PLAN CHECK GUIDE
FOR
RETAIL FOOD FACILITIES

The California Plan Check Guide for Retail Food Facilities is an outline of requirements for plan preparation before submission to Inyo County Environmental Health Services Department (ICEHSD). It is intended to give basic information for compliance with the California Retail Food Code (CRFC). Refer to California Health and Safety Code, Division 2,, Chapter 4, Section 113700 et seq for specific code requirements.

This guide only encompasses health aspects and should not be construed to encompass other agencies involved such as the local planning departments, the local building authorities or the local fir departments. Owners and agents should be advised to contact the appropriate local agencies involved to obtain any permits and/or to clarify other local codes.

Plan review should be completed within twenty (20) working days; approval should be received at this time if the plans are complete. You will be notified if the plans are incomplete or do not satisfy minimum sanitation requirements. If you have any questions about the plan review, please contact your Environmental Health Specialist.

I. CONSTRUCTION PLAN APPROVAL PROCEDURES FOR FOOD FACILITIES:

Pursuant to the California Health and Safety Code, Chapter 4, Division 104, Part 7, California Retail Food Code (CRFC), Section 114380 a plan approval must be obtained from the Inyo County Environmental Health Services Department before constructing or remodeling any building for use as a food facility. Remodel of a food facility means construction, building, or repairing that requires a permit from the local building authority. The following procedures are required to process and approve food facility plans as well as to obtain final approval to open for business:

1. The plans must include sufficient information to demonstrate compliance with the minimum requirements of the California Retail Food Code (CRFC).
2. Plans may be prepared by an architect, draftsman, designer, contractor or owner. All plans must be drawn in a concise, detailed and professional manner. Inadequate plans will be rejected.
3. Items to be submitted to begin the plan review process:
    - A minimum of two (2) sets of detailed plans and equipment specifications.
    - A complete food facility application.
    - A copy of the menu and a complete business plan (e.g., hours of operation, food suppliers, any other pertinent information).
    - A plan check fee

4. Upon plan approval, one set of approved plans must be maintained at the construction site until the final inspection has been made. The second set of approved plans will be kept on file by the ICEHSD until construction has been completed.
5. Before commencing construction, approvals must be obtained from Environmental Health, the local

building authority and other appropriate agencies. Building permits for food facilities are not to be issued until plan approval has been obtained from the ICEHSD.

6. If any changes to the approved plans are desired, revised plans shall be submitted for review and approval prior to construction.
7. All construction and equipment installation shall be subject to field inspection. The food facility shall not open for business until final approval is obtained from the ICEHSD and a valid food facility permit is issued. Call your Environmental Health Specialist at least 48 hours in advance for inspection appointment(s).

II. MINIMUM REQUIREMENTS FOR FOOD FACILITY PLANS:

Plans shall be drawn to scale (the recommended scale is 1/4 inch = 1 foot), and shall include the following:

1. Name and address of the food facility
2. Name, mailing address, and telephone number of owner, contractor, and contact person
3. Vicinity map
4. Floor plan of entire facility
5. Floor plan showing equipment layout including:
   a) Complete equipment checklist, including the methods of installation if necessary
   b) Equipment specification sheets
6. Plumbing layout
7. Electrical layout (including lighting schedule)
8. Exhaust hood ventilation and make-up air systems design
9. Site plan including proposed exterior waste storage receptacle location
10. Room finish schedule for floors, base (coving), walls, and ceiling that indicates the type of material, the color and the surface finish for each room or area. Give specific brand names and colors. Samples or specifications of proposed finish material may be required.

III. FIELD CONSTRUCTION INSPECTIONS

Preliminary construction inspection

Contact your Environmental Health Specialist at least 48 hours in advance to request a preliminary construction inspection prior to the installation of equipment.

Final / Pre-opening inspection

Upon completion of construction, including finishing work, contact your Environmental Health Specialist at least 48 hours in advance to arrange for a final pre-opening inspection. Approved materials/equipment and good workmanship are significant factors in the evaluation and final field approval of food facility construction and equipment installation. Prior to opening for business or use of remodeled areas, final construction must be approved and an annual food facility health permit must be paid.

