



Guidelines for Food Establishment Plan Review

AND PROCEDURES FOR OBTAINING A FOOD OPERATORS CERTIFICATE

The following documents and materials must be submitted to obtain Health District Approval for renovation and construction. Health District approval should be granted prior to the start of any construction or renovation.

1. The application for plan review with the plan review fee.
2. A floor plan, drawn to scale for the entire establishment, which includes all floors and solid waste area.
3. The floor plan showing all equipment in its proposed locations, and a corresponding equipment list.
4. Specification sheets (cut sheets) which correspond with the equipment list for all new equipment.
5. Floor, ceiling, wall and floor/wall juncture types.
6. Proposed menu and/or list of food items to be sold.
7. Copy of proposal or contract for solid waste removal (and grease removal if applicable).
8. Copy of proposal or contract with a pest control operator for the establishment.
9. If your property is connected to public sewers, submit a copy of a recent sewer bill. If property is not connected to public sewers, submit the following:
 - a. **If public sewers are available, provide a letter from the Town Engineer stating that sewer connection is allowed.**
 - b. **If sewers are not available,** A B100 application must be submitted with an as-built of the septic system and a copy of a recent pump out report. The B100 plan review must be completed prior to approval of the Food Establishment Plan Review.
10. If your property is connected to public water, submit a copy of a recent water bill. If property is not connected to public water, submit the following:
 - a. Location of well on site plan, including pollution sources.
 - b. Inspection results of well construction.
 - c. Recent water analysis.
 - d. Copy of well registration application.

S:common/food/planreviewappl2023

PROCEDURE FOR PLAN REVIEW

1. The application, floor plans, equipment schedule, and menu are reviewed by the Sanitarian for code compliance. Please note that requirements for public toilet facilities are also controlled by the Town Building Official.
2. Necessary changes or modifications or request for more information are communicated to the owner or representative.
3. The original or revised plans, once found acceptable, are approved by the Sanitarian. It is strongly advised that the applicant meet with the Sanitarian during his/her review to discuss specifics.
4. The plan review application is approved, by signature of the Sanitarian.
5. Construction/renovation work may begin after building and zoning permits are obtained.
6. The owner should contact the sewer authority of the town for grease trap requirements.
7. It is customary for the Sanitarian to conduct ongoing inspections during the construction phase. The Sanitarian must conduct a final pre-operational inspection prior to any operating permit.

PROCEDURE FOR OBTAINING A FOOD OPERATORS PERMIT

1. A completed food service application must be submitted with the applicable fee.
2. The application must be signed by the Building Official, Fire Marshall, and Zoning Officer prior to issuance of any food operators permit.
3. Your establishment will be assigned a food classification (Class I, II, III, or IV) depending on the types of foods to be served. This classification will determine your inspection frequency. In addition, **all** class III and IV food establishments must comply with the qualified food operator requirement below.
4. The Certified Food Protection Manager (CFPM) and alternate CFPM must sign the application. A copy of the CFPM's certificate must be submitted with the application. The Certified Food Protection Manager must be employed full time at the establishment.
5. A final pre-operational inspection will be conducted by the Sanitarian for compliance with all Health Codes.
6. If all of the above requirements are met, a food operators permit will be issued. A fee, which varies according to the type and seating capacity of the establishment, is due prior to permit issuance.
- 7. The permit must be prominently displayed in public view within the establishment. The permit is non-transferable and becomes null and void when there is a change in the operator of the establishment.**
8. The food service permit must be renewed annually.
9. Any future changes to your menu may result in a classification change, which could void your permit. Any physical changes to your operation or menu should be discussed with your Sanitarian.



EAST SHORE DISTRICT HEALTH DEPARTMENT
 Bringing good health to the towns of Branford, East Haven and North Branford

Date: _____ Fee: _____ Payment Type: _____ Receipt #: _____ Paid by: _____

FOOD ESTABLISHMENT PLAN REVIEW APPLICATION
*Fee: Half the License Fee (*Plan review fee is non-refundable)*

Check type: NEW _____ **RENOVATION** _____ **CHANGE OF OWNERSHIP** _____

Name of Proposed Business: _____

Address of Business: _____

Town: _____ **Zip Code:** _____ **Phone:** () _____

Contact Person Name: _____ **Phone:** () _____

Contact Person Address: _____

Email: _____

Owner Name: _____ **Phone:** () _____

Owner Address: _____

Type of Business: (check all that apply)

RESTAURANT _____ **FOOD STORE** _____ **DELI** _____ **BAKERY** _____ **CATERER**

TAKE OUT ONLY _____ **BAR** _____

Public Water Yes _____ No _____

Public Sewers Yes _____ No _____

Grease Trap Yes _____ No _____ **If yes, Interior** _____ **Exterior** _____

The information supplied above is accurate and correct.

Signature: _____ **Date:** _____

Print name and title: _____

----- *For office use only* -----

ESDHD Approval date: / / **Signed:** _____ **Title:** _____

Comments:



Submit the following items along with your application:

- Proposed menu or complete list of food and beverages to be offered
- Plans clearly drawn to scale (minimum 11x14 inches in size) and include these items below:
 - Floor plan must identify: kitchen layout, serving and seating areas, restrooms, office, employee changing rooms, storage, janitorial and trash area. Include location of any outside equipment or facilities (i.e.: dumpsters, well and septic system if applicable)
 - Equipment layout with equipment specification sheets
 - Identify all handwashing, ware washing and food preparation sinks
 - Finish schedule showing floors, coved base molding, walls and ceilings for each area shown on plans, and lighting plan
 - Provide plumbing layout showing the sewer lines, cleanouts, floor drains, floor sinks, vents, grease trap or grease interceptor, hot and cold water lines, and direction of flow to sanitary sewer

Food Operation Information:

Hours/days of Operation

Sun: _____
 Mon: _____
 Tues: _____
 Wed: _____
 Thurs: _____
 Fri: _____
 Sat: _____

Restaurant Seating Capacity

of Indoor Seats: _____
 # of Outdoor Seats: _____
 Square Footage of Facility: _____

Type of Service (check all that apply)

On-Site consumption
 Off-Site consumption
 Catering
 Other: _____

List type of plates/utensils used for customers:

Total Employees: _____

Meals to be served:

Breakfast: _____
 Lunch: _____
 Dinner: _____



Food Delivery

1. How often will frozen foods be delivered: Daily Weekly Other: _____
2. How often will refrigerated foods be delivered: Daily Weekly Other: _____
3. How often will dry foods or supplies be delivered? Daily Weekly Other: _____

Food Storage: Identify size of: Dry Storage Area: _____ Refrigerated Storage: _____ Freezer Storage: _____
 *Identify on plans where storage will be located.

FOOD PROCESSES: INSTRUCTIONS: Describe the following with as much detail as possible. Indicate Not Applicable (NA) as appropriate (use additional pages if needed)

Process	Identify Food Items	Indicate Equipment Used & Location Process will be completed
Washing food (veggies, fruit)		
Thawing Food		
Cooling Food		
Hot Holding		
Reheating		

Adapted from the Food Establishment Plan Review Manual, 2016 Version, as recommended by the conference of food protection, Plan review committee



Finish Schedule

INSTRUCTIONS: Indicate which materials (quarry tile, stainless steel, FRP, ceramic tile, etc.) are used for each area. Indicate Not Applicable (NA) as appropriate

Room/Area	Floor	Floor/Wall Juncture	Walls	Ceiling
Food Preparation				
Dry Food Storage				
Warewashing Area				
Walk-In Refrigerator/Freezer				
Service Sink				
Refuse Area				
Toilet Rooms				
Other:				
Identify Finishes of cabinets, countertops, and shelving:				

Adapted from the Food Establishment Plan Review Manual, 2016 Version, as recommended by the conference of food protection, Plan review committee



Physical Facilities

INSTRUCTIONS: Explain the following with as much detail as possible. Indicate Not Applicable (NA) as appropriate

