



COMMUNITY RESOURCES AGENCY

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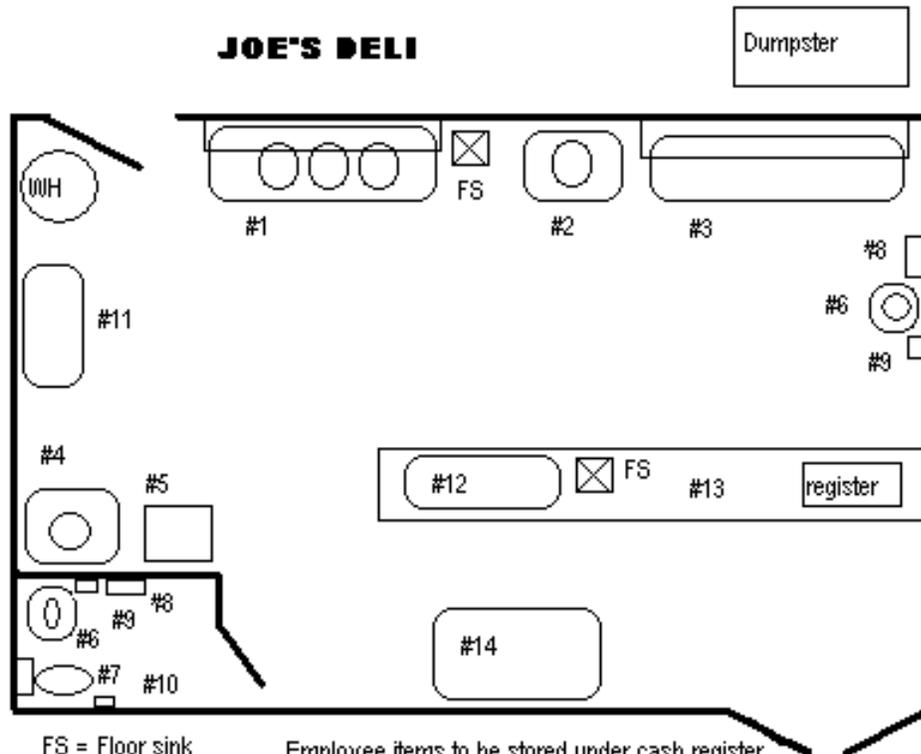
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Food Facility Plan Check Guide

(This is a sample only)

- #1 - 3-compartment sink
h&c water
indirect drain
- #2 - Prep sink
h&c water
indirect drain
- #3 - Deli refrigerator
indirect drain
- #4 - mop sink
h&c water
(vacuum breaker faucet)
- #5 - chemical storage
- #6 - hand sink
h&c water
- #7 - toilet
- #8 - paper towel dispenser
- #9 - soap dispenser
- #10 - toilet paper dispenser
- #11 - 2 door upright refrig.
self-contained
- #12 - undercounter freezer
indirect drain
- #13 - service counter
- #14 - upright 'Pepsi' refrig.
self-contained



FS = Floor sink
WH = Water heater

Employee items to be stored under cash register
Dry storage on shelves above #3
Utensil storage above 3-compartment sink

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ENVIRONMENTAL HEALTH DIVISION

PLAN CHECK GUIDE

CONSTRUCTION REQUIREMENTS FOR RETAIL FOOD FACILITIES:

OVERVIEW:

This guide is based on requirements found in the California Retail Food Code (CRFC), Part 7 of the California Health and Safety Code. It is intended to serve as a general overview of the plan and construction requirements, and should not be considered all-inclusive. Please refer to the most current revision of CRFC for additional requirements and details. The most current revision of CRFC is under “Consumer Protection”, on our County website, www.tuolumnecounty.ca.gov. The website for The California Conference of Directors of Environmental Health, www.ccdeh.com, also has guidelines which may be of value to you.

This guide only encompasses the health aspects of construction, and should not be construed to include requirements of other agencies involved, such as the local Planning and Zoning Divisions, the local Building and Safety Division, the local Fire Prevention Division, and the local Water District. Contact the appropriate local agencies involved to obtain any permits and/or to clarify other local codes.

HOW LONG DOES THE PLAN REVIEW PROCESS TAKE?

Within twenty (20) working days (CRFC – 114380), you will be sent a letter indicating that the plans are approved or rejected. If the plans are rejected, the letter will include details on what needs to be changed or submitted in order to obtain approval.

Before commencing construction, approvals must be obtained from this Division, the local Building Official, and any other applicable authorities. If any changes to the approved plans become necessary, revised plans shall be submitted for review and approval prior to construction.

It is a misdemeanor to construct or remodel a food facility without approval from your local Environmental Health Division (CRFC – 114380), as it is to operate a food facility without a permit (CRFC – 114387).

Food is defined as “a raw, cooked, or processed edible substance, ice, beverage, an ingredient used or intended for use or for sale in whole or in part for human consumption, and chewing gum” (CRFC – 113781), and a food facility is “an operation that stores, prepares, packages, serves, vends, or otherwise provides food for human consumption at the retail level...” **This definition includes giving food away free of charge.** Storage areas for food related utensils, equipment, and materials are also considered to be a food facility (CRFC – 113789) if these items are used by a food facility. The following are examples of food facilities: a school cafeteria (public and private), a bed and breakfast inn, a licensed healthcare facility serving food, a commissary, any type of mobile food facility, a temporary food facility, a farm stand (CRFC – 114375), a certified farmers’ market (CRFC – 114370), a vending machine which handles open food or potentially hazardous food, a restaurant, a deli, a grocery store, a bar, etc.