IV. STRUCTURAL REQUIREMENTS: The plans must show and specify in detail the following:

1) Floors:

Floors in food establishments shall be durable, smooth and impervious to water, grease, and acid, and of easily cleanable construction (e.g., quarry tile or seamless epoxy pour).

Floor surfaces in all areas where food is prepared, packaged, dispensed, or stored in open containers, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and hand washing areas and in employee change and clothing storage areas, shall be an approved type that continues up the walls at least four (4) inches, forming a 3/8 inch minimum radius cove as an integral unit. (Vinyl rubber topset base is not acceptable)

Floor drains (draining to an approved sewer system) are required in floors that are water-flushed for

cleaning and/or where pressure spray methods for cleaning equipment are used. Where floor drains are utilized, the floor surfaces shall be sloped 1:50 (1/4 inch per foot) to the floor drains. (CRFC-114269) Approved anti-slip floor finishes or materials are acceptable in areas where necessary for safety reasons, such as traffic areas (CRFC-114268).

2) Walls and Ceilings:

Walls and ceilings of all rooms (except bar areas, rooms where food is stored in unopened containers and dining areas) shall be durable, smooth, nonabsorbent, and washable (e.g., gloss or semigloss enamel paint, epoxy paint, FRP paneling, stainless steel, ceramic tile).

Walls and ceilings in food preparation and utensil washing areas and interior surfaces of walk-in refrigeration units shall be easily cleanable.

Exposed brick, concrete block, rough concrete, rough plaster or textured gypsum board is not acceptable.

The wall behind sinks and dishtables should be covered with a durable waterproof material (e.g., FRP, ceramic tile, stainless steel, etc.) extending from the top of the coved base to at least twelve (12) inches above the backsplash.

Walls adjacent to floor mounted mop sinks should be covered with a durable waterproof material (e.g., FRP, ceramic tile, stainless steel, etc.) extending from the top of the sink to at least forty-eight (48) inches above the floor.

Provide a durable, cleanable, smooth, noncorrodible and nonflammable material (e.g., stainless steel, ceramic tile, etc.) behind the cook line and to any side walls that are adjacent or in close proximity.

3) Conduits:

All plumbing, electrical, and gas lines shall be concealed within the building structure to as great an extent as possible. When otherwise installed, they shall be mounted or enclosed so as to facilitate cleaning (e.g., at least 2 inch from the wall and six (6) inches about the floor).

Where conduits or pipelines enter a wall, ceiling or floor, the opening around the line shall be tightly sealed and made smooth.

Conduits or pipelines shall not be installed across any aisle, traffic area or door opening.

Multiple runs or clusters of conduits or pipelines shall be installed within the walls or encased in an approved sealed enclosure.

4) Window Screens:

All exterior windows shall be screened with not less than sixteen (16) mesh per square inch screening.

5) Food Protection Equipment: Service of unpackaged foods/utensils directly to or by the customer

Displays of unpackaged foods or utensils shall be shielded so as to intercept direct line between the customers mouth and the food or utensils being displayed or shall be dispensed from approved selfservice containers.

Cafeteria, buffet and salad bar self-service; food preparation equipment and food preparation areas, etc., shall be protected by approved sneeze guards. (Please see your Environmental Health Specialist for approved specifications).

Approved self-service containers shall have tight fitting, individual covers.

6) Dry Food and Beverage Storage:

Adequate and suitable space shall be provided and designated on plans for dry storage purposes. This area shall be equipped with sufficient and approved shelving to accommodate anticipated needs. It shall include only aisle space and floor area where shelving, cabinets, or other storage facilities are located. It shall not include floor area where desks, equipment, ladders, or other items may be placed. The following recommended methods of determining adequate storage space may be used:

• Whichever is greater:

1. A floor area equivalent to 25% of all kitchen space.
2. One square foot of floor space per customer seat. Or:

Sufficient approved shelving dispersed throughout the kitchen area may be substituted for 1 and 2 above.

