

**SAN BENITO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT**  
**FOOD FACILITY PLAN CHECK/CONSTRUCTION APPLICATION**

**[California Retail Food Code 114380]**

(revised September 1, 2007)\*

Facility/Business Name: \_\_\_\_\_  
Facility/Business Address: \_\_\_\_\_  
Mailing Address (if different from above): \_\_\_\_\_  
Applicant/Owner Name: \_\_\_\_\_  
Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_ e-mail: \_\_\_\_\_  
Person To Contact Regarding Plans: \_\_\_\_\_  
Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_ e-mail: \_\_\_\_\_  
Date Plan Check Submitted: \_\_\_\_\_  
Signature of Applicant/Owner: \_\_\_\_\_

**Section A:** To be completed by the applicant/owner.

1. These plans are for:    New Facility Construction [ ☐ ]        Remodel Existing [ ☐ ]

(CRFC 113715. Any construction, alteration, remodeling, or operation of a food facility shall be approved by the enforcement agency and shall be in accordance with all applicable local, state, and federal statutes, regulations, and ordinances, including but not limited to, fire, building, and zoning codes.)

2. Type of Food Facility (Restaurant/Market/Other): \_\_\_\_\_

Single Service [ ☐ ]        or        Multi Service [ ☐ ]

3. Seating Capacity: \_\_\_\_\_ Square Footage of Floor Area: \_\_\_\_\_

4. Submit 3 sets of plans.

5. Submit all specification data information ("cut sheets") on all pieces of equipment.  
Non-commercial home appliances/equipment is not allowed.

5. Completed Section B (food facility general requirements): Yes [ ☐ ] No [ ☐ ]

6. Completed Section C (hot water supply calculations):        Yes [ ☐ ] No [ ☐ ] N/A [ ☐ ]

7. Completed Section D (exhaust hood calculations):        Yes [ ☐ ] No [ ☐ ] N/A [ ☐ ]

8. Plan Check Fee (must be paid in advance, as per schedule A): \$ \_\_\_\_\_

\* Note, on July 1, 2007, the California Retail Food Code (CRFC or "Cal Code") replaced the California Uniform Retail Food Facilities Law (CURFLL).

## San Benito County Environmental Health Food Facility Plan Check

### Section B:

1. Floor Surfaces [CRFC 114268]:
  - a. Are all floor surface materials durable, easy to clean and commercial grade? Yes No
  - b. Are areas in the facility, that are subject to food preparation and equipment washing, coved 4 inches up the wall with the same floor surface material (contiguous)? Yes No  
\* Rubber base coving is not allowed.
  - c. Please indicate the type of floor material to be installed for the following:  
Kitchen and/or Food Preparation Area- \_\_\_\_\_  
Dry Storage- \_\_\_\_\_  
Dishwashing Area- \_\_\_\_\_  
Janitorial Area- \_\_\_\_\_  
Restrooms- \_\_\_\_\_  
Walk-in Box- \_\_\_\_\_  
Bar- \_\_\_\_\_  
Garbage/Refuse Area- \_\_\_\_\_
2. Walls and Ceilings [CRFC 114271]:
  - a. Are walls/ceilings in the facility smooth and easily cleanable? Yes No
  - b. Are walls/ceilings in the facility of a contrasting light color? Yes No
  - c. What colors are the walls and ceiling in the facility? \_\_\_\_\_
  - d. Will acoustical paneling be used? Yes No
  - e. Are walls that are next to sinks water resistant? Yes No
3. Lighting [CRFC 114252]:
  - a. Is there adequate light in the facility? Yes No
  - b. Are lighting fixtures in food preparation areas, food storage areas and dish/utensil washing areas protected by shatterproof shields? Yes No
  - c. Are the lighting fixtures UL approved? Yes No
4. Insect and Vermin Control [CRFC 114259]:
  - a. Are all windows (that can be opened) screened? Yes No
  - b. Are all door entrances screened and/or self-closing? Yes No
  - c. Will all openings around conduit and plumbing be sealed? Yes No
5. Hand Wash and Toilet Facilities [CRFC 113953 and 114250]:
  - a. Are attached soap and paper towel dispensers in all restrooms? Yes No
  - b. Is there adequate hot water at all lavatories? Yes No
  - c. Is there mechanical ventilation in all restrooms? Yes No
  - d. Are doors to restrooms self-closing? Yes No