Topic	Minimum criteria	Notes
Handwashing facilities	<ul style="list-style-type: none"> Identify number of handwashing sinks in: <ul style="list-style-type: none"> Food Prep Area _____ Warewashing Area _____ Soap, paper towel, trash can available? _____ 	
Warewashing Facilities	<p>Identify type if dish machine: _____</p> <p>Manual dishwashing: Identify the length, width, and depth of the 3-compartment sink: _____</p> <p>How will items being washed be air dry? (drain boards, overhead shelving, etc.) _____</p> <p>What type of Sanitizer will be used? _____</p> <p>Will the largest pot/pan fit into the sink basins or in the dish machine? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If <u>No</u>, what will the procedure for manual cleaning and sanitizing of the items be? _____</p>	
Water Supply	<p><input type="checkbox"/> Public Water <input type="checkbox"/> Private Well Water</p> <p>If Private, provide well water test results</p>	
Sewage Disposal	<p><input type="checkbox"/> Public Sewers <input type="checkbox"/> Private Septic System</p> <p>Will a grease trap be provided? _____</p>	
Backflow Prevention	<p>Will all potable water sources be protected from backflow? _____</p> <p>Note proper backflow prevention on plans</p> <p>Are all floor drains identified on the submitted floor plan? _____</p>	
Toilet Facilities	<p>Identify locations and number of toilet facilities: _____</p> <p>Hot/Cold water provided: <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	



Dressing Rooms, Linens	Will dressing rooms be provided? _____ Describe storage facilities for employee personal belongings: _____ Will linens be laundered on site? _____ If yes, what will be washed and where? _____ If no, how will linens be cleaned? _____	
Poisonous/Cleaning Storage	Where will poisonous and/or toxic chemicals be stored? _____ Where will cleaning and sanitizing solutions be stored at workstations? _____ How will chemicals be separated from food and food-contact surfaces? _____	
Provide any additional information:		

Date: _____ Reviewed By: _____
 Comments: _____

FOOD ESTABLISHMENT PLAN REVIEW CATEGORIES

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SECTION 1 - FACILITIES TO MAINTAIN PRODUCT TEMPERATURE

Sufficient hot-holding and cold-holding facilities should comply with the standards of NSF or equivalent, and should be designed, constructed and installed in conformance with the requirements of these standards.

***REFRIGERATION FACILITIES SIZING AND DESIGN**

Refrigeration facilities shall be adequate to provide for the proper storage, transportation, display, and service of potentially hazardous foods. Specific refrigeration needs will be based upon the menu, number of meals, frequency of delivery, preparation in advance of service. Refrigeration facilities should be supplied with a temperature monitoring device (thermometer) accurate to +/- 2 degrees F.

If potentially hazardous foods are prepared a day or more in advance of service, a rapid cooling device(s) or method capable of cooling potentially hazardous foods from 140°F to 45°F within 6 hours should be provided (140°F to 70°F in 2 hours & 70°F to 45°F in 4 hours). The capacity of the rapid cooling facilities must be sufficient to accommodate the volume of food required to be cooled to 45°F within 6 hours.

Point-of-use refrigerators should be provided at workstations for operations requiring preparation and handling of potentially hazardous foods. Refrigeration units, unless designed for such use, should not be located directly adjacent to cooking equipment or other high heat producing equipment which may tax the cooling system's operation.

****SIZING CONSIDERATION FOR CALCULATING TOTAL REFRIGERATED STORAGE NEEDS INCLUDING WALK-INS***

To plan reserve storage, the following need to be considered: menu, type of service, number of meals per day, number of deliveries per week, adequate air ventilation in the area where refrigeration system will be located.

The following is a suggested formula to establish required reserve storage (note: only 40% of any walk-in unit actually provides usable space):

Total Interior Storage Volume Needed:

$$\frac{\text{Vol. Per meal (cu. Ft.)} \times \text{number of meals}}{.40}$$

Below are typical meal volumes for each of three types of refrigerated storage:

<i>Meat and Poultry</i>	<i>=</i>	<i>.010-.030 Cu. Ft. per meal</i>
<i>Dairy</i>	<i>=</i>	<i>.007-.015 Cu. Ft. per meal</i>
<i>Vegetables and fruit</i>	<i>=</i>	<i>.020-.040 Cu. Ft. per meal</i>

Thus for a restaurant serving 1000 meals between deliveries (assume a minimum of 4 day storage), the following storage capacities are needed:

$$\text{Meat refrigerated storage} = \frac{.030 \text{ cu. Ft./meal} \times 1000 \text{ meals}}{.40}$$

$$= 75 \text{ Cu. Ft.}$$

$$\text{Vegetable refrigerated storage} = \frac{.040 \text{ cu. Ft./meal} \times 1000 \text{ meals}}{.40}$$

$$= 100 \text{ Cu. Ft.}$$

$$\text{Dairy refrigerated storage} = \frac{.015 \text{ cu. Ft./meal} \times 1000 \text{ meals}}{.40}$$

$$= 37.5 \text{ Cu. Ft.}$$

To calculate the interior storage space required for the above example in square feet, simply divide the cu. ft. (volume), in each case, by the height of the unit.

$$\text{Example for meat storage} = \frac{75 \text{ cu. ft.}}{6 \text{ ft. (height)}}$$

$$= 12.5 \text{ sq. ft. of interior floor area}$$

would have to be provided to accommodate storage of meat for 1000 meals. To estimate total interior volume or space, add the requirements for each type of food. To convert interior measurements to exterior floor area simply multiply by 1.25. Thus, for meat storage, in the above example an exterior floor area = 1.25 x 12.5 sq. ft., or 15.6 sq. ft. would be needed.

*ADDITIONAL RECOMMENDATIONS FOR REFRIGERATED STORAGE FACILITIES

- a. Shelving for walk-ins and reach-ins should be NSF listed or equivalent for use under Standard #7 (for refrigeration use).
- b. Interior finishes of walk-in and reach-in refrigeration units that comply with the requirements of NSF Standard #7 or equivalent would be acceptable except for galvanized metal which is not recommended because of its tendency to rust.
- c. All refrigeration units must have numerically scaled indicating thermometers accurate to +/- 2°F with the temperature-sensing unit located in the unit to measure air temperature in the warmest part. All such thermometers should have an externally mounted indicator to facilitate easy reading of the temperature of the unit. Refrigerators and freezers should be capable of maintaining appropriate temperatures when evaluated under test conditions specified under NSF Standard #7 or equivalent.
- d. Approved coved juncture base around the interior.

- e. Approved coved junction base around the exterior.
- f. Approved enclosure between the top of the unit and the ceiling if this space is 24" or less.
- g. Refrigeration units should not be installed exterior to the building if unpackaged foods will be transported from the unit to the food establishment. Only units listed by the National Sanitation Foundation or equivalent for outside installation will be reviewed for that specific application.
- h. If the walk-in floors are water-flushed for cleaning or receive the discharge of liquid waste or excessive melt water, the floors should be non-absorbent (i.e. quarry tile or equal) with silicone or epoxy impregnated grout, sloped to drain outside of the box to a floor drain located within 5 feet of the cooler door.
- i. Walk-in freezer doors should be equipped with pressure relief ports.
- j. Walk-in units should contain incandescent vapor-proof lamps providing a minimum 20-foot candles of light.

Cooking Equipment

All cooking equipment must be NSF approved or equivalent. No non-commercial cooking equipment will be allowed. Equipment must be capable of reaching required product cooking temperature, for the quantities anticipated and within the required time frames.

REQUIREMENT

*HOT HOLDING AND REHEATING FACILITIES

The hot holding facilities must be capable of maintaining potentially hazardous foods at an internal temperature of 140°F or above during display, service or holding periods. In general, heating lamps have not been found effective for this purpose.