Sufficient approved shelving for a small food service establishment means thirty two (32) lineal feet eighteen (18) inch deep shelving, meeting equivalent to applicable NSF standards. More shelving may be required for larger establishments.

Shelving shall meet or be equivalent to applicable NSF standards or other approved shelving which is smooth, durable, easily cleanable, nonabsorbent and vermin tight. The lowest shelf shall be at least six (6) inches above the floor with clear unobstructed area below.

7) Other Required Storage Facilities:

Adequate and suitable space shall be provided for the separate storage of clean and soiled linens.

A room, area or cabinet separated from any food preparation or storage area, or utensil washing or storage area, shall be provided for the storage of all cleaning equipment, supplies and poisonous substances (e.g., mops, buckets, brooms, cleaning compounds, waxes, commercial insecticides, commercial rodenticides, detergents, bleaches or any other injurious or poisonous materials).

8) Refuse Disposal Facilities:

Garbage and waste grease shall be disposed into adequate, watertight, nonabsorbent, rodent proof containers with close fitting lids. There shall be an area provided for the storage of these containers and facilities for their washing.

A floor mounted janitorial sink may be sufficient to clean the food waste containers of a small food facility.

Structural requirements for **interior** refuse disposal rooms and areas:

1. Floors shall be smooth, durable, grease resistant, nonabsorbent, coved, and easily cleanable.
2. Walls and ceilings shall be durable, easily cleanable, impervious to grease and moisture, and capable of withstanding the expected impacts.
3. The room or enclosure shall be well ventilated.
4. Hot and cold running water through a mixing valve protected with a backflow protection device shall be provided and located so that the room or enclosure can be cleaned.

Structural requirements for **exterior** refuse disposal facilities:

1. A securable enclosure is required.
2. Ground surfaces and enclosure surfaces should be constructed so as to be durable and cleanable.
3. Wash down facilities shall be provided with hot and cold water and a sanitary drain for liquid waste disposal. The slope to the drain shall be on a 1:5 gradient.

9) Toilet Facilities:

• In each food facility, there shall be employee toilet facilities. The requirements on the number of toilet and handicapped facilities shall be in accordance with local building and plumbing ordinances.

• Toilet facilities which are provided for use by patrons shall be so situated that patrons do not pass through food preparation, food storage, or utensil washing areas.

• The floors, walls and ceilings shall have surfaces that are smooth, nonabsorbent and easily cleanable.

• Hand washing facilities shall be provided within or adjacent to toilet rooms and shall be equipped with an adequate supply of hot and cold running water under pressure from a pre-mixing faucet. Hand washing cleanser and single use sanitary towels in permanently installed dispensers or hot air blowers shall be provided at this sink.

• Hand washing facilities shall be equipped to provide ware water (at least 100 degrees F) under pressure for a minimum of 15 seconds through a mixing valve or combination faucet.

• Toilet tissue shall be provided in a permanently installed dispenser at each toilet.

• Toilet rooms shall be separated from other portions of the food establishment by well-fitted, self-closing doors that prevent passage of flies, dust or odor.

• Public toilet facilities shall be provided in each food establishment with more than 20,000 square feet of floor space. Separate men and women toilet facilities are required.
• Toilet rooms shall be vented to the outside air by means of an openable screened window, an air shaft, or a light switch-activated exhaust fan, consistent with the requirements of the local building codes.

10) Clothing Change Rooms and Areas:

• A room, enclosure (e.g., locker, cabinet, etc.) or a designated area shall be provided where employees may change and store clothing and personal effects.
• The room, enclosure or designated area should be sized to accommodate the number of employees.
• The room, enclosure or designated area shall be separated from toilets, food storage, food preparation and utensil washing areas.