CONSTRUCTION PLAN APPROVAL PROCEDURE

BEFORE YOU BEGIN CONSTRUCTING, ENLARGING, ALTERING OR CONVERTING ANY BUILDING FOR USE AS A FOOD FACILITY, PLEASE BE ADVISED OF THE FOLLOWING:

1. Submit two (2) complete sets of plans to ¼" scale, menu and list of food purveyors, and equipment specifications sheets to this Division. Plans to other agencies may be submitted at the same time. However, other agencies will not approve the plans until Environmental Health approves the plans.
2. Incomplete plans will slow down approval.
3. Once the plans are approved, it is your responsibility to contact our Division to schedule a 75% inspection, which is when flooring and plumbing are complete. A set of approved plans is to be kept on the jobsite until the facility obtains our Division's final approval. It is your responsibility to come to our office to obtain the approved plans. Our Division keeps the other set of approved plans.
4. A final inspection will be conducted once construction is complete. At this inspection, the facility is to be ready to open though no food is to be onsite. All refrigerators and hot hold units are to be running and holding temperature; all soap and paper towel dispensers are to be full; hot and cold water are to be available; pass through windows are to function, etc. If the facility is not ready (e.g., a piece of equipment is not holding temperature), an additional inspection will have to be conducted at our current hourly fee.
5. Any revisions to the original approved plans, including a change in equipment, shall be submitted to this Division for approval prior to the change being done. This may also incur an additional fee if the changes were not required by our Division.
6. Once the facility is approved by this Division, other agencies then approve the facility. When all agencies have approved the facility, an Environmental Health Permit to Operate a Food Facility will be issued once a permit application is submitted with the permit fee.

Do NOT alter a food facility without approval from this Division.

Do NOT construct a food facility without approval from this Division.

Do NOT sell or give away food to the public without approval from this Division.

Do NOT install new equipment without approval from this Division.

CONSTRUCTION PLAN SUBMITTAL REQUIREMENTS

Plans shall be easily readable, drawn to 1/4" scale, and shall include:

1. Complete floor plan with plumbing, electrical, lighting and equipment details. Demolition plans may be required for the proposed remodel of an existing facility.
2. Type of comfort cooling in the building, e.g. "building is cooled by refrigerated air conditioning," or "evaporative cooling," and locations of vents and restroom exhaust fans. (Note: The corresponding Building Official, not this Division, reviews the complete mechanical exhaust system and make up air).
3. Finish schedule for floors, walls, and ceilings that indicate the type of material, the surface finish, and the type and dimensions of coved base at the floor-wall juncture.
4. A site plan including proposed waste storage receptacle location. If applicable, this is to include location of common use restrooms, janitorial facilities, and the On-site Management office.
5. Equipment manufacturer's specification sheets.
6. Copy of the proposed menu and list of food purveyors.
7. Source of potable water and method of sewage disposal.

CONSTRUCTION REQUIREMENTS

The plans shall show and specify the following in detail:

1. **FULL ENCLOSURE:** Each permanent food facility shall be fully enclosed in a building consisting of permanent floors, walls, and an overhead structure that meet the minimum standards as prescribed by this document (CRFC – 114266). Remote storage rooms that do not open into the food facility are therefore not approved. Doors to the outside are to be self-closing, open out, and close with gaps not to exceed 1/8" in order to exclude insects. Refer to sections titled "Windows" and "Doors" for more information.
2. **FLOORS:** Please refer to our handout, "Accepted Flooring Materials for Food Facilities". Areas in a food facility requiring approved flooring are: "all areas in which food is prepared, prepackaged, or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and hand washing areas, except with respect to areas relating to guestroom accommodations and the private accommodations of owners and operators in restricted food service facilities*, shall be smooth and of durable construction and nonabsorbent material that is easily cleanable." (CRFC – 114268). At least 3 feet of approved flooring is required around buffets, salad bars, drink stations, etc. in dining areas. * Commonly referred to as a "bed and breakfast inn".

Floor Drains: Floor drains shall be installed in floors that are water-flushed for cleaning and in areas where pressure spray methods for cleaning equipment are used. Floor surfaces in these areas shall be sloped 1:50 toward the floor drains. Other agencies may also require floor drains, even in areas where floors are not water-flushed or where equipment is not pressure sprayed for cleaning (CRFC – 114269). Please refer to section 15. Installation Of Equipment, subsection Walk-In Refrigeration regarding trench drain requirements for diamond plate flooring.

3. **WALLS & CEILINGS:** The walls and ceilings of all rooms except dining rooms, locker rooms, restrooms used only by consumers, offices, rooms holding only unopened foods or unopened utensils, and alcohol bar walls not adjacent to sinks or food preparation, are to be approved by this Division. These walls and ceilings shall be of a durable, smooth, non-absorbent, easily cleanable surface. Though exempt from explicit approval, restrooms used by consumers and afore-mentioned storage rooms are to have walls and ceilings which are durable and cleanable (CRFC – 114271).

Walls may be finished with gloss, semi-gloss, or epoxy paint; fiberglass reinforced paneling (FRP), Marlite paneling; ceramic or porcelain tile; steel; clear acrylic panels (such as to allow original rock walls in older buildings to remain visible). Conduits of all types shall be installed within walls as practicable. When otherwise installed, they shall be mounted or enclosed so as to facilitate cleaning (e.g., between one-half (1/2) and two (2) inches from the wall, and six (6) inches above the floor surface) (CRFC – 114271).

Paneling is not to be installed in walk-in refrigeration units with wood walls, or behind dishwashers or sinks, with the exception of janitorial sinks.

Ceilings requiring approval are not to have any beams which can accumulate dust. Acoustical ceiling tiles are to be installed at least six (6) feet above the floor, and not have perforations which go through the panel (CRFC – 114271).

No ceiling fans, or equipment or ornamentation which can accumulate dust is to be on ceilings or walls requiring approval (CRFC – 114271).

4. **LIGHTING:** In every room and area in which food is prepared, manufactured, processed or prepackaged, or in which utensils are cleaned, sufficient natural or artificial lighting shall be provided to produce the following light intensity while the area is in use:

- a) At least 10-foot candles at a distance of 30 inches above the floor in walk-in refrigeration units and dry food storage areas.
- b) At least 20-foot candles at a distance 30 inches above the floor where food is provided for customer self-service; where fresh produce or prepackaged foods are sold or offered for consumption; inside equipment such as reach-in and under-counter refrigerators; hand washing areas; ware washing areas; equipment and utensil storage areas; and in toilet rooms.
- c) At least 50-foot candles at surfaces where a food employee is working with food or with utensils, equipment such as knives, slicers, grinders, or saws where employee safety is a factor; **and in other rooms during periods of cleaning** (CRFC – 114252).