Reheating equipment must be capable of raising the internal temperature of potentially hazardous foods rapidly (within a maximum of 2 hours) to at least 165°F. Appropriate product thermometers will be required to monitor temperature.

SECTION 2 - FACILITIES TO PROTECT FOOD

***FOOD PREPARATION SINK**

Adequate facilities must be provided to promote good hygienic practices, sanitary food handling and to minimize the potential of cross contamination between finished and raw products. Separate areas should be designed to segregate food-handling operations involving raw and finished products. It is advisable to provide a separate food preparation sink with a minimum 18" drain board for washing raw fruits and vegetables if these items are served. This sink must be indirectly drained to the waste line. Provide a separate food preparation area for handling, washing and preparing raw meat, fish and poultry if served. Where portable chopping boards are planned (must be NSF approved or equivalent) they should be coded or labeled for specific use.

All food on display, during service or while being held, must be adequately protected from contamination by the use of: packaging; serving line, storage or salad bar protector devices; display cases or by other effective means including dispensers.

Salad bars and sneeze guards should comply with the standards of NSF or equivalent.

Where frozen desserts are being portioned and dispensed, running water-dipping wells should be provided for the in-use storage of dispensing utensils.

SANITATION CONSIDERATIONS FOR FOOD DISPLAY AND SERVICE

INTRODUCTION

Well-designed procedures and equipment are essential for maintaining proper sanitation in the display and service of food. Inadequate equipment and sanitation procedures not only cause contamination and bacterial growth in foods, but they also waste much of the effort in buying, storing, preparing, and serving food products.

This section describes some of the HEW and NSF guidelines on equipment and procedures in food service—guidelines that can help preserve the taste, esthetic appeal, and wholesomeness of food products. Good sanitation is good business.

EQUIPMENT

Inadequate food temperature control, contaminated equipment, and contact of employees and customers with food are the main sources of contamination. The guidelines below ensure that food service equipment holds food at the proper temperature, is easy to clean, and minimizes employee and customer contact with food.

1. Hot and Cold Facilities

Temperature control is crucial for “potentially hazardous foods” such as milk, meat, and eggs, which support rapid growth of organisms. Because the temperature range of 45°F to 140°F is ideal for bacterial growth, display equipment must be able to hold the food at temperatures outside this range—that is, the equipment should keep cold foods below 45°F and hot foods above 140°F. Hot and cold storage facilities must be sufficient in quantity, as well as quality, to hold all potentially hazardous foods outside the temperature danger zone.

2. Display Equipment

Displayed food should be protected from customer contamination by packaging, display cases, or protective devices over all counters, serving lines, and salad bar service areas. Containers should be easy to remove for cleaning. Protective devices should be easy to clean.

3. Display Cases

For easy cleaning, display cases should be designed to eliminate dust collecting projections or moldings, and to minimize open joints and sharp corners. Where sliding doors enclose one or both sides of a display case, they should be readily removable for cleaning. Hinged or pivot doors need to be easily removable if they are designed to allow thorough cleaning.

4. Food Shields

Display stands and buffet tables, such as a salad bar, should have a food shield (see Figure 1 & 2) to minimize contamination by customers. The food shield should intercept the direct line between the customer's mouth and the food on display. On the average, the vertical distance from the customers' mouth to the floor is 4'6" to 5'. This average must be adjusted for children in educational institutions, and for other special installations.

The food shields should be made of easy-to-clean, sanitary materials conforming to materials requirements of NSF Standard #2. Exposed edges of glass shelves or shields must have a safety edge of parent material, or be trimmed.

5. Flatware Dispensers

Containers for dispensing flatware must be readily removable for cleaning. Flatware dispensers should be constructed so that the customers can pick up flatware only by the handles.

6. Serving Utensils

Serving utensils must be of such size and length as to minimize manual contact of employees or customers with the food. Between uses during service, store serving utensils as follows:

- a. In the food with the serving utensil handle extending out of the food, minimum One utensil for each food item, or
- b. In running water, or
- c. Clean and dry

7. Self Service Stations

In areas of customers dispensing their own food or beverage, adequate sneeze guard and/or contamination protection should be provided for the food product and the containers and utensils provided for the customers' use. This includes single service items (disposable) cups, utensils, and plates, containers, etc.

DISPLAY AND SERVICE PROCEDURES

Like service equipment, service procedures should be designed to minimize the contact of employees and customers with the food. Individual packing of food portions or controlled dispensing procedures reduces the amount of contact.

1. Milk and Cream Dispensing

- a. Milk and milk products for drinking purposes shall be provided to the consumer in an unopened commercially filled package not exceeding 1 pint in capacity, or drawn from a commercially filled container stored in a mechanically refrigerated bulk milk dispenser. Where a bulk dispenser for milk and milk products is not available, and portions of less than ½ pint are required for mixed drinks, cereal, or dessert service, milk and milk products may be poured from a commercially filled container of not more than ½-gallon capacity.
- b. Cream or half-and-half shall be packaged in an individual service container, provided in a protected pour-type pitcher, or drawn from a refrigerated dispenser designed for such service.

2. Nondairy Product Dispensing

Nondairy creaming or whitening agents shall be packaged in an individual service container, provided in individual packages, from dispensers, or from containers adequately protected.

3. Condiment Dispensing

Condiments, seasonings, and dressings for table or counter service shall be individually portioned, except that catsup and other sauces may be served in the original container. Sugar for consumer use shall be provided in individual packages or in pour-type dispensers. Pour-type sugar dispensers should be equipped with self-closing lids.

4. Ice Dispensing

Ice for consumer use shall be dispensed by automatic, self-service, ice-dispensing equipment, or by employees with scoops, tongs, or other ice-dispensing utensils. The utensils shall be stored on a clean surface or in the ice, with the utensils handle extending out of the ice. Between uses, ice transport and transfer receptacles shall be stored to protect them from contamination. Ice storage bins shall be drained through an air break. Water used to make ice shall be from an approved source.

5. Re-Service

Leftover portions of food served to a consumer shall not be served again, except packaged food (other than potentially hazardous food) that is still packaged and in sound condition may be re-served.

SECTION 3 - HANDWASHING

***HANDWASHING FACILITY**

Provide **at least one** separate handwashing sink; hand drying device, or disposable towels; supply of hand cleaning agent; and waste receptacle for: each food preparation area, food dispensing area, utensil washing area, and toilet room (required number based on law). Sinks used for food preparation or for washing equipment or utensils shall not be used for handwashing. Likewise, handwash sinks must be used for handwashing only. It is also recommended that all handwash stations in food prep areas be supplied with a nail brush.

Each handwashing sink shall be provided with hot and cold water tempered by means of a mixing valve or a combination faucet. Hot running water available for handwashing shall be a maximum temperature of 115°F. Any self-closing, slow-closing or metering faucet shall be designed to provide a flow of water for at least 15 seconds without the need to reactivate the faucet.

Handwashing sinks shall be of sufficient number and conveniently located for use by all employees at all times in all areas identified above.

It is suggested that a handwash sink be located within 25 feet of a workstation. Splashguard protection is suggested if adequate spacing to adjoining food, food preparation, food contact surfaces, and utensil washing area surfaces (drainboards) is insufficient.

SECTION 4 - WATER SUPPLY

The water supply must be from an approved source. It must be in compliance with Section 19-13-B102 (quality) and 19-13-B51a through 19-13-B51m (location and construction) of the Connecticut Public Health Code.

If the property is served by public water, indicate this on your application.

If the property is (or is expected to be) served by well water, this may be considered a transient non-community public water supply (TNC PWS). TNC-PWS are non-residential water systems that serve 25 or more persons, not necessarily the same persons, on a daily basis for at least 60 days per year.