11) Exterior Door and Windows:

• All exterior doors shall be well-fitted and self-closing to effectively prevent the entrance of flies, rodents, and vermin.
• All exterior windows which open to food preparation areas, food storage areas and utensil washing areas shall be shall be screened with no less than sixteen (16) mesh per square inch.

12) Pass-through Windows:

• When food is passed through a window to a customer on the outside of the building, the size of the window opening should not exceed 216 square inches.
• Food service pass-through window openings should be equipped with a self-closing screen or window, or an automatic switch-activated air curtain which will produce an air flow eight (8) inches thick at the discharge opening (432 square inches allowed) and with an air velocity of not less than 600 FPM (feet per minute) across the entire opening measured at the point three (3) feet below the air curtain. *Window openings must be closed when not in use.*
• The minimum distance between multiple pass-through window openings may not be less than eighteen (18) inches.
• The counter surface of the pass-through window must be smooth, easily cleanable, and free of channels and crevices.

13) Delivery and Cargo Doors:

• All delivery doors leading to the outside shall open outward and be self-closing. Overhead air curtains must be provided when delivery doors remain open for extended period of time and when necessary to exclude insects, dust, dirt, and fumes.
• The air curtain when installed inside the building shall produce a downward and outward air flow not less than three (3) inches thick at the nozzle with an air velocity of not less than 1600 FPM (feet per minute) across the entire opening measured at the point three (3) feet below the air curtain.
• When the air curtain is installed outside of the building, the same velocity of air needs to be directed straight down over the entire door opening. The air curtain shall turn on automatically when the door is opened. *An overhead air curtain is not a substitute device to permit a door to remain open.*
• Large cargo type doors shall not open directly into a food preparation area. Cargo type doors that open into any food warehouse of a food facility may only be open during deliveries.

14) Lighting:

• In every room and area in which any food is prepared, manufactured, processed or packaged, or in which utensils are cleaned, sufficient natural or artificial light shall be provided to produce an intensity of not less than 215 lux (footcandles) at the working surface, measured thirty (30) inches above the floor.
• The working surfaces on which alcoholic beverages are prepared, or where utensils used in the preparation or service of alcoholic beverages are cleaned shall be provided with at least 108 lux (10 footcandles) of light.

• Food and utensil storage rooms, refrigeration storage, toilet rooms and dressing rooms shall be provided with at least 108 lux (10 footcandles) of light.
• Light fixtures in areas where food is prepared, open food is stored or utensils are cleaned shall be of shatterproof construction or protected with shatterproof shields and be readily cleanable.
• During general cleanup activities, at least 215 lux (50 footcandles) shall be provided in the area being cleaned, including, but not limited to, areas where alcoholic beverages are prepared or served.

15) Water:

• An adequate, protected, pressurized, potable supply of hot water at least 120E Fahrenheit (49EC) and cold water shall be provided.
• In sizing the water heater, the peak hourly demands for all sinks, dishwashing machines, etc., are added together to determine the minimum required recovery rate.
• The water supply shall be from a water system approved by El Dorado County Environmental Health.

16) Backflow Protection:

• An approved backflow prevention device shall be properly installed upstream of any potential hazard between the potable water system and a source of contamination (e.g., all threaded water outlets, mop sinks, sprayers, dishwashers, etc.).

17) Indirect Waste Receptors:

• All steam table, ice machines and bins, food preparation sinks, utensil washing sinks, display cases, and other similar equipment that discharge liquid waste shall be drained by means of indirect waste pipes, and all wastes drained by them shall discharge through an air gap into an open floor sink or other approved type of receptor that is properly connected to an approved sewer system.
• The floor sink or other approved waste receptors should be located to provide adequate drainage of the equipment being served. Equipment should be located within fifteen (15) feet.
• Floor sinks or other approved waste receptors shall be located so that they are readily accessible for inspection, cleaning, and repair. Overflow from floor sinks shall be prevented from flowing into accessible areas (e.g., storage cabinets, display refrigerators, etc).

18) Sewage Disposal, Grease Traps and Interceptors:

• All liquid waste, including sewage generated by a food establishment, shall be disposed of in an approved manner into either a public sewer system or to an approved on-site disposal system.