Light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas where there are non-prepackaged ready-to-eat foods, clean equipment, utensils and linens, or unwrapped single-use articles (CRFC – 114252.1).

5. **VENTILATION and EXHAUST:** Fume hoods are sized and required by the corresponding Building Official and Fire Prevention Division. They will ensure proper ventilation throughout the entire facility.

Cooking equipment which is fume hood exempt may be required to have a hood if a facility has more than three such pieces of equipment. Fume hood exempt equipment includes bread proofers, steam tables used only for hot holding, electric rice cookers, and electric convection ovens with less than 220v. Fume hoods will be required for open flames and for certain

equipment which generates oil/grease, and for ware washing machines which are not “hoodless, meaning that they condense steam through the use of cold water (CRFC – 114149, 114149.1, 114149.2, 114149.3).

Restrooms are to have a light-switch-activated exhaust fan, an air shaft, or a screened window which can open, and has a sixteen (16) mesh per square inch screen. Venting is to be to the outside (CRFC – 114149).

Makeup air is to equal air mechanically exhausted (CRFC – 114149.1).

Temperature Control: Ambient temperature of the facility shall be controlled to maintain employee comfort, to maintain refrigeration units functioning properly, and to maintain canned and jarred foods safe (CRFC – Chapter 9, Article 2). Please note that commercial refrigerators are often rated to work in maximum ambient temperatures of 84F, and the FDA states that canned and jarred foods are best kept at or below 85F, but above freezing. A statement regarding how ambient temperature will be controlled is required, and the locations of vents is to be shown on the plans.

6. **WINDOWS:** All windows which can open to the outside shall be provided with approved screening not less than sixteen (16) mesh per square inch set in tight fitting frames (CRFC – Chapter 9, Article 2).

Pass through window service openings: Service openings without an air curtain shall be limited to two hundred-sixteen (216) square inches each. Each opening shall be provided with a solid or screened window, equipped with a self-closing device. Screening shall be at least sixteen (16) mesh per square inch. Pass through windows up to four hundred-thirty two (432) square inches are approved if equipped with an air curtain device. The air curtain shall produce an airflow of not less than eight (8) inches thick at the discharge opening, and not less than six hundred (600) feet per minute across the entire opening, as measured three (3) feet below the air curtain. The window openings must be closed when not in use, and the air curtain shall turn on automatically when the window or screen is opened. The minimum distance between any pass through windows shall not be less than eighteen (18) inches (CRFC – 114259, 114259.1, 114259.2). Food facilities with walk-up windows, rather than drive-up windows which have a speaker system, should consider having a screened window to speak to customers so that the window is open only while food and payment are exchanged. The goal in this case is to minimize the entrance of flies.

7. **DOORS:** Doors shall be located and kept closed such that the food and utensil handling and storage areas, are fully enclosed at all times (CRFC – Chapter 8, Article 6).

Delivery Doors: Like all doors to the outside, delivery doors shall be self-closing and open out. Overhead, automatic switch-activated air curtains must be provided at dedicated delivery doors, which are doors used exclusively for deliveries. For delivery doors which are four (4) feet in width or less, the air curtain shall produce an air flow at least eight (8) inches thick at the discharge opening and with an air velocity of not less than 750 feet per minute across the entire opening as measured at a point three (3) feet above the floor. The same shall apply for delivery doors which are over four (4) feet in width, except that the air velocity shall be at least 1600 feet per minute. Food facilities that sell only pre-packaged food are exempt from this requirement. Large cargo-type doors shall **not** open directly into a food preparation or utensil washing area, and like all doors to the outside, are not to have any gaps greater than 1/8” (CRFC – 114259, 114259.1).

Exterior Doors: These include 16 mesh or better screen doors, and shall be self-closing, tight-fitting with gaps no greater than one-eighth inch (1/8”), vermin proof, and open out. Air curtains

may be used as auxiliary fly control but are **not** adequate substitute devices to permit a door to remain open (CRFC – 114259, 114259.1).

8. **VERMIN CONTROL:** In addition to the window and door requirements listed above, some facilities, because of their location, need additional fly control. Fly control can be accomplished by the use of a fly light with a pheromone. These lights enclose and adhere the fly, and the adhesive board is discarded and replaced. These lights are mounted to have a clear drop to the floor. A pest control professional can best assist in determining where to place these lights. The placement of electrical outlets for these lights has to be taken into account during the plans submittal process. Alternative vermin control methods may be approved.
9. **EXTERIOR VENTS and CONDUITS:** Gaps around conduits leading to the outside, or other such openings, shall be tightly sealed. All exterior wall vents shall be properly screened with one-fourth inch (¼”) hardware cloth screening, and a 16 mesh may also be required for fly exclusion. (CRFC – 114259).
10. **GARBAGE AREA:** Each food facility shall be provided with facilities and equipment necessary to store or dispose of all waste material. If provided, an outdoor storage area or enclosure used for refuse and recyclables, shall be constructed of nonabsorbent material such as concrete or asphalt and shall be easily cleanable, durable, and sloped to drain. The local Zoning and Planning Division determine if an outdoor area may be used (CRFC – 114245, 114245.1, 114245.2). Because spilled fryer oil digests asphalt, bins for used oil require a concrete pad.

If an outdoor area is not available or not approved by the local Zoning and Planning Division, then an indoor area is to be designated away from food and food contact surfaces. This indoor area is to have approved flooring with coving, walls, and ceilings (CRFC – 114245.3).

A restroom or employee storage area may not be used for waste (CRFC – Chapter 7, Article 4).