TNC Water Quality Requirements

At a minimum, the following water quality tests are required to be performed at the frequencies indicated:

Parameter	Frequency of Testing
Total coliform bacteria	quarterly
PH, color, odor, turbidity	quarterly
Nitrite nitrogen	annually
Nitrate nitrogen	annually

If this is a new well, please fill out Attachment "A" Non- Community Public Water System Well Site Approval Application.

If this is an existing well, please fill out Attachment "B" Water System Registration Form

Where a non-municipal water supply and sewage disposal are utilized, the location of these facilities shall be noted on the plans and certification provided that state and local regulations are to be complied with.

***WATER SUPPLY**

Enough potable water for the needs of the food service establishment shall be provided from a source constructed and operated according to law.

Potable water from a municipal water supply is appropriate for the needs of a food service establishment. The quality and yield from a non-community water supply must be specified. We will require a water analysis for any non-community water supply or notification from the Connecticut Department of Public Health, Water Supplies Section, that your non-community supply is in compliance with the Public Health Code for purposes of plan review and at least annually thereafter once in operation.

***WATER USE DATA GUIDE (Suggested Formula for Food Preparation Only)**

-pot sink = 49 gals. For a total fill 49 x 4 fills per day =	196 gals. per day
-Floor wash = 35 gals. 35 x 2 fills per day =	70 gals. per day
-General sanitation =	30 gals. per day
-Prep sink = 15 gals. 15 x 2 fills per day =	30 gals. per day
-3 Full time employees 3 x 30 gals. =	90 gals. per day
-Dish machine 46 x 2 meal periods =	92 gals. per day
Total Daily Usage =	508 gals. per day

These are examples only. Your water use formula amounts may be more or less depending on your specific type of operation.

SECTION 5 - SEWAGE DISPOSAL

All sewage including liquid and kitchen wastes shall be disposed of by a public sewer system or by an on-site sewage disposal system constructed and operated according to law. The adequacy of any non-public sewage disposal (septic) system must be evaluated as part of the foodservice plan review.

If the property (food establishment) is served by an existing on-site subsurface sewage disposal system (septic system), this may be considered a change of use. A complete description and location of the existing septic system, including size of the septic tank(s), grease tank(s), and leaching fields, need to be provided on a plan. If the building housing the newly food establishment is newly constructed, then a code complying sewage disposal system must be documented to the health District.

“Change of use” means any structural, mechanical, or physical change to a building which allows the occupancy to increase (adding bedrooms or increasing seats in a restaurant); or the activities within the building to expand or alter such that, when the building is fully utilized, the design flow or required effective leaching area will increase. If the change-of-use is significant, an upgrade of the on-site subsurface sewage disposal system may be required. All change of uses will need to be evaluated by the Health District.

If there is no soil testing results on file, and sewers are not available, soil testing will be required on the property to determine if a code complying area exists on the property.

IF YOUR ESTABLISHMENT IS ON PUBLIC SANITARY SEWER:

The Department of Environmental Protection / Water Pollution Control Authority/ Building Official now requires an outdoor in-ground grease trap/ interceptor (passive interceptor) of at least 1,000 gallons or an in-door electrically operated Active Grease Recovery Unit (AGRU) be installed according to the following compliance scheduled for FOG (fats, oils, & greases) requirements:

Prior to the Health District issuing a food service license, the designee of the local Water Pollution Control Authority must sign your food service application, indicating your food establishment is in compliance with the following:

- All *new* Class III or IV food establishments must comply with the general permit before discharging to the sanitary sewer
- All *existing* Class III or IV food establishments in existence discharging to the sanitary sewer must comply by July 1, 2011. However, earlier compliance is required if any of the following three conditions apply:
 1. *Change in ownership* facility must comply *within 60 days*
 2. *Renovation* of the facility exceeding \$20,000, or exceeding \$40,000 combined renovations during the calendar year must comply *immediately*
 3. *Problem areas* of the sanitary sewer system designated by the Water Pollution Control Authority *may require immediate compliance*

SECTION 6 - EQUIPMENT AND INSTALLATION

All equipment in food establishments should comply with the design and construction standards of the National Sanitation Foundation (NSF) or equivalent.

Equipment including ice makers and ice storage equipment, food storage and food containers, shelving, and food prep areas shall not be located under exposed or unprotected sewer lines, open stairwells or other sources of contamination.

Equipment should be installed in accordance with the NSF "MANUAL ON SANITATION ASPECTS OF INSTALLATION OF FOOD SERVICE EQUIPMENT" or equivalent and must conform to the requirements of applicable codes.

The following outlines some of the equipment installation requirements to insure proper spacing and sealing to allow for adequate and easy cleaning:

***FLOOR MOUNTED EQUIPMENT**

Whenever possible, equipment should be mounted on NSF approved or equivalent castors or wheels to facilitate easy moving, cleaning and provide a flexibility of operation. Wheeled equipment requiring utility services should be provided with easily accessible quick-disconnects, or the utility service lines should be flexible and of sufficient length to permit moving the equipment for cleaning. Check with local fire safety and building codes to ensure that such installations do not present a conflict.

Floor-mounted equipment not mounted on wheels or castors with the above utility connections should be:

1. Sealed to the floor around the entire perimeter of the equipment (the sealing compound should be pliable but not gummy or sticky, non-shrinking, retain elasticity and provide a water and vermin-tight seal); or
2. Installed on a solid smooth non-absorbent masonry base. Masonry bases and curbs should have a minimum height of 2" and be coved at the junction of the platform and the floor with at least a ¼" radius. The equipment should overhang the base by at least 1" but not more than 4". Spaces between the masonry base and the equipment must be sealed; or
3. Elevated on legs to provide at least a 6" clearance between the floor and equipment. The legs shall comply with the standards of NSF or equivalent with no hollow open ends.
4. Display shelving units, display refrigeration units and display freezers may be exempt from the above.

If all the equipment butts against a wall it must be joined to it and/or sealed in a manner to prevent liquid waste, dust and debris from collecting between the wall and the equipment.

When equipment is butted together or spreader plates are used the resultant joint must be affected in a manner to prevent the accumulation of spillage and debris therein and to facilitate cleaning.

Aisle and working spaces between units of equipment and walls shall be unobstructed and at least 30".

All utility and service lines and openings through the floor must be sealed adequately. Exposed vertical and horizontal pipes and lines must be kept to a minimum. The installation of exposed horizontal utility lines and pipes on the floor is prohibited. Any insulation materials used on utility pipes or lines in the food preparation or dishwashing areas must be smooth non-absorbent and easy to clean. It is desirable that switch boxes, electrical control panels, wall mounted cabinets, etc. be installed out of the cooking and dishwashing areas. Where installed in areas subject to splash from necessary cleaning operations or food preparation or utensil or equipment washing, the electrical units should be watertight and washable.

*TABLE MOUNTED EQUIPMENT

All table mounted equipment should be:

- a. Sealed to the table or counter; or
- b. elevated on legs to provide at least a 4" clearance between the table or counter and equipment and installed to facilitate cleaning; or
- c. Portable: 25 pounds or less, no dimensions exceeding 36", no fixed utility connections.

Equipment open underneath such as drainboards, dish tables, and other tables should be installed 4" away from the wall or sealed to the wall.

SECTION 7 - DRY STORAGE CONSIDERATIONS

The dry storage space required depends upon the menu, number of meals, quantities purchased and frequency of delivery. The location of the storeroom should be adjacent to the food preparation area and convenient to receiving. Adequate ventilation should be provided. Ideally the storeroom should be free of uninsulated steam and water pipes, water heaters, transformers, refrigeration condensing units, steam generators or other heat producing equipment. Temperatures of 50°F to 70°F are recommended.