V. VENTILATION:

Provide adequate ventilation to remove gases, odors, steam, heat, grease, vapors, or smoke from all rooms in the facility including: food preparation, scullery, toilet, janitorial, garbage and change rooms, consistent with the requirements of local building codes.

1) Exhaust Hoods and Ducts:

• Mechanical exhaust ventilation shall be required at or above all commercial type deep fat fryers, broilers, fry grills, steam jacketed kettles, ranges, ovens, barbecues, rotisseries, dishwashing machines, and other similar equipment to effectively remove gases, odors, steam, heat, grease, vapors, or smoke from the facility. Usually, chemical sanitizing or undercounter dishwashing machines do not require exhaust hoods.
• The above paragraph shall not apply to cooking equipment when the equipment has been submitted to the State Department of Health Services for evaluation, and it has found that the equipment does not produce toxic gases, smoke, grease, vapors, or heat when operated under conditions recommended by the manufacturer. The Department may recognize a testing organization to perform any necessary evaluations.
o Refer to Uniform Mechanical Code for construction requirements.
o Refer to CCDEH ARecommendations for Mechanical Exhaust Ventilation and Hood Systems

for Commercial Food and Utensil Heat Processing Equipment@ guidelines.
• Ventilation plans for each system shall include front and side elevations of the exhaust hood and duct details to the roof fans (both exhaust and make-up air).
• Provide manufacturer specification sheets for exhaust fan, make-up air fan and hood filters along with the static pressure calculations. Specify the number and location of make-up air diffuser.

VI. EQUIPMENT REQUIREMENTS:

• All new and replacement food-related and utensil-related equipment shall meet or be equivalent to approved applicable sanitation standards.
• All utensils, display cases, windows, counters, shelves, tables, refrigeration units, sinks, dishwashing machines and other equipment or utensils used in the preparation, sale, service and display of food shall be made of nontoxic, noncorrodible materials and shall be constructed, installed and maintained to be easily cleaned.
• Equipment shall be installed so as to facilitate cleaning under and around the equipment, and of all the adjacent surfaces. Equipment should be sealed to adjacent walls and equipment, or should be spaced away from the adjacent walls and equipment at least six (6) inches for every four (4) linear feet of equipment.
• All floor mounted equipment shall be place on NSF approved casters, minimum six (6) inch high easily cleanable legs or be completely sealed in position on at least a four (4) inch high continuously coved base or concrete curb.

1) Refrigeration:

• All reach-in and walk-in refrigeration and freezer units shall be adequate in capacity and usage to meet the needs of the proposed operation and shall:
o Be specifically constructed for commercial use and shall meet or be equivalent to applicable NSF standards. Domestic model refrigerators and freezers will not be accepted.
o Have shelving that is nonabsorbent, noncorrodible, easily cleanable, and shall meet or be equivalent to applicable NSF standards.
o Be provided with an accurate, readily visible thermometer.
o Drain condensate and other liquid waste in a sanitary manner to a floor sink or other approved device by an indirect connection located outside the refrigerator and freezer units. Condensate may be drained to a properly installed and functioning evaporator.
o Open into the building
• Walk-in refrigeration and freezer units shall also:
o Be designed to be closed and sealed to the floor or be constructed integral with the floor. Coved bases shall be provided at the intersection of interior floors and walls.
o Be flashed or sealed to walls and/or ceiling as needed to prevent rodent and vermin harborage or inaccessible areas.
o Have noncorrodible shelving that is at least six (6) inches above the floor and shall meet or be equivalent to applicable NSF standards. Wood is not acceptable.
o Have floor drains and floor sinks located outside units.