11. **TOILET FACILITIES:** Each permanent food facility shall be provided with toilet rooms for employees. The number of toilet and handicapped facilities required shall be determined by the local Building Official. Toilet rooms shall have well-fitted, self-closing doors, and shall not open into areas of food or utensil handling or storage. Toilet tissue shall be provided in a permanently installed dispenser at each toilet. Toilet facilities are to have handwashing facilities, in good repair (CRFC 114276).

Separate toilet facilities for men and women shall be provided for customers, guests, or invitees, when the food facility was constructed after July 1, 1984, and has more than 20,000 square feet of floor space (CRFC – 114276).

Food facilities constructed **before January 1, 2004**, in continuous operation since January 1, 2004, which provide space for the consumption of food on the premises, shall provide toilet facilities for customers, guests or invitees, or prominently post a sign within the food facility in a public area stating that toilet facilities are not provided. These facilities, if provided, shall be located where customers, guests, and invitees do not pass through food preparation, food storage, or utensil washing areas to reach the toilet facilities. (CRFC – Chapter 9, Article 2).

Food facilities located within amusement parks, stadiums, arenas, food courts, fairgrounds, and similar premises shall not be required to provide toilet facilities for employee use within each food facility if the following conditions are met:

- a. Approved common use toilet facilities are located within 200 feet of each food facility, and are readily available

- b. The On-site Management office is staffed with personnel responsible for the maintenance of the designated common toilet facilities
- c. Approved common use toilet facilities are located in a common area that will not be accessible through another business
- d. Approval for a common use toilet facility is obtained from this Division and from the corresponding Building Official (CRFC – Chapter 8, Article 1; Chapter 9, Article 2).

Hand Washing: Hand washing facilities shall be provided within or adjacent to toilet rooms, and the number of hand washing facilities per toilet is determined by the local Building Official. See subsection titled “Hand Washing Sinks” under section 14, titled “Sinks.” (CRFC – Chapter 3, Article 4).

- 12. **EMPLOYEE STORAGE AREAS:** An area for employees to eat, drink, and store personal belongings is required. This area shall not be where contamination of food, equipment, utensils, linens, and single-use articles can occur. Employee storage may consist of shelves, coat hooks, and/or lockers. Dressing rooms or dressing areas shall be provided and used by employees if the employees regularly change their clothes in the facility (CRFC – 114256, 114256.1). Because aprons are to be removed when entering the restroom or stepping outside, hooks are strongly recommended in these areas to encourage compliance. Facilities with more than 10 employees per shift are required to have at least a 20 square foot employee storage room, and 2 square feet for each additional employee (CCDEH December 2003 Statewide Plan Check Standardization).

First Aid Supplies: These are to be stored in a kit or a container that is located to prevent the contamination of food and food related items, and are to have a legible manufacturer’s label (CRFC – 114256.5).

- 12. **EQUIPMENT STANDARD:** All equipment shall be designed and constructed to be durable and to retain its characteristic qualities under normal use conditions. All new and replacement food-related and utensil-related equipment shall be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program. In the absence of an applicable sanitation certification, unique or special equipment may be evaluated for approval by this Division. All materials that are used in the construction of utensils and food contact surfaces of equipment shall not allow the migration of deleterious substances or impart colors, odors, or tastes to food, and under normal use conditions shall be safe, durable, corrosion-resistant, nonabsorbent, sufficient in weight and thickness to withstand repeated washing, finished to have a smooth, easily cleanable surface, and resistant to pitting, chipping, crazing, scratching, scoring, distortion and decomposition (CRFC – 114130, 114130.1).

- 13. **SINKS:** Food facilities which handle only pre-packaged foods (sold to the customer without ever having been opened by the food facility staff), both potentially hazardous and non-potentially hazardous, are required to provide only hand washing sinks for toilet facilities, as outlined below. All other food facilities are required to provide hand sinks in addition to all other sinks as prescribed below (CRFC – Chapter 3, Article 4).

All sinks are to be able to provide hot (at least 120°F, at a constant pressure for at least 15 seconds) and cold (not tempered) running water to each compartment, with the exception of hand sinks as described below (CRFC – 114192, 114192.1).

Except for hand sinks in customer restrooms, sinks are not to be set into counters. Stainless steel sinks may be integral with stainless steel counters. Sinks are to be secured and sealed to a wall. The gap between the wall and the sink is not to exceed one millimeter. Sinks which are within 24 inches of food or utensil storage or handling are to have a 6-inch high metal splash guard with

rounded corners. Janitorial sinks (described below) are to have a minimum 6-foot high partition when located in a room where contamination of food, linens, or utensils may occur. Except for hand sinks and janitorial sinks, all sinks in a food facility are to drain into a floor sink through a one-inch air gap. As all equipment, all sinks, except for hand sinks in restrooms used by customers, are to meet ANSI standards or be ANSI approved.

Sinks requiring drain boards and ware washing machines with drain boards are to have the drain boards installed sloped to drain toward the sink or ware washing machine. Drain boards and adjacent racks or tables for air drying sanitized utensils or holding soiled utensils are to be adequate in size to accommodate the accumulation of utensils that will occur during peak demand (CRFC – 114103).

Hand Washing Sinks: Food facilities constructed or extensively remodeled after January 1, 1996, which handle non-prepackaged food, shall provide facilities **exclusively** for hand washing in the food preparation areas **and** in ware washing areas which are not located within or immediately adjacent to food preparation areas. Hand washing sinks are to be provided for toilet facilities, as prescribed under section 11, titled “Toilet Facilities”, of this document. Hand washing facilities shall be sufficient in number and conveniently located, maintained clean, unobstructed and accessible **at all times** for use by food employees. Hand washing sinks are to be used exclusively for hand washing. Hand washing sinks shall have water provided from a combination or premixing faucet which supplies pressurized warm water for a minimum of fifteen (15) seconds while both hands are free for washing. Combination faucets are to provide cold and hot (at least 120°F) water, while premixing faucets are to be set to deliver warm (100°F to 108°F) water. Hand washing facilities shall be provided with hand washing cleanser in a pump dispenser, and sanitary single-use towels in an enclosed dispenser or a heated-air hand drying device. A sign or poster that notifies food employees to wash their hands shall be posted at all times at all hand lavatories used by food employees, and shall be clearly visible to food employees. (CRFC – 113952, 113953, 113953.1, 113953.2, 113953.5, 1142520, 114250.1, Chapter 7, Articles 1 and 2).