A suggested formula used in estimating required storage space is as follows:

$$\text{Required Storage Area (sq. ft.)} = \frac{\text{Volume per meal} \times \text{number of meals}}{\text{Average height} \times \text{fraction of usable storeroom floor area}}$$

between deliveries

- (1) Volume per meal = .025 to .050 cu. ft. per meal served*
- (2) Useful storeroom height = 4 to 7 feet*
- (3) Storage time between deliveries = 3 to 14 days*
- (4) Fraction of useable storeroom floor area = .3 to .6*

For example, assume 100 meals per day and a 10 day storage between deliveries = 1000 meals for which to provide storage:

$$\text{Required Storage Area} = \frac{.05 \text{ cu. ft.} \times 1000 \text{ meals}}{5 \text{ ft.} \times .3}$$

Required Storage Area = 33 square feet

Shelving can be constructed of suitably finished hard wood, durable plastic or preferably of metal. The highest shelf for practical use is 7' and the lowest one should be 36" from the floor if bulk items are stored below and 12" from the floor if no bulk below. Clearance between the shelves should be at least 15". Sufficient moveable dunnage racks and dollies (with smooth surfaces, cleanable in case of food spillage or package breakage) should be provided to store all food containers at least 6" above the floor.

Dunnage racks, pallets, etc. should be spaced from walls sufficiently to allow for vermin monitoring and inspection. Food containers shall not be stored under exposed or unprotected sewer lines or leaking water lines. Approved food containers with tight-fitting covers and dollies should be used for storing broken lots of such items as flour, cornmeal, sugar, dried beans, rice and similar foods. Scoops are needed for each food storage container in use.

Wooden shelving and pallets require a higher level of maintenance and are more conducive to insect infestation, *and are not recommended.*

SECTION 8 - DISHWASHING FACILITIES

***MANUAL DISHWASHING**

For manual washing and sanitizing of utensils, a stainless steel sink with no fewer than 3 compartments shall be provided. The sink compartments shall be large enough to permit full submersion of the equipment and utensils and each compartment shall be supplied with adequate hot and cold potable running water. Drainboards or easily moveable dish tables of adequate size and separate for cleaned and soiled utensils shall be provided. The stainless steel sinks and moveable dish tables should comply with the standards of NSF or equivalent.

In some limited applications, a two compartment sink may be approved. This will depend on the menu, method and extent of preparation, and type of equipment proposed. Please be advised that a limitation may be placed on the menu in regards to what can be safely prepared. For example, 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. At least a two compartment sink shall be provided and used for warewashing kitchenware and equipment which does not require sanitization.

The drainboards and dish tables shall be pitched a minimum of 1/8" per foot and drainage directed so as to prevent contamination of other areas of the dish table or drainboard, i.e., into the sink. Drainboards should generally be at least 36-48" long and 30" wide.

A floor drain should be located in the immediate vicinity of the sink. In areas where wet pots, utensils and equipment are air-drying on approved racks or dish tables away from the sink, adequate floor drains should also be provided at those locations.

Adequate facilities shall be provided for preflushing or prescraping equipment and utensils, and shall comply with the standards of NSF or equivalent.

A sink used for dish and warewashing shall be designated for that use only.

***MECHANICAL DISHWASHING**

For mechanical dishwashing utilizing hot water for sanitization, a commercial dishwashing machine shall be provided that is in compliance with the standards of NSF or equivalent. The installation and required appurtenances shall be in conformance with local applicable plumbing codes.

The capacity of the dishwashing machines should be based on the peak number and type of dishes, utensils, flatware, etc. that must be washed per hour. One way to find the capacity in racks per hour for each make and model of machine is to refer to the NSF listing under Standard #3. To determine the required capacity refer to the following guide:

Each 20" x 20" dish rack will accommodate:

- 16 - 9" dinner plates
- 25 - water glasses
- 16 - coffee cups
- 100 - pieces of flatware

Only 70% of the NSF listed capacity (in racks per hour) should be considered as an average capacity. Consult the manufacturers' specification sheets ("cut sheets") for optimum capacity.

A suggested formula to determine the number of dish racks required per hour for a restaurant serving 200 meals at lunch is as follows:

$$200 \text{ plates} = \frac{200 \text{ plates}}{16 \text{ plates/rack}} = 13 \text{ racks}$$

$$200 \text{ Water glasses} = \frac{200 \text{ glasses}}{25 \text{ glasses/rack}} = 8 \text{ racks}$$

$$200 \text{ coffee cups} = \frac{200 \text{ coffee cups}}{16 \text{ cups/rack}} = 13 \text{ racks}$$

$$200 \text{ pieces of flatware} = \frac{200 \text{ pieces}}{100 \text{ pieces/rack}} = 2 \text{ racks}$$

$$\text{Required total working capacity} = 36 \text{ racks/hour}$$

Since this figure is 70% of the listed capacity, a mechanical dishwasher with a minimum listed capacity of:

$$\frac{36}{.70 (70\%)} = 51 \text{ racks/hour would be recommended}$$

An adequate facility for preflushing or prescraping shall be provided on the soiled dish side of the dishwashing machine. The facility shall comply with the standards of NSF or equivalent.

Drain boards fabricated in conformance with NSF standards or equivalent shall be provided and shall be of adequate size for the proper handling of utensils and located so as not to interfere with the proper use of the dishwashing facilities. NSF listed or equivalent mobile dish tables may be acceptable for use in lieu of drain boards.

*CHEMICAL DISHWASHING

Chemical dishwashing machines should comply with NSF Standard #3 or equivalent. The installation should conform to NSF standards or equivalent and applicable code requirements. Among the specific requirements for the installation of an approved chemical dishwashing machine are the following:

1. The chemical sanitizing feeder should be listed by NSF or equivalent and be compatible with the specific make and model of machine in question.
2. An approved chemical test kit shall be available and used.
3. A visual flow indicator should be provided to monitor the operation of the sanitizing agent feeder. Other indication devices such as audible alarms may also be used. The flow indication devices must be installed so as to be conspicuous to the operator.

Any chemical dishwasher proposed for use must be on the Connecticut Department of Public Health list of approved chemical sanitizer machines. You should check with the sanitarian if you have any questions regarding this.

For all mechanical dishwashing machines, the waste line must not be directly connected to the sewer line. Except that it may be connected directly on the inlet side of a properly vented floor drain when the floor drain is within 5' and the drain line from the machine is properly trapped and vented.

Adequate facilities shall be provided to air dry washed utensils and equipment. Storage facilities shall be provided to store cleaned and sanitized utensils and equipment at least 12" above the floor protected from splash, dust, overhead plumbing or other contamination, on fixed shelves or in enclosed cabinets. The plan must specify location and facilities used for storing all utensils and equipment.

SECTION 9 - DETERMINING HOT WATER SUPPLY REQUIREMENTS

The hot water supply shall be sufficient to satisfy the continuous and peak hot water demands of the establishment. Hot water must be supplied in all areas of food preparation, equipment washing, and for other general purposes. Hot running water available for handwashing shall be a minimum temperature of 110°F. Generally, hot water for mechanical dishwashing must be 150°F minimum for washing and 180°F minimum for sanitizing. The temperature of the wash solution in spray-type ware washers that use chemicals to sanitize may not be less than 120°F.

Wash water temperature for a warewashing machines: The temperature of the wash water shall not be less than:

- 165 degrees F. for a single temperature stationary rack machine;
- 160 degrees F. for a single tank, conveyor, dual temperature machine;
- 150 degrees F. for a single tank, stationary rack;
- 150 degrees F. for a multi-tank, conveyor, multi-temperature machine.

When hot water is relied upon for sanitization in mechanical warewashing, the following water temperatures must be supplied:

- 165 degree F for a single temperature stationary rack machine;
- 180 degree F for all other machines

The maximum hot water sanitizing temperature for all machines is 194 degree F.

All items being sanitized in a mechanical hot water sanitizing machine shall reach a minimum surface temperature of 160 degree F.

For purposes of sizing the hot water generating capability, assume a supply temperature requirement of 140°F to each fixture and to the mechanical dishwashing machines.