- e. Are toilet facilities located within 200 feet of the facility? Yes No
  - f. Are toilet facilities available at all times during operation? Yes No
6. Change Room [CRFC 114256]:
- a. Is there a room or enclosure to provide privacy (separate from toilets), away from food storage and food preparation areas? Yes No
  - b. Are there lockers or storage areas away from food storage and food preparation areas for employees personal items/clothing? Yes No
7. Lavatory in Kitchen/Food Preparation Areas [CRFC 113953,]:
- a. Are there lavatories in the Kitchen and Food Preparation areas? Yes No
  - b. Are fixed soap/paper towel dispensers available at lavatories? Yes No
8. Equipment and Utensil Requirements [CRFC 114130]:
- a. Are all equipment and utensils ANSI certified or equivalent? Yes No  
(\*Note, home appliances and non-commercial grade equipment is not allowed.)
9. Refrigeration [CRFC 114157 and 114193 ]:
- a. Do all refrigeration units have accurate thermometers? Yes No
  - b. Are all refrigeration units, which must dispose of wastewater (i.e. ice machines, ice bins, etc.), properly plumbed and indirectly connected to a sewer line or floor sink (air gapped)? Yes No
10. Food Service [CRFC 114060 and 113996]:
- a. Are sneeze guards provided as to protect displayed food items? Yes No
  - b. Are steam wells and/or hot holding ovens capable of maintaining hot food items at or above 135 degrees F? Yes No
  - c. Are cold wells and/or self serve refrigeration units capable of maintaining cold food at or below 41 degrees F? Yes No
11. Food and Utensil Storage [CRFC 114047, 114079]:
- a. Is there adequate storage space for supplies (should equal 25% of all kitchen area)? Yes No
  - b. Are all food items stored items 6 inches off the floor? Yes No
  - c. Are all food items protected from contamination? Yes No
  - c. Are all shelves smooth and easy to clean? Yes No
12. Janitorial Room [CRFC 114279 and 114281]:
- a. Is there a separate area or room to store cleaning supplies and chemical agents, that is away from food preparation, food storage, utensil washing and utensil storage? Yes No
  - b. Is there a janitorial sink in the facility? Yes No
13. Plumbing & Waste Disposal [CRFC 114193.1, 114197, 114199,114201, 114244]:
- a. Is there a waste storage area? Yes No