Food Preparation Sink: Food facilities are required to have a separate stainless steel sink for washing, rinsing, soaking, thawing, or similar preparation of foods, if applicable, and this sink shall be located within the food preparation area. The sink tub dimensions shall be at least 18” x 18” by 12” deep. An 18” x 18” integral drain board is to be provided. An adjacent work table of similar dimensions may be substituted for the drain board. A food preparation sink must drain indirectly through an air gap into a floor sink (CRFC – 114163).

Manual Ware Washing Sink: All food facilities in which food is prepared or in which multi-service utensils or equipment are used shall provide a three-compartment ware washing sink with two integral metal drain boards. The tub compartments shall be large enough to accommodate immersion of the largest piece of equipment and utensils. A sprayer may be provided in addition to or in place of a faucet. The manual ware washing sink shall be easily accessible and conveniently located to the food preparation area (CRFC –114099).

Bar Sink (Ware Washing): A three-compartment bar sink with two integral metal drain boards shall be provided in bars, and are to be large enough to accommodate the largest utensil washed. This sink is to be installed in the same manner as prescribed above for a manual ware washing sink. A dishwasher may be installed at a bar in place of this three-compartment sink if the facility has a three-compartment sink elsewhere, such as in the kitchen. A bar sink is required not only at stand-alone bars, but at bars within a food facility if there is seating at the bar (CCDEH Plan Check Guide 2003, CRFC – 114099).

Sprayer sinks: These are the only sinks which may have a garbage disposal attached. These sinks are installed as the first step in utensil washing, and are installed at the entry point to a ware washing machine or **before** a drain board (not in the drain board) into the first compartment of a

three-compartment sink. When installed at the entry point to a ware washing machine, these sinks may be provided with metal bars over the sink compartment so that the ware washing machine racks rest on these bars while the utensils in the rack are rinsed before going into the ware washing machine. These sinks have a high-pressure nozzle on a hose. These sinks are not required (CCDEH Plan Check Guide 2003).

Ware Washing Machines: Mechanical ware washing shall be accomplished by using an approved machine installed and operated in accordance with the manufacturer's specifications. Ware washing machines shall have two integral drain boards that are of adequate size and construction to each accommodate at least one ware washing tray or be installed adjacent to a three-compartment sink so that this sink's drain boards can act as the ware washing machine's drain boards (CRFC – 114099). Ware washing machines are to have a passive hood or be "hoodless." Ware washing machines are not required. **Installation of a mechanical ware washing machine does not eliminate the requirement for a three-compartment sink** (CRFC – 114101, 114103).

Rinse/Work Sink: A single compartment rinse/work sink may be provided in service areas where blenders or similar equipment are rinsed and the three-compartment sink is not located within the area. **NOTE: A Rinse/work sink will not be a substitute for the requirement of a three-compartment sink.** A rinse/work sink is not required, but if installed is to drain indirectly, and is not to be used as a dump sink (Please see below).

Dump Sink: A single compartment dump sink is generally installed in bars (coffee bars, smoothie bars, and alcohol bars) for the emptying of the contents of used pitchers and glasses. A dump sink differs from a rinse/work sink in that an assumption can be made that the beverage being disposed of has been handled by customers. A funnel with a tube leading to a floor sink may also be used for this purpose (CCDEH Plan Check Guide 2003). A dump sink is not required, but if installed is to drain indirectly, and is not to be used as a rinse/work sink (Please see above).

Janitorial Sink: At least one (1) of the following is to be used for general cleaning purposes and for the disposal of mop bucket wastes (CRFC – 114279, 114281):

1. A one-compartment, non-porous janitorial sink with an effective height of no more than thirty (30) inches (CCDEH Plan Check Guide 2003).
2. A slab, basin, or curbed cleaning facility constructed of concrete or equivalent material (CCDEH Plan Check Guide, 2003).

In choosing one of the above types of janitorial sinks, it is important to keep in mind that **floor mats washed onsite have to be washed in a janitorial sink**, and may not be washed so that wastewater flows out onto the ground or into a storm drain.

Janitorial facilities shall be provided with a backflow protection device (Please refer to section 20, titled "Water Supply"). Janitorial sinks and basins shall be separated from other equipment by at least 30 inches or have a solid and cleanable partition that extends a minimum of six (6) feet above the floor (CCDEH Plan Check Guide, 2003).

A room, area, or cabinet separated from any food preparation, food storage area or ware washing area shall be provided for the storage of cleaning equipment and supplies, such as mops, buckets, brooms, cleansers and waxes. Mops are to be allowed to air dry without staining walls or affecting equipment or supplies (CRFC – 114279, 114281, 114282).

Janitorial facilities shall not be required within each food facility if the following conditions are met:

- a. Approved common use, readily available janitorial facilities are located within 100 feet and on the same level as each food facility
- b. The On-site Management office is staffed with personnel responsible for the maintenance of the designated common use janitorial facilities
- d. Prior approval is obtained from this Division
- e. Approved common use janitorial facilities are not located in an area that is accessible through another business
(CCDEH Plan Check Guide 2003).

Floor Sinks and Troughs: Floor sinks are to be installed where they are visible and readily accessible. In no instance is an overflow to go unnoticed or soil the floor in an area where it cannot be reached for cleaning. Floor sinks are to be partitioned off so that an overflow from the floor sink does not spill under a counter or refrigerator which cannot be readily moved for cleaning. This partition is to be made of a nonabsorbent material and be sealed to the floor to preclude the flow of liquid under the equipment or counter. A mop sink may act as a floor sink for walk-in refrigeration units and ice machines only. A walk-in refrigeration unit may drain onto the ground provided that puddling is prevented through the use of gravel, and there is no risk of freezing a walkway. The condensate line's point of discharge is to be screened with 16 mesh. No outdoor draining will be allowed in instances where it is determined that the liquid being drained may contact a body of water or any waterway.