2) Sinks:

When a sink is installed next to a wall, the integral metal backsplash shall be sealed to the wall. Hot and cold water under pressure shall be provided through a mixing valve to each compartment of the following sinks:
• **Utensil Sinks:**
o Where multi-service kitchen utensils and eating and drinking utensils are washed, a minimum three (3) compartment stainless steel sink with dual integral stainless steel drainboards shall be provided.
o The sink compartments shall be large enough to accommodate the largest utensil or piece of

equipment to be washed, and the drainboards shall be as large as the largest sink compartment.
o A three (3) compartment sink may be required within each separate section of a large food establishment which handles unpackaged foods (i.e., deli, meat, bakery, sushi bars, oyster bars, etc.).
o Dishwashing sinks are recommended where a large volume of eating and drinking utensils are washed.

• **Food Preparation Sinks:**

o The separate sink for food preparation shall have a food preparation sink that drains by means of an indirect connection.
o The food prep shall be located in the food prep area, be provided exclusively for food prep, and be accessible at all times.
o The sink shall be equipped with an adequate supply of hot and cold running water through a mixing valve.
o The food prep sink shall have minimum dimensions of 18 inches by 18 inches by 12 inches in depth with an integral drainboard or adjacent table of at least 18 inches by 18 inches.

• **Handwashing Sinks:**

o Handwashing sinks shall be provided in each food preparation area sufficient in number and conveniently located so as to be accessible at all times for use by food handlers.
o Soap and single-use sanitary towels (or a hot-air blower) shall be provided in permanently installed dispensers at or adjacent to the handwashing sinks.
o Handwashing sinks shall be equipped to provide ware water (100 degrees Fahrenheit) under pressure for a minimum of 15 seconds from a combination faucet or mixing valve.
o The sink shall be separated from the ware washing sink by at least 24 inches or have a metal splashguard with a height of at least 6 inches that extends from the back edge of the drainboard to the front edge of the drainboard, the corners of the barrier to be rounded.

• **Janitorial Sink:**

o Food establishments shall be equipped with at least one of the following to be used exclusively for general cleaning purposes and for the disposal of mop bucket waste and other liquid waste:
 A one (1) compartment, non-porous janitorial sink
 A slab, basin, or floor constructed of concrete or equivalent material, curbed and sloped to a drain.
o The sink shall be located so as not to contaminate any food preparation areas, food storage areas, utensils, or equipment.
o The sink shall provide hot (minimum at least 120 degrees Fahrenheit) and cold running water from a combination faucet or a mixing valve.
o The mixing valve faucet shall be equipped with a backflow prevention device.

3) Dishwashing and Glass washing Machines:

• **A**n area should be provided for scrapping utensils and equipment as circumstances require. An overhead re-rinse sprayer with a scupper tray, sink or garbage disposal will satisfy this requirement.
• Dishwashing machines may be connected directly to the sewer immediately downstream from a floor drain or they may be drained through an approved indirect connection.
• Spray type dishwashing and glass washing machines which are designed for got water bactericidal rinse shall be provided with an approved booster heater or be connected to an approved recirculating water system which is capable of maintaining the rinse water at not less than 180 degrees Fahrenheit. These machines may require an approved type II exhaust hood.
• Spray type dishwashing and glass washing machines which are designed for a chemical bactericidal rinse shall be capable of maintaining the rinse water at a temperature in accordance with its NSF listing.

• Dishwashing machines must have two (2) integral stainless steel drainboards, one for soiled utensils and one for clean utensils. The drainboards shall be sloped and drained to an approved waste receptor.
• For glass washing machines and under counter dishwashing machines, there shall be two (2) metal drainboards, one for soiled utensils and one for clean utensils. The drainboards shall be sloped and drained to an approved waste receptor.
• Drainboards shall be large enough to adequately store all utensils above the floor at all times or additional approved shelving or racks shall be provided in the dishwashing area for this purpose.
• A minimum of a three (3) compartment stainless steel sink with dual integral metal drainboards is required in addition to any dishwashing machine.
• When a dish table is installed next to a wall, the integral metal backsplash shall be sealed to the wall.

4) Dipper Wells:

• A cold running water dipper well shall be provided, if scoops or a reusable serving utensils are stored in water. The dipper well shall be drained by means of an indirect connection.