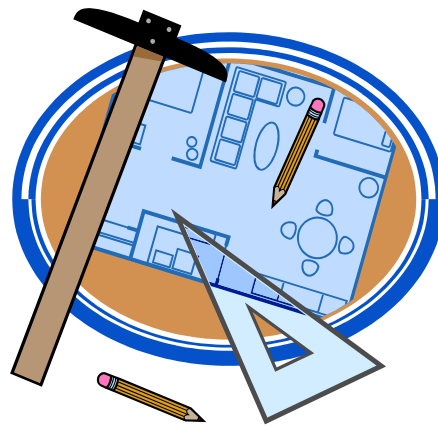


PLAN REVIEW PACKET

EDIBLE CANNABIS MANUFACTURING FACILITIES



The Plan Review Packet Includes:

1. Procedure for Edible Cannabis Manufacturing Facility Plan Review and Approval
2. Quick Reference for Building Departments
3. Flooring Guidelines
4. Hot Water Heater Worksheet
5. Requirements for Mechanical Exhaust Ventilation Plans
6. Plan Review Application

TO: Contractors, Consultants and Facility Owners

SUBJECT: Procedure for Edible Cannabis Manufacturing Facility Plan Review and Approval

BACKGROUND: Sonoma County Code requires that all cannabis facilities that manufacture edible cannabis products obtain a health permit. Environmental Health requires plan review approval prior to construction on all new facilities. Plan reviews and inspections will be based on relevant sections of the California Retail Food Code (CALCODE) and related state regulations.

New Edible Manufacturers

Environmental Health will review plans within 20 working days of receipt. If plans are not approved, a notice will be sent to the applicant detailing additional information needed. Plans may be submitted via mail and must be accompanied with a completed Plan Review Application and required fees. Environmental Health will not begin the plan review process until all plan review fees, the application and required plan documents and copies are submitted.

Upon completion of plan review, two of the three approved sets of plans must be picked up by the applicant or a representative of the applicant. The yellow copy of the approved Plan Review Application is attached to the applicant's copy of the plans and shall remain at the construction site. The pink copy of the approved Plan Review Application is attached to the set of plans designated for the local building department and must be signed by them. It is the responsibility of the applicant to submit the pink set of plans to the building department and obtain necessary building permit(s). **The building permit(s) cannot be issued without plan review approval from Environmental Health.** It is the responsibility of the applicant to obtain a use permit from the building department (if required).

Construction of your project must be completed, final construction approval must be granted by Environmental Health and verification of approval from the jurisdictional building department obtained before the applicant may submit a Cannabis Facility Health Permit application. Contact this office at (707) 565-6565 at least one week prior to your completion date to schedule a construction inspection.

Additional Information for Submitting a Plan Review Application

The following information is necessary for timely review and approval. Many of the items presented below may not apply to your facility. Please review the list carefully and be sure to provide the required information where applicable.

- Complete and sign the **Plan Review Application and pay the required fee** (see fee schedule). New construction plan review fee begins with a ten-hour fee. Plans will not begin the review process without completion of a plan check application and payment of the required fees. Plan check review, construction inspection(s) and travel fees are separate from the operational permit fee. Plan check fees are a prepaid estimate of time and are based on the current hourly rate fee (see fee schedule). Any additional time over the plan check fees will be invoiced after the project is complete.
- Submit **THREE sets of detailed plans** and **ONE set of manufacturer equipment specification sheets, plus ONE electronic set of the plans and manufacturer equipment specification sheets.** Electronic documents may be submitted in PDF format via CD, flash drive or, if under 1 MB, email to eh@sonoma-county.org. Please be sure to include your cannabis facility's name in the subject line.
- **Scale:** Plans shall be drawn to a minimum scale of 1/4" = 1 foot. Identify each room or area on the plans.
- **Site plan:** Submit details of the entire site, including proximity to road, driveway, parking, building footprint, other structures/infrastructure and refuse enclosure.
- **Floor plans:** Submit plans of the entire facility including plumbing layout, electrical layout, reflected ceiling plan, equipment layout details and equipment elevations.