Elevated floor sinks will be considered, as will horizontal air gaps.

A trough may be required outside of walk-in refrigeration units which have a non-skid floor, such as diamond plate, and in front of tilting soup kettles to facilitate cleaning water disposal.

14. **FOOD and UTENSIL PROTECTION:** 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 and utensils (including cups) on display shall be protected from contamination by the use of packaging, counter, service line, dispensers, or sneeze guards that intercept a direct line between the customers' mouth and the food and utensils being displayed. Please refer to our handout titled "Sneeze Guards." This requirement shall not apply to market produce displays where the expectation is that the customer will have the opportunity to clean or wash the produce before consumption (CRFC – Chapter 4, Article 7).

Self-service non-potentially hazardous beverage and ice enclosed dispensers may be on the outside of a food facility if contiguous with the facility, completely under overhead protection, and may be fully enclosed to be vermin proof when not in operation. Cups and straws are to be individually sealed or dispensed from an enclosed dispenser. The beverage and ice dispensing mechanism are to avoid contact with the beverage or ice once these are dispensed, and with the lip contact surface of the cup (CRFC – Chapter 4, Article 7).

Beverage tubing and cold-plate beverage cooling devices shall not be installed in contact with stored ice intended to be used for food or beverages. This section shall not apply to cold plates that are constructed integrally with an ice storage bin (CRFC – 114167). Liquid waste drain lines shall not pass through an ice machine or ice storage bin (CRFC – 114171). Ice used to cool exterior surfaces, such as cans, bottles, produce, prepackaged foods, or fish, shall not be used in a beverage or in any other food or in contact with utensils to be used with food without first being washed, rinsed, sanitized, and fully air dried (CRFC – 113990, 114117).

15. **INSTALLATION OF EQUIPMENT:** All equipment is to be installed in such a way that it allows for cleaning. The following applies to areas not accessible to customers. However, areas accessible to customers are nevertheless to be easily cleanable and vermin-proof (CRFC – 114169).

Floor Mounted: All equipment shall be easily movable (e.g., on 4" casters), elevated on rounded legs that provide at least a six inch (6") clearance between the floor and the equipment, or sealed to a minimum four inch (4") solid masonry island with minimum three-eighths inch (3/8") coved radius. If on an island, it shall overhang the base at least two inches (2"), but not more than the height of the island. Sealing to the floor is acceptable only if no other means are available. Sealing may be done if no gaps between the equipment and the floor exceed one (1) millimeter. Floor tile grout lines may produce larger gaps (CRFC – 114169, CCDEH Plan Check Guide 2003).

Table Mounted: Table-mounted equipment that is not easily movable (i.e., exceeds eighty (80) pounds or three (3) feet in any direction, does not have a utility connection which easily disconnects or is flexible and long enough to allow for cleaning) shall be installed to allow cleaning of the equipment and areas underneath and around the equipment by being sealed to the table or elevated on legs that provide at least a four-inch clearance between the table and the equipment. Gaps and spaces between equipment base and top of islands shall be sealed with a non-hardening silicone sealant (CRFC – 114169, CCDEH Plan Check Guide 2003).

All equipment flashings and backsplashes are to be adequately sealed to the wall and to abutting equipment or moved away from the wall and each other at least six inches (6") for every four (4) linear feet of equipment frontal length. Soldering, welding, approved sealants, or "T" cap molding may be used to meet the requirement of sealing equipment which is exposed to spillage (CRFC – 114169, CCDEH Plan Check Guide 2003).

Reach-In Refrigeration: Reach in refrigerators shall either be self-contained or drained indirectly to a floor sink (Please see section titled "Sewage Disposal"). Refrigeration units shall be provided with an accurate, readily visible thermometer, have shelving that is nonabsorbent, non-corrodible, easily cleanable, and shall meet all applicable NSF/ANSI standards. If the refrigeration unit does not have a built in thermometer, then one is to be placed in the warmest part of the unit (top shelf, toward the door). Wood is not an acceptable structural material finish for a refrigeration unit (CRFC – 113885, 114130, 114193).

Walk-In Refrigeration: Walk-in refrigerators shall have a well-fitted door, **shall open into an approved area of the food facility**, shall be constructed flush with the floor; coved base shall be provided at the intersection of floors and walls with a minimum 3/8" radius and 4" height; be flashed or sealed to walls and/or ceiling as needed to prevent rodent and vermin harborage; have non-corrodible shelving that is at least six (6) inches above the floor; shall be certified or classified for sanitation to applicable NSF/ANSI standards. Wood is not acceptable. Diamond plated flooring is not acceptable unless a trench drain is provided just outside the walk-in refrigeration door, the walk-in floor slopes 1:50 towards the trench drain, and a power wash spray method of cleaning is provided. Condensate from refrigeration units shall be drained in a sanitary manner to a floor sink, or other approved device by an indirect connection (Please see section titled "Sewage Disposal"). Plumbing waste receptors, including floor drains, floor sinks, and evaporators are to be located outside of refrigeration units (CRFC – 113885, 114130, 114193).

16. **STORAGE:** Adequate and suitable space shall be provided for the storage of food. Twenty-five percent (25%) of the food preparation area footprint or one (1) square foot per customer seat, whichever is greater, containing at least ninety-six (96) lineal feet of approved shelving for each 100 square feet of required storage area is considered adequate (excluding refrigeration). Shelving is to be at least eighteen (18) inches deep. Bars serving only alcohol are to have at least seventy-four (74) lineal feet of eighteen (18) inch deep shelving per 100 square feet of required storage area (TCEHD Policy II-7; CRFC – 114047).