In the absence of specific hot water usage figures for the equipment, the following chart may be used to provide an approximation:

<u>Equipment Type</u>	<u>Gallons Per Hour</u>	
	<u>High</u>	<u>Low</u>
Vegetable Sink	15	15
Single pot sink	20	15
Double pot sink	40	30
Triple pot sink	60	45
Pre-rinse for dishes-shower head type	45	45
Bar sink-three compartment	20	
Bar sink-four compartment	25	
Chemical sanitizing glasswasher	60	
Lavatory	5	5
Cook sink	10	10
Hot water filling faucet	15	15
Bain Marie	10	10
Coffee urn	5	5
Kettle stand	5	5
Garbage can washer	50	50
Nine and twelve pound clothes washer	45	45
Sixteen pound clothes washer	60	60
Employee shower	20	20

High – to be used when multi-use eating utensils are utilized

Low – To be used in carry-out food operations where single service eating utensils are utilized

One way to estimate the projected hot water demand (gallons per hour final rinse) of mechanical dishwashing machines, pot and pan washers and silverware washers, is to refer to the NSF Standard #3 or equivalent for the particular make and model of machine.

All hot water generating equipment should conform to NSF Standard #5 or equivalent. The NSF Standard #5 listing or equivalent may be used to determine the actual capacity of any listed heater. Consult the manufacturers’ “cut sheets” for hot water supply requirements.

***POT SINK CALCULATION**

1,728 cubic Inches	=	1 Cubic Foot
7.48 Gallons	=	1 Cubic Foot
14" x 18" x 21"	=	Size of one pot sink compartment
14" x 18" x 21"	=	5,292.00 Cubic Inches
5,292.00 ÷ 1,728	=	3.06 Cubic Feet
3.06 x 7.48	=	22.88 Gallons in one compartment of sink
22.88 x 3	=	68.64 Gallons needed to fill 3 pots compartments

SECTION 10 - FINISH SCHEDULE

The following chart and footnotes provide acceptable finishes for floors, walls and ceiling, by area:

	<u>FLOOR</u>	<u>WALL</u>	<u>CEILING</u>
*Kitchen Cooking	-Some commercial grade vinyl tile, -Quarry tile -Seamless epoxy -Terrazzo	Stainless steel, Aluminum, Glazed wall tile	Fiberboard Plastic coated, metal clad, dry- wall with epoxy, glazed surface, plastic laminate
Food prep & warewashing	Same as above	Same, plus approved wall panels, drywall taped epoxy, block filled & epoxy paint, glazed surface	Same as above
*DRY STORAGE	Same, plus sealed concrete, commercial grade vinyl tile	Same as above	Same as above
*SERVING	Same as above	Same as above	Same as above
*TOILET ROOM	Quarry tile, poured sealed concrete	Same as above	Same as above
*JANITOR CLOSET	Quarry tile, poured sealed concrete	Same as above	Same as above
*WALK-INS	Quarry tile, aluminum, stainless steel, poured sealed concrete	Aluminum, stainless steel	Aluminum stainless steel

Notes:

FLOORS

1. All floor coverings in food preparation, food storage, utensil-washing areas, walk-in refrigeration units, dressing rooms, locker rooms, toilet rooms and vestibules must be smooth, non-absorbent, easily cleanable and durable. Anti-slip floor covering may be used in high traffic areas only.
2. Any alternate materials not listed in the above chart must be submitted for evaluation.
3. Coving at base junctures must be compatible to both wall and floor coverings and provide at least $\frac{1}{4}$ inch radius.
4. 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. Floors must be sloped to drain, at least 1/8" per foot.
5. Grouting must be non-absorbent and impregnated with epoxy, silicone or polyurethane.
6. All walk-in refrigeration units both with prefabricated floors and without, should be installed according to the NSF guide "Special Consideration Regarding Installation of Walk-In Refrigerators and Storage Freezers" or equivalent.

WALLS

1. The walls, including non-supporting partitions, wall coverings and ceilings of walk-in refrigerating units, food preparation areas, equipment washing and utensil washing areas, toilet rooms and vestibules shall be smooth, non-absorbent and easily cleanable. Light colors are recommended for walls and ceilings. Studs, joists and rafters shall not be exposed in walk-in refrigerating units, food preparation areas, equipment washing and utensil washing areas, toilet rooms and vestibules. Where permitted they must be finished to provide an easily cleanable surface.
2. All alternate materials not listed in the above chart must be submitted for evaluation.
3. Glazed surfaces could be glazed block or brick or ceramic tile. Grouting must be non-absorbent and impregnated with epoxy, silicone, polyurethane or an equivalent compound. Concrete block if used must be rendered non-porous and smooth by the application of an approved block filler followed by the application of an epoxy-type covering or equivalent. All mortar joints shall be only slightly tooled and suitably finished to render them easily cleanable.

4. Plastic laminated panels may find applications. Joint finishes should be compatible with the wall structure. Voids should be eliminated at joints.

CEILINGS

Finishes shall be light-colored, smooth, non-absorbent and easily cleanable. Acoustical material free of porous perforations, smooth and durable enough to be washed with a cloth or sponge may be used, provided ventilation is adequate to minimize soiling.

SECTION 11 - TOILET FACILITIES

Toilet facilities shall be installed according to law and shall be the number required by law. They shall be conveniently located and shall be accessible to employees at all times.

Toilet and hand washing facilities shall be accessible to the public and shall be in conformance with Sections 19-13-B105 through 19-13-B113 of the Connecticut Public Health Code.

Toilets and urinals shall be designed to be easily cleanable.

Toilet rooms shall be completely enclosed and shall have tight fitting, self-closing, doors and shall be actively vented to the outside. Doors shall not contain openings to permit the entrance of insects or rodents, and must be equipped with self-closing devices.

Toilet facilities shall be of adequate number for customers, workers and the handicapped.

You should consult with your local Building Official on the Building Code requirements for public toilet facilities and handicap accessibility.

Accessible facilities should meet ANSI 117.1 Standards.

The State of Connecticut Building Code requires that all new or newly renovated food service establishments provide toilet facilities for the public. The public toilet facilities must be separated by sex unless the total occupant load is 15 or less. Any questions should be directed to your Building Official.

SECTION 12 - PLUMBING AND CROSS CONNECTION CONTROL

Plumbing shall be sized and installed according to applicable codes. There shall be no cross connections between the potable water supply and any non-potable or questionable water supply. Where non-potable water systems are permitted for purposes such as air conditioning and fire protection, the non-potable water must not contact directly or indirectly: food, potable water or equipment that contacts food or utensils. The piping of any non-potable water system shall be durably identified so that it is readily distinguishable from piping that carries potable water.

Water supply systems to the foodservice facility may require backsiphon protection. You should check with the Building Official and the SCCRWA for potable water supply system protection.

The potable water system shall be installed to preclude the possibility of backflow. Devices shall be installed to protect against backflow and backsiphonage at all fixtures and equipment unless an air gap is provided. The air gap must be at least twice the diameter of the water supply inlet, but not less than 1" between the water supply inlet and the fixture's flood level rim.

***SUBMERGED INLET PROTECTION**

The following provides an example of some of the types of equipment with potentially submerged inlets and required backflow/backsiphonage protection:

<u>Equipment</u>	<u>Backflow/Backsiphonage Preventer Required in Lieu of Air Gap</u>
1. Boiler with chemicals added	Reduced pressure device
2. Boiler with no chemicals added	Air vent type backflow preventer
3. Carbonators for beverage dispensers	Approved backflow preventer (in agreement with local plumbing codes)
4. Lawn sprinkler system with no chemicals added	Atmospheric or pressure vacuum breaker
5. Flush valve toilets	Atmospheric or pressure vacuum breaker
6. Threaded faucets inside & outside of establishments	Hose bib-type vacuum breaker
7. Preflush hose with a nozzle head that may be submerged	Pressure vacuum breaker
8. Inlets which are or may become submerged:	

Equipment

Backflow/Backsiphonage Preventer
Required in Lieu of Air Gap

a.	Supply inlet to garbage grinder	Atmospheric vacuum breaker*
b.	Supply inlet to dish table trough	" " "
c.	Fill line for steam kettle	" " "
d.	Supply line for mechanical dishwashing machine	" " "
e.	Supply line to soap dispenser or mechanical dishwashing machine	" " "
f.	Garbage can washer	" " "
g.	Soap portioner on faucet	Soap portioner must contain an internal air gap
h.	Water wash system for exhaust	Air vent type backflow preventer hood

*Atmospheric vacuum breakers shall be located beyond the last control valve prior to the first outlet and at an elevation higher than any outlet and shall be installed so as not to be subjected to backpressure or continuous operating pressure of more than 12 hours duration.