- b. Are waste containers durable, made of approved material, non-absorbing, non-leaking, and have tight fitting lids? Yes No
  - c. Is there an area to clean waste containers? Yes No
  - d. Is there an area to clean rubber mats? Yes No
  - e. Does all wastewater generated disposed of via an approved sewer connection? Yes No
  - e. Is all plumbing connected to an approved (check one)  
Sewer\_\_\_\_ Septic Tank\_\_\_\_  
Other (specify)\_\_\_\_\_
  - f. Is there a grease trap or grease interceptor? Yes No
  - g. Do all thread outlets have a backflow prevention device installed up-stream? Yes No
14. Dishwashing [CRFC 114099 and 114101]:
- a. Is there a 3 compartment sink with dual metal drain boards? Yes No
  - b. Is the largest utensil or pot able to fit inside the compartments of the 3 compartment sink? Yes No
  - c. Is the 3 compartment sink indirectly connected to the sewer? Yes No
  - d. Is there a pre-wash sink? Yes No
  - e. Is an integral metal backsplash installed and sealed to the wall? Yes No
  - f. Is there a dishwashing machine? Yes No
15. Water Supply [CRFC 114189, 114190, 114192, 114195 and UPC]:
- a. Is the water from an approved source? Yes No
  - b. Complete **Section C** to determine required hot water supply/heater size. The required minimum hot water temperature at all faucets is 120 degrees Fahrenheit.
16. Mechanical Ventilation [CRFC 114149 and UMC]:
- a. Is any of the cooking equipment capable of generating grease or smoke vapors (i.e. stove/range, grill, griddle, deep fat fryer, oven)? Yes No
  - b. Complete **Section D** if you answered "Yes" to question "a".
  - c. Is the hood UL listed? Yes No
  - d. Are all cooking appliances under the hood? Yes No
  - e. Are all cooking appliances within 6 inches of the hoods inner lip? Yes No
  - f. Is there a make-up air system? Yes No
  - g. Are the hood and make-up air system interlocked? Yes No
  - h. Will the exhaust air from the vents create a nuisance? Yes No
17. Miscellaneous:
- a. The owner or one employee is required to obtain a valid Food Safety Certificate, within 60 days of obtaining the Health Permit [CRFC 113947.1].
  - b. No sleeping accommodations shall be maintained or kept in any room where food is prepared, stored, or sold [CRFC 114286].
  - c. It is recommended that a licensed pest control operator service your facility annually.

**SECTION C**  
**HOT WATER SUPPLY CALCULATION SHEET FORM FFI**  
(revised 10/17/08)

I. Complete the following calculations for hot water demand requirements. The gallons/hour demands per fixture are available on Attachment FFA.

II. List gallons/hour figures for all equipment using hot water. (See Attachment A).

		<u>GPH</u>
a. Pot sinks (3 Compartment)	Number _____	Demand _____
b. Bar /Fountain sinks (3 Compartment)	Number _____	Demand _____
c. Vegetable & Pantry sinks	Number _____	Demand _____
d. Slop or Janitorial sinks	Number _____	Demand _____
e. Hand Wash/Lavatories sinks	Number _____	Demand _____
f. Pre-wash + <u>dishwashing machine</u>	Number _____	Demand _____
g. Garbage can wash facility	Number _____	Demand _____
h. Other	Number _____	Demand _____

Total Demand \_\_\_\_\_ GPH

**RECAPITULATION OF TOTAL DEMAND ON DISHWASHING MACHINE HOT WATER SOURCE**

a. Items a. through h. above                      Total Demand (from above) \_\_\_\_\_ GPH  
b. Recovery Rate (100% multi-service; 80% single service)      GPH x \_\_\_\_\_ % = \_\_\_\_\_ GPH  
Final Total Demand \_\_\_\_\_ GPH

III. Calculate usable hot water from following equation:  
(Supply cut sheet for hot water heater)

**Gas Water Heater:**

$$\text{BTU's/hr. or BTU Input} = \frac{(\text{GPH}) \times 8.33 \text{ lb./gal H}_2\text{O} \times \text{TEMP RISE}}{\text{Heater or Thermal Efficiency (75\%)} *}$$

\* Assume thermal efficiency to be 75%

$$\text{BTU Input} = \frac{\text{GPH (final)} \times 8.33 \times 50}{.75}$$

$$\text{BTU Input} = \underline{\hspace{2cm}}$$

**Electric Water Heater:**

$$\text{KW/hr or KW Input} = \frac{\text{GPH} \times \text{Rise} \times \text{lb./gal H}_2\text{O}}{\text{Thermal Efficiency} * \times \text{BTU/KW}}$$

\* Assume thermal efficiency to be 98%

$$\text{KW Input} = \frac{\text{GPH (final)} \times 50 \times 8.33}{.98 \times 3412}$$

$$\text{KW Input} = \underline{\hspace{2cm}}$$

IV. Allowances for hot water storage (total capacity above 100 gallons)

a.  $QS = \frac{0.7s}{d}$

QS = Quantity of usable hot water from storage (GPH)

s = Storage capacity of tank

d = Duration of peak hot water demand; hours

\* If specification sheet indicates hot water has a higher efficiency, that value may be substituted.

b.  $Q_n = Q_t - Q_s$

Q<sub>n</sub> = Net quantity of hot water required from heater: gallons/hr.