When using racks as shelving, the racks are to have round legs with end caps, have four (4) inch casters or have a six (6) inch clearance, and be smooth and easily cleanable. Racks not on casters are to be placed at least one (1) inch away from the wall. All such shelving is to be ANSI approved. Crates do not provide a six (6) inch **clearance**, are not easily cleanable, and are not acceptable shelving (CRFC – 114047).

When using wall mounted or recessed/built in shelving, which are often made of wood, these are to be made smooth and impervious to water through the use of paint or a wood seal such as polyurethane. The back of each shelf is to be sealed to the wall. The lowest shelf is to be no less than six (6) inches above the floor (CRFC – 114047).

If pallets are to be used, pallet jacks or forklifts should be available for ease of movement (CRFC – 114047).

Shelving may not be covered with liner or FRP to be made smooth and easily cleanable. Shelving may not be particle board or wafer board, even when sealed (CRFC – 114130.4).

Equipment for cooling and heating food, and for holding cold and hot food shall be sufficient in number and capacity to ensure proper food temperature control during transportation and operation (CRFC – 114153). **More than one refrigeration unit, on separate condensers, is strongly recommended, as a facility having only one refrigeration unit will be forced to close and dispose of all foods requiring refrigeration if that unit fails.** Facilities which cool foods cooked on site will be required to have more than one refrigeration unit (CRFC – 114153).

17. **WALKWAYS:** No conduits (electric cords, liquid discharge lines, etc.) are to cross a walkway. The corresponding Building Official will determine the width of the walkway, but a minimum of thirty-six (36) inches is currently required by the County of Tuolumne Building and Safety Division.

18. **ELECTRICAL SUPPLY:** Electrical power shall be supplied at all times to operate the food facility. All electrical features and accessories shall be installed in compliance with the applicable local electrical ordinances (CRFC – 114182).

19. **WATER SUPPLY:** An adequate, protected, pressurized, potable supply of hot water at least 120°F measured from the faucet, and cold running water shall be provided from an approved source. The potable water supply shall be protected with a backflow or back-siphon device, as required by the local Building Official. Facilities using a private well must meet applicable drinking water standards, which require that the water be tested (TCEHD II-13).

Water Heater: Each food facility shall be provided with its own dedicated water heater. Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands throughout the food facility. Where fixtures are located more than sixty feet (60') from the water heater, a recirculation pump must be installed (CRFC – 114192, 114195; CCDEH Plan Check Guide 2003).

In sizing the water heater, the peak hourly demands for all sinks, ware washing machines, etc., are added together to determine the minimum required recovery rate (CRFC – 114192, 114195; CCDEH Plan Check Guide 2003).

Please refer to our handout titled “Water Heater Work Sheet”.

Carbonators: These are to be protected with a reduced pressure principle assembly and a vented double check valve. Please refer to our handout titled “Backflow Protection Requirements for Retail Food Facilities.”

Janitorial Sinks: These are to be protected with a permanently installed (non-removable) backflow preventer if the faucet has threads to which a hose can attach. The corresponding Building Official may require this even when there are no threads on the faucet. The faucet is to be installed above the flood rim of the janitorial sink, as directed by the corresponding Building Official. Please refer to our handout titled “Backflow Protection Requirements for Retail Food Facilities.”

Hose Bibs: These are to be protected with a permanently installed backflow preventer. Please refer to our handout titled “Backflow Protection Requirements for Retail Food Facilities.”

Produce Foggers: No fogging device installed after July 2001 shall use a reservoir for holding water for fogging, but shall employ water under pressure for fogging or misting of foods (CRFC – 114180).

Lines: Lines are to be in walls, ceilings, or under flooring.

20. **SEWAGE DISPOSAL:** All ware washing sinks, food preparation sinks, ice machines, dipper wells, and any food equipment which discharges liquid is to drain into a floor sink through a one (1) inch air gap. The floor sink is to be within fifteen (15) feet of the equipment which drains into it per the current Universal Plumbing Code, and installed in the floor so that the grate cover fits flush with the floor. A mop sink may serve as a floor sink only for water discharge, such as from an ice machine, or for refrigeration condensate. Ware washing machines may drain into such a floor sink or may drain directly into the sewer system if a floor drain is provided adjacent to the fixture, and the fixture is connected on the sewer side of the floor drain, provided that no other drainage line is connected between the floor drain waste connection and the fixture drain (CRFC – 114193, 114193.1). The local Building Official may have different requirements, and his or her requirements may override our Division’s requirements.

Grease Traps/Interceptors: Grease traps or interceptors are to be outdoors. In instances where the footprint of the facility is the property line, or the facility is surrounded by other businesses and installing the grease trap or interceptor outside of the facility is not possible, then the grease trap or interceptor is not to be in a food or utensil handling area. Grease traps and interceptors are to be approved by the local water district, or an on-site sewage disposal consultant if the facility is connected to an onsite wastewater treatment system (CRFC – 114190, 114201).

If an indoor grease trap is installed, the one (1) inch air gap is to be between the sink (e.g., 3-compartment sink) and the trap. If an outdoor grease interceptor is installed, then the floor sink(s) drain to the interceptor (TCEHD Policy II-20).

Facilities which use an onsite wastewater treatment system (owts, also called a “septic system”) are required to have this system evaluated and approved by an on-site sewage disposal consultant. Please refer to our handout titled “Non-Exclusive List of Environmental Consultants”, which also lists excavating contractors, septic tank pumpers, water well drillers and pump installers, onsite service providers, and surveyors (CRFC – 114197).

Garbage Disposals: Garbage disposals may be installed in drain boards if the drain board is lengthened to accommodate the disposal cone in addition to the minimum required drain board size. **Garbage disposals may not be installed under a sink compartment, unless an additional compartment is provided for the disposal** (CRFC – 114099.2).

21. **SEATING:** The number of customer seats determines the facility’s yearly permit fee, and may determine the amount of storage required (Please refer to section 17 titled “Storage”).

For areas without fixed seats, the seating shall not be less than the number determined by dividing the floor area (square feet) under consideration by 15.

For areas with fixed seats, the seating for such areas shall be determined by the number of fixed seats installed therein.