DRAINS

A direct connection may not exist between the sewerage system and any drains originating from equipment in which food, portable equipment, or utensils are placed, except if otherwise required by state plumbing codes. When a dishwashing machine is located within 5 feet of a trapped floor drain, the dishwasher waste outlet may be connected directly on the inlet side of a properly vented floor drain trap.

Other examples of required drain line connections are:

<u>Equipment</u>	<u>Drain Line connection required to Sewer Line</u>
1. Water-cooled condenser for Ice machine or other refrigeration system	Indirect connection
2. Ice bin	Indirect connection
3. Water cooled coolant discharge line on ice machine	Air gap

A cross connection is defined as any connection or structural arrangement between a potable water system and a non-potable source, liquid or otherwise, through which backflow can occur.

Backflow is defined as the flow of water or other liquids, mixtures, or substances into a potable water system from any source, other than the intended source.

A connection to a sewer line may be direct or indirect:

- * A direct connection is a solid physical joining to a waste or soil line;
- * An indirect connection is other than a solid physical joining to a waste or soil line (such as a submerged inlet).

An indirect connection may be one of two types:

- * An air gap is the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying potable water to a tank or plumbing fixture.
- * A connection that does not provide an unobstructed vertical distance and is not solidly connected but precludes the possibility of backflow to a potable water source.

SECTION 13 - INSECT AND RODENT CONTROL

Openings to the outside shall be effectively protected against the entrance of rodents. Outside openings shall be protected against the entrance of insects by the installation of tight fitting self-closing doors, closed windows, self-closing serving windows at drive-throughs, screening, controlled air currents, vestibules or other means approved by the Health District. Screen doors shall be self-closing; and screens for windows, doors, skylights, transoms, intake air ducts and other openings to the outside shall be tight fitting and free of breaks. Screening material shall not be less than sixteen mesh to the inch.

Loading docks and delivery doors should be provided with effective air curtains or vestibules with self-closing doors to preclude the entrance of insects. It is recommended that outside lighting around loading areas and entrances be sodium vapor rather than mercury vapor to decrease insect attraction.

All foundations shall be rodent proof. Openings between the floor and bottom of outer doors shall be adequately flashed with rodent proof material to eliminate any opening.

SECTION 14 - LIGHTING

Permanently fixed artificial light sources shall be installed to provide a light intensity of at least 50-foot candles (540 lux) at a surface where a food employee is working with unpackaged potentially hazardous food or with food, utensils, and equipment such as knives, slicers, grinders, or saws where employee safety is a factor. Areas where fresh produce or packaged foods are sold or offered for consumption; areas used for handwashing, warewashing, and equipment and utensil storage; and in toilet rooms shall be provided with at least 20 foot candles (220 lux) of light (measured at a distance of 30" from the floor). A light intensity of at least 10-foot candles (110lux) shall be provided in all areas and rooms during periods of cleaning (measured at a distance of 30" from the floor).

Shielding such as plastic shields, plastic sleeves with end caps, shatterproof bulbs and/or other approved devices shall be provided for all artificial lighting fixtures located in areas where there is exposed food; clean equipment, utensils, and liners; or unwrapped single-service and single-use articles.

Heat lamps, where permitted, shall be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed.

SECTION 15 - VENTILATION

All rooms shall have sufficient ventilation to keep them free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes. Ventilation systems shall be designed and installed according to law.

Cooking ventilation hoods and devices shall be designed and installed to prevent grease or condensation from collecting on walls, ceilings, fire suppression supply piping and from dripping into food or onto food contact surfaces.

All hoods should comply with NSF Standard #2 or equivalent and be designed, constructed and installed in conformance with the National Fire Protection Association Bulletin #96 and other applicable fire safety codes. New hood installation requires a building permit from the Building Official.

Make up air intakes must be screened (bird screen) and filtered to prevent the entrance of dust, dirt, insects and other contaminating material. Where the introduction of make up air will cause condensation, drafting or interfere with the exhaust or vapor capture efficiency of the hood, the make up air must be tempered. A make up air system will be required if the exhaust is greater than 1500 cfm (cubic feet per meter). Tempering of makeup air may be necessary in certain climates.

The installation of fire suppression system piping in the unfiltered air space in exhaust hoods should be limited to vertical runs as much as physically possible to minimize grease collection. Exposed piping must be cleanable.

Hot water sanitizing dishwashing machines must be provided with adequate ventilation sized according to the dishwashing machine manufacturer's specifications.

All hoods should be tested prior to use.

Lighting may be required to comply with state or local code requirements.

SECTION 16 - UTILITY FACILITY

At least one utility sink or curbed cleaning facility with a floor drain shall be provided for cleaning mops and for the disposal of mop water or similar liquid wastes.

Mop sinks are acceptable; the water supply must be properly protected against backsiphonage.

A properly sized mop and broom rack shall be provided. All mops should be allowed to air dry, preferably above the mop sinks.

SECTION 17 - DRESSING ROOMS AND LOCKERS

Rooms or areas separate from food preparation, storage or service areas, and separate from utensil washing or storage areas should be provided if employees will routinely change clothes within the establishment.

Lockers or other suitable storage facilities shall be located in dressing areas. The top of the locker(s) should be sloped (not flat).

If dressing rooms are not required, separate facilities should be provided for coats, sweaters and other personal belongings.

SECTION 18 - STORAGE FOR GARBAGE, REFUSE, AND RECYCLABLES

Rooms for the storage of garbage, refuse, or recyclables shall be constructed of easily cleanable, non-absorbent, washable materials, and shall be insect-proof and rodent-proof. Containers, dumpsters, and compactor systems located outside shall be stored on or above a smooth, level surface of non-absorbent material such as 4" sealed concrete. Sealed road-grade asphalt shall be allowable only if permitted by the Town*

Used-grease containers (dumpsters) are required in any establishment in which used grease will be generated.

Adequate indoor and/or outdoor storage facilities must be provided for all state-mandated and any other town-mandated, recyclable items that will be generated by or commonly disposed of at the establishment. The state-mandated items include corrugated cardboard, glass food or beverage containers, metal food or beverage containers, scrap metal, newspaper, and white office paper. The applicant should contact the Town for details about local requirements.

Provisions must be made for compliance with State beverage container redemption) laws, Section 22a-243 through 22a-245 of the Connecticut General Statutes, as they shall be amended from time to time.

Please be aware that construction and location of solid waste facilities for your establishment may require Zoning approval from the Town.

SECTION 19 – CERTIFIED FOOD PROTECTION MANAGER

Section 19-13-B42(s)(4) of the Public Health Code

Each person owning, operating, or managing any food service establishment designated either as a class III or class IV shall be a Certified Food Protection Manager (CFPM), or shall employ at least one CFPM who is in a supervisory position at said establishment. Certified Food Protection Manager is a food operator employed in a full-time position who has demonstrated a knowledge of safe food handling techniques. Supervisory position means that position of a person who directs and inspects the performance of food service workers. Responsibilities of CFPM: The CFPM is responsible for operating the food service establishment in compliance with all the provisions of section 19-13-B42 of the Public Health Code. The Certified Food Protection Manager of each food service establishment is responsible for ensuring training of food preparation personnel. All such personnel shall receive training that shall include but not necessarily be limited to: instruction in proper food temperature control; food protection; personal health and cleanliness; and sanitation of the facility, equipment, supplies, and utensils. The Certified Food Protection Manager shall maintain written documentation of a training program and training records of individual employees, and shall make these records available to the local health department upon request.