Q<sub>t</sub> = Total quantity of hot water required; gallon/hr.

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**VII. SIZING REQUIREMENTS FOR INSTANTANEOUS WATER HEATERS**

- A. One of the advantages of an instantaneous water heater is its ability to provide a continuous supply of hot water. However, since the water passes through a heat exchanger, the water must flow through the unit slowly to ensure proper heat transfer. Therefore, the quantity, or rate, at which the hot water is delivered can be significantly less than that provided by a storage water heater. When hot water is utilized at several locations of the food facility at the same time the flow of hot water to each fixture can be severely restricted. As a result of the restricted output of instantaneous water heaters, more than one unit may be required, depending on the numbers and types of sinks and equipment present. Due to the limitations inherent in the design of instantaneous water heaters, some local health agencies may restrict or prohibit their usage. Check with your local health agency prior to installing an instantaneous water heater in order to determine their requirements.
- B. Instantaneous water heaters must be sized to provide hot water of at least 120° Fahrenheit, and at a rate of at least two gallons per minute (GPM), to each sink and fixture that utilizes hot water. (Note: Hand lavatories must receive at least 1/2 GPM.) The following example is provided to explain how this sizing criteria is applied:

Assume:

1 18" X 18" three compartment sink	2 GPM
2 hand lavatories	1 GPM (1/2 GPM each)
1 janitorial sink	2 GPM
	5 GPM

- C. In the example given above, one or more instantaneous water heaters would have to be provided in order to supply a total of at least 5 GPM.
- D. Food facilities that install an automatic ware washing machine that utilizes a large quantity of hot water may be required to provide an instantaneous water heater exclusively for the ware washing machine. NSF International listings or listings established by other nationally recognized testing laboratories are used to determine the minimum GPM hot water demand for automatic ware washing machines.



## COMPUTING HOT WATER DEMANDS FOR FOOD ESTABLISHMENTS

### A. GENERAL PURPOSE WATER (140° F)

	<u>Fixtures/Sinks</u>	<u>No. Compartments</u>	<u>Gals. Per Hour</u>
1.	Pot Sinks (18"x18")	3	42
2.	Bar & Fountain Sinks	3	25
3.	Vegetable/Preparation Sinks	1	10
4.	Slop or Janitorial Sinks	1	15
5.	Hand Wash Sinks (Hand Lavatory)	1	5
6.	Pre-wash (dishwashing):		
	a. Hand Spray		45
	b. Pre-Flush-Open Type		45
	c. Pre-Flush-Recirculating Type		40
	d. Pre-Flush-Closed Type		240
	e. Pre-Scraper-Open Type		160
7.	Garbage Can Wash Facility		15

### B. Final Rinse Requirements (180° F) – Machine Dishwashers

<u>Dishwashing Machine Classification</u>	<u>GPH 20 PSI</u>
Class 1-16 x 16 Single Tank, Hood	
Class 2-18 x 18 Single Tank, Door	
Class 3-20 x 20 Single Tank, Door	
Class 4 – Multiple Tank Conveyor, Inclined	
Class 5 – Multiple Tank Conveyor, Flat	
Class 6 – Single Tank Conveyor	

### C. Low Temperature Requirements

Ex. Auto Chlor		
1.	Single Rack	2.5 gal/cycle 1.5 min/cycle
		100
2.	Double Rack	4 gal/cycle 1.8 min/cycle
		133