Areas with fixed booths shall have seating based on one person for each twenty four (24) inches of booth length.

Areas with fixed benches shall have seating based on one person for each eighteen (18) inches of length of bench (TCEHD Policy II-21).

The local Building Official, along with the local Fire Prevention Division, will determine the maximum occupancy, and this may affect the number of customer seats.

SUMMARY OF THE GUIDELINES FOR PRE-PACKAGED FOOD ONLY FACILITIES

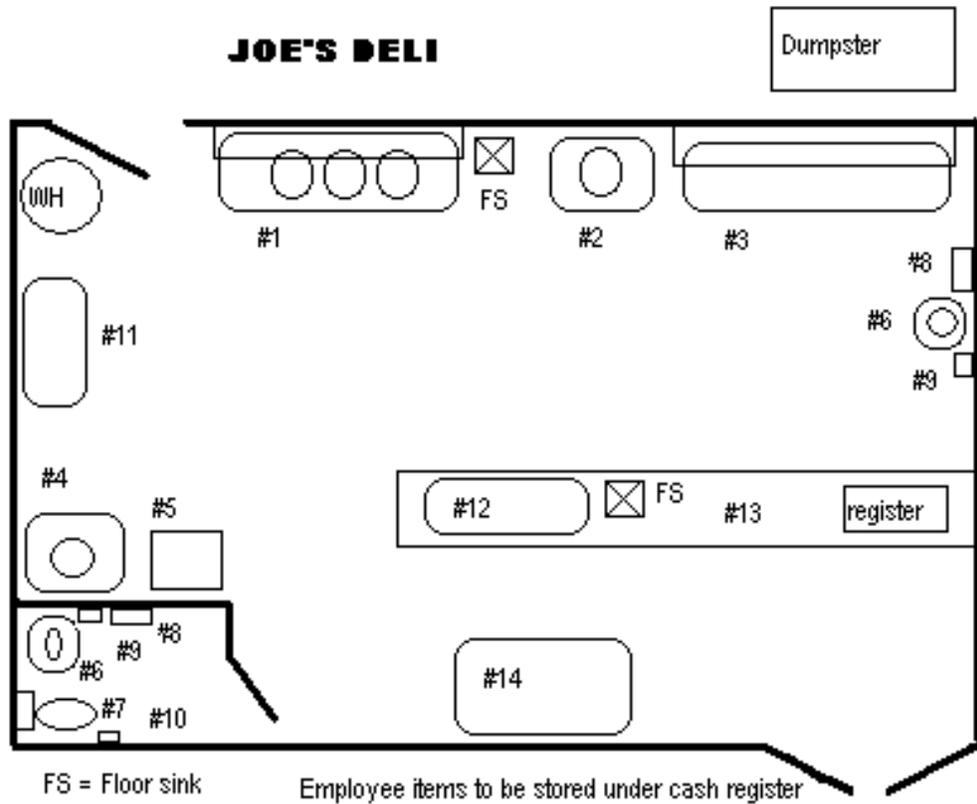
1. Building is to be rodent-proof. Doors leading to the outside are to be self-closing and have no more than 1/8 inch gap around the perimeter of the door. Holes and gaps in ceilings and walls are to be sealed, and windows are to be covered with sixteen (16) mesh per square inch screen.
2. There is to be at least one restroom with single-use soap and paper towels, 20 foot candles lighting, mechanical exhaust or a window that can open, and a self-closing door. Water is to be provided through a mixing valve, or premixed, allowing for hands to be washed with warm water. If hot and cold water are provided through a mixing valve, the hot water is to be at least 120°F; if the water is provided premixed, it is to be between 100°F and 108°F.
3. Janitorial facilities are to be provided, with a janitorial sink as described on page 12 of this document.
4. A minimum twenty (20)-gallon water heater is to be installed (5 for hand washing and 15 for janitorial purposes). Please refer to our handout titled "Water Heater Worksheet".
5. An employee storage area is to be provided, as described on page 9 of this document.
6. Equipment is to meet ANSI standards as described on page 10 of this document.
7. Plans are to be approved by this Division and all other required agencies, as for all other facilities.

SAMPLE FACILITY LAYOUT

This is to be drawn to 1/4" scale

(This is a sample only)

- #1 - 3-compartment sink
h&c water
indirect drain
- #2 - Prep sink
h&c water
indirect drain
- #3 - Deli refrigerator
indirect drain
- #4 - mop sink
h&c water
(vacuum breaker faucet)
- #5 - chemical storage
- #6 - hand sink
h&c water
- #7 - toilet
- #8 - paper towel dispenser
- #9 - soap dispenser
- #10 - toilet paper dispenser
- #11 - 2 door upright refrig.
self-contained
- #12 - undercounter freezer
indirect drain
- #13 - service counter
- #14 - upright 'Pepsi' refrig.
self-contained



SAMPLE ROOM FINISH SCHEDULE

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ROOM OR AREA	FLOOR	FLOOR BASE OR COVE	WALLS	CEILING	REMARKS
A Dining / Customer Area					
B Wait Station					
C Kitchen					
D Ware Washing Room					
E Janitorial Station					
F Employee Storage Room					
G Restroom					
H Storeroom					
I Trash Enclosure					

PHONE NUMBERS

City of Sonora Building Official	(209) 532-3508
Groveland Community Services District (GCSD)*	(209) 962-7161
Jamestown Sanitary District	(209) 984-3536
Tuolumne County Building & Safety Division, Planning, Zoning <i>and Environmental Health</i>	(209) 533-5633
Tuolumne Utilities District (TUD)	(209) 532-5536, ext.517 or 511
Twain Harte Sanitary District (THSD)	(209) 586-3172

*Also serves Big Oak Flat

ADDITIONAL DOCUMENTS: For additional information, please refer to the following documents available from our Division:

- *Water Heater Worksheet
- *Backflow Prevention for Food Facilities
- *Accepted Flooring Material for Food Facilities
- *Sneeze Guards