink		X	5 GPH	=	
Two-Comp. Prep Sink		X	10 GPH	=	
Three-Comp. Prep Sink		X	15 GPH	=	
Three Comp. Bar Sink (See Note)		X	x x	=	
Four Comp. Bar Sink (See Note)		X	x x	=	
Hand Sink		X	5 GPH	=	
Pre-Rinse		X	45 GPH	=	
Can Wash		X	10 GPH	=	
Mop Sink		X	5 GPH	=	
Dishmachine		X	GPH = 70% of "Final Rinse Usage"	=	
Cloth Washer		X	15 GPH	=	
Hose Reel		X	5 GPH	=	
Other Equipment		X		=	
Other Equipment		X		=	
Gallons per hour (GPH) Recovery Rate needed (based on 100 ⁰ F temperature rise)				Total	

Note:	GPH = (Sink size in cu. in.) x (7.5 gal./cu. ft.) x (# compartments x .75 capacity)
GPH Calculation for Sinks	1,728 cu. in./cu. ft.
Short version for above	GPH = (Sink size in cu. in.) x (# compartments) x (.003255/cu. in.) Example: (24" x 24" x 14") x (3 compartments) x (.003255) = 79 GPH