**SECTION D**  
**COOKING EQUIPMENT & HOOD**  
**(rev 9/13/07)**

- Provide a detailed diagram of all cooking equipment items and hood dimensions in an overhead view.
- Casters & quick disconnects **STRONGLY** recommended! Specified? yes \_\_\_ no \_\_\_
- Hood long enough to allow  $\geq 6"$  on sides of equipment? yes \_\_\_ no \_\_\_
- Hood wide enough to allow  $\geq 6"$  in front & back of equipment? yes \_\_\_ no \_\_\_
- Canopy lip  $\geq 6.5'$  above floor &  $\leq 4'$  above cooking surface? yes \_\_\_ no \_\_\_
- Canopy is free of horizontal electrical/ansul lines yes \_\_\_ no \_\_\_

**CFM**

- Hood opening: \_\_\_\_\_ ft. X \_\_\_\_\_ ft. = \_\_\_\_\_ sq. ft.  
(width) (length)
- \_\_\_\_\_ sq. ft. X \_\_\_\_\_ Q factor from UMC = \_\_\_\_\_ CFM
- Other formula: \_\_\_\_\_ = \_\_\_\_\_ CFM
- Other formula is for what kind of hood? \_\_\_\_\_

**FILTERS**

- \_\_\_\_\_"H X \_\_\_\_\_"W \_\_\_\_\_ X \_\_\_\_\_ sq. ft. = \_\_\_\_\_ sq. ft.  
(filter size) (# of filters) (usable area per filter) (total filter area)
- \_\_\_\_\_ CFM  $\div$  \_\_\_\_\_ sq. ft. (total filter area) = \_\_\_\_\_ fpm
- Baffle filter fpm should  $\approx 300$ ; must be 250-350. Is it? yes \_\_\_ no \_\_\_
- Horizontal slot filter fpm should  $\approx 1000$ ; must be 800-1200. Is it? yes \_\_\_ no \_\_\_
- If this is a "LISTED" hood, fpm can be  $<$  or  $>$  above. Is it? yes \_\_\_ no \_\_\_

**DUCT**

- Duct dimensions: \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_  $\div$  144 = \_\_\_\_\_ sq. ft.  
(inches) (inches) (duct area)
- Hood  $> 12$  ft. long shows  $> 1$  exhaust outlet to main duct? yes \_\_\_ no \_\_\_
- \_\_\_\_\_ CFM  $\div$  \_\_\_\_\_ sq. ft. (duct area) = \_\_\_\_\_ fpm
- Fpm should  $\approx 1800$ ; must be 1500-2500. Is it? yes \_\_\_ no \_\_\_

**STATIC PRESSURE & EXHAUST FAN**

- # of elbows = \_\_\_\_\_ Cleanout at each elbow? yes \_\_\_ no \_\_\_
- Total Static Pressure  $\approx$  \_\_\_\_\_ SP Inspector: From plans & SP Chart  $\approx$  \_\_\_\_\_ SP
- Exhaust Fan: Make \_\_\_\_\_ Model # \_\_\_\_\_ H.P. \_\_\_\_\_
- Unit handles grease-laden vapors? yes \_\_\_ no \_\_\_
- Unit pulls required CFM at SP? yes \_\_\_ no \_\_\_

**MAKE-UP AIR**

- \_\_\_\_\_ CFM  $\div$  2000 CFM = \_\_\_\_\_ Next higher Diffusers  
(Exhaust) (Max. per diffuser) whole number = \_\_\_\_\_ required
- Make-up air Static Pressure  $\approx$  \_\_\_\_\_ SP Inspector: From plans & SP chart  $\approx$  \_\_\_\_\_ SP
- Make-up air unit: Make \_\_\_\_\_ Model #: \_\_\_\_\_
- Unit supplies 95-100% of exhaust CFM at estimated SP? yes \_\_\_ no \_\_\_
- Diffusers on ceiling  $\geq 10$  ft. from hood? yes \_\_\_ no \_\_\_
- Exhaust & make-up air electrically interlocked? yes \_\_\_ no \_\_\_

Prepared by: \_\_\_\_\_  
Name Company