REPLACEMENT OF CERTIFIED FOOD PROTECTION MANAGER NOT PRESENT

Section 19-13-B42(s) (7) of the Public Health Code

The owner/operator of the food service establishment shall designate an alternate person who has complied with Section 19-13-B42(s) (6)(b) to be in charge at all times when the CFPM cannot be present. This alternate person in charge shall be *responsible for* ensuring that all employees comply with the requirements of this section, and that foods are safely prepared; handling emergencies; admitting the inspector; and receiving and signing their inspection report.

REPLACEMENT OF CERTIFIED FOOD PROTECTION MANAGER NOT PRESENT

Section 19-13-B42(s) (7) of the Public Health Code

Whenever the Certified Food Protection Manager terminates employment, is terminated or is transferred, the person owning, operating, or managing the food service establishment shall notify the local health department in writing. A replacement CFPM shall be employed within sixty (60) days from the date of termination or transfer of the CFPM.

CLOSURE OF A FOOD ESTABLISHMENT FOR FAILURE TO EMPLOY AN ON-SITE CERTIFIED FOOD PROTECTION MANAGER

Section 19-13-B42 (U) of the Public Health Code

If a Certified Food Protection Manager is not employed onsite, except as provided in Section 19-13-B42(s) (7), the food service establishment has thirty (30) days to comply. If correction has not been made after thirty (30) days, the Director of Health shall take immediate steps to close the food service establishment.

SECTION 20 –FOOD TRANSPORT REQUIREMENTS

Food transport equipment shall be:

- NSF or equivalent
- Safe, durable, corrosion-resistant and nonabsorbent
- Withstand repeated warewashing
- Smooth, easily cleanable surface
- Resistant to chipping, pitting, crazing, scratching, etc.
- Certified or classified as ANSI- accredited certification program
- Able to keep the foods at proper temperatures for the necessary amount of time
- Of adequate size or quantity to transport all potentially hazardous foods, under safe temperature and sanitary conditions.

FATS, OILS AND GREASE “FOG”

Important Information for Class II, Class III and Class IV Food Preparation Establishments

The Connecticut Department of Environmental Protection has issued a General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments effective September 30, 2005 for Class II, Class III, and Class IV food service establishments.

What do Class II, Class III and Class IV establishments need to know?

The general permit regulates the discharge of wastewaters from Class II, Class III or Class IV food preparation establishments, as defined in the Connecticut Public Health Code, and that discharge to a sanitary sewer.

What does this mean for me?

If you received this notice, your establishment is defined as Class II, Class III or Class IV. You must comply with the new general permit requirements according to the timeline outlined below. You will need to work with the Town of Branford Water Pollution Facility, East Shore District Health Department, Town of Branford Engineering Department, and Building Code Enforcement to determine your compliance needs. No Department of Environmental Protection registration is required.

When do I need to comply?

The Compliance schedule is as follows:

- After September 30, 2005, any new food preparation establishments must comply with the permit before discharging to the sanitary sewer.
- All existing Class II, Class III, and Class IV food preparation establishments in existence prior to September 30, 2005, discharging to the sanitary sewer must comply by July 1, 2011. However, earlier compliance is required if any of the three conditions apply:
 1. Change in ownership facility must comply **within 60 days**.
 2. Renovation of the facility exceeding \$20,000, or exceeding \$40,000, combined renovations during the calendar year must comply with requirements **immediately**.
 3. Problem areas of the sanitary sewer system designated by the Water Pollution Facility **may require immediate compliance**.

How do I proceed to make my establishment in compliance?

A plumbing permit must be secured by the Building Department prior to the installation of any such recovery units.

What are the General Permit requirements?

The General Permit includes, but is not limited to, the following conditions:

- Treatment requirements (grease trap/interceptor)
- Effluent limitations on discharge to sanitary sewer
- Pollution prevention and Best Management Practices (BMPs)
- Reporting and record keeping requirements
- Recording and reporting violations

How to obtain additional information?

You can download copy of the General Permit from the CTDEP website at

www.dep.state.ct.us/pao/download.htm or can be obtained from the East Shore Health Department. If you have any questions, please call the Water Pollution Facility at 203-488-3125.

REMINDER !!!

WPCA Grease Trap/Interceptor Installation Requirements

All class III and IV Food Establishments that discharge wastewater to the Public Sewer System must comply with Connecticut's Department of Environmental Protection (DEP) "General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments" that became effective September 30, 2005.

The CT general permit seeks to reduce Fats, Oils, and Grease from entering the public wastewater system from Class III or IV food service establishments through the use of:

- Outdoor In-Ground Grease Trap/Interceptor (1,000 gallon minimum), or
- Automatic Grease Recovery Unit (AGRU)

There are other requirements for Class III and IV Food Establishments that are defined in the Connecticut General Permit.

All existing Class III and IV Food Establishments must comply with this permit by July 1, 2011

Immediate compliance is mandatory for:

- **New Food Establishments**
 - **Food Establishments that change ownership**
 - **Food Establishments that complete renovations in excess of \$20,000**
- a. Please contact your local WPCA representative for specific instructions and permit requirements for compliance with this requirement and to receive an updated list of approved automatic grease recovery units.
- b. Note: Building Inspectors, Plumbing Inspectors and Health Inspectors do not approve grease trap/interceptors or AGRUs.

Links for more information:

GNHWPCA Sewer Ordinance: www.qnhwpc.org

CT DEP General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments:

www.ct.gov/dep/lib/dep/Permits_and_Licenses/Water_Discharge_General_Permits/food_prep_establishment_gp.pdf

CT DEP Food Preparation Establishment's Guide To The General Permit For The Discharge of Wastewater Associated with Food Preparation Establishments and the CT DEP Food Preparation Establishment's Guide To Disposal of Animal Fat and Cooking Oil:

www.ct.gov/dep/lib/dep/water_regulating_and_discharges/industrial_wastewater/resourceguide.pdf

Local WPCA Contacts:

In East Haven: Jesse Whittlemore, GNHWPCA Tel: 203-466-5277, x1006 Fax: 203-466-5287
jwhittlemore@omihv.com

In Branford: Manny Furtado: WPCA, 203-488-3125, FAX: 203-315-5278
mfurtado@branford-ct.gov

In North Branford: Kurt Weiss, Town Engineer, 203-484-6009
townengineer@townofnorthbranfordct.com
F:common/food/FOG

FOOD ESTABLISHMENT PLAN REVIEW

If someone proposes to open a new restaurant/ food establishment (or renovate an existing food establishment), they need to obtain and complete an “Application for Food Establishment Plan Review”. The information necessary to complete the application is provided in the packet “Food Establishment Plan Review Categories” and the pamphlet entitled “Guidelines for Food Establishment Plan Review and procedures for obtaining a food operators certificate”.

The applicant must pay the established fee for the plan review application and packet. The fee is based on the type and size (seating). If the application fee is submitted at a later date, the packet fee is credited toward the plan review fee.

The application should provide much of the information that is needed to properly review the proposal and should include:

- signed application and fee
- floor plan
- proposed menu
- plans and specifications for all new equipment
- materials/ surfaces requirement of NSF quality or equivalent

The Sanitarian will then review the plan review proposal. Once the application has been reviewed, the Sanitarian should meet with the applicant. Revisions may be necessary based on the Sanitarians review.

After a complete review by the Sanitarian, approval of the plan is next. If the plan is approved, the Sanitarian will sign off and fax the review sheet to the Building Official. A building permit can then be issued by the Building Official.