- **Square footage:** Provide square footage of the cannabis facility.
- **Menu for Edible Cannabis Products to be produced in a manufacturing site:** Submit a list of Edible Cannabis products including raw ingredients to be manufactured at an Edible Cannabis Manufacturing Site.
- **Equipment schedule:** Include manufacturers' specification sheets and the method of installation for all equipment. Service sinks must meet applicable National Sanitation Foundation (NSF) standard.
- **Finish schedule:** Specify materials and finishes for floors, floor bases, walls, ceiling, shelving and cabinets. This schedule should include the type of material and the surface finish. Give specific brand names. Samples or specifications of proposed finish materials may be required. See handout "Flooring for Food Establishments." (Note: Flooring requirements for food facilities will apply to edible cannabis manufacturers.)
- **Mechanical exhaust ventilation:** Hoods shall be installed over all equipment that produce heat, gases, smoke or vapors. Refer to the current edition of the Uniform Mechanical Code (UMC), Chapter 5, for requirements. For each hood, provide plans, completed hood work sheet and other information as specified on "Requirements for Hood Plans" form, available at the office or exhaust hood manufacturer's hood specification sheet.
- **Plumbing plan:** Show a complete plumbing layout and water heater location. If more than one water heater is proposed please identify the units and connections. Floor sinks must be accessible for cleaning and installed flush with the floor finish. Include specification sheets for all food service sinks. All service sinks must meet NSF standards.
- **Toilet facilities:** Toilet facilities are required for each edible cannabis facility and must be employee accessible. Contact your local building department for specific American with Disabilities Act (ADA) requirements regarding toilet room design and number of required restrooms prior to submitting plans to this office.
- **Water heater:** Specify size and output in BTU/hour, KW or GPM of the water heater. If fixtures are located more than 60 feet from the water heater, a recirculation pump must be installed. See "Guidelines for Sizing Water Heaters" available from this office for additional requirements. If more than one water heater is proposed, identify the units and connections. Water heater minimum sizing requirements will be calculated by the plan checker and stamped on the plans for gas (BTU), electric (KW) and on demand/instantaneous water heaters (GPM). **If you are proposing an on-demand water heater please include the name and model number.**
- **Handwash sink(s):** A sink to be used exclusively for handwashing with hot and cold water must be provided within every cannabis manufacturing facility, and shall be equipped with mounted soap and towel dispensers. Hand wash sinks must be easily accessible.
- **Dishwashing:** A 3-compartment stainless steel sink with dual integral drain boards may be required. The sink must be capable of accommodating the largest utensil (dish or pot) to be washed. Each drain board shall be as large as the sink compartments. The 3-compartment sink must drain to a floor sink (or other equivalent receptacle) via an indirect connection with a one-inch air gap space above the top rim of the floor sink. An automatic dishwashing machine or glass washing machine with high temp or chemical sanitizer may be added in addition to a 3-compartment sink.
- **Preparation sink:** Facilities that perform edible cannabis manufacturing activities such as thawing, rinsing, or soaking are required to have a separate stainless-steel food preparation sink that meets NSF standards. Minimum size of a preparation sink is 18 x 18 x 12 inches with either a single integral drain board 18 x 18 inches or an adjacent table 18 x 18 inches or larger. If the preparation sink is located closer than two feet from a hand sink or 3-compartment sink, a six-inch splash guard is required. The

preparation sink must drain to a floor sink (or other equivalent receptacle) via an indirect connection with a one-inch air gap above the top of the rim of the floor sink.

- **Mop sink:** Provide an approved janitorial sink with hot and cold water and backflow protection. Submit a specification sheet. The sink shall be located to prevent contamination of any preparation areas, storage areas, utensils, or equipment. A wall or enclosure may be required depending on location of the mop sink. Provide space for storage of a mop bucket and cleaning supplies. A curbed utility wash-down area may be used in lieu of a mop sink. Mop sink/janitorial areas are required to have acceptable flooring (refer to the flooring guidelines). The walls around the mop sink must be of an impervious material: either Fiberglass Reinforced Plastic (FRP) or tile to eight feet or ceiling height and a reasonable splash distance to the sides.
- **Employee clothes storage:** For manufacturing facilities, a room, enclosure, or designated area separated from toilets, product storage and preparation areas and utensil washing areas must be provided where employees may change and store clothes. Facilities with fewer than 10 employees per shift can meet this requirement by providing employee lockers or similar cabinets.
- **Storage of Food:** A dedicated storeroom area shall be provided. Adequate and suitable space shall be provided for the storage of food. Food shall be protected from contamination by storing the food in a clean, dry location, where it is not exposed to splash, dust, vermin or other forms of contamination or adulteration, and at least six inches above the floor. This area must include cleanable shelves. Shelves must be located to allow for six inches of clear space between the floor and the bottom shelf.
- **Storage of Cannabis Products/Inventory:** Cannabis and cannabis products shall be stored in a building designed to permit control of temperature and humidity and shall prevent the entry of environmental contaminants such as smoke and dust. The area in which edible cannabis goods are stored shall not be exposed to direct sunlight. Operators shall store harvest batches and edible cannabis products that require refrigeration at 35 to 42 degrees Fahrenheit. In addition, harvest batches shall be stored in a darkened area with no more than 60% humidity. Storage areas must be under continuous video-monitoring and recording and secured in accordance with their Security Plan.
- **Lighting:** Shatterproof shields are required on lights above product preparation areas, utensil washing areas, and where open food and/or cannabis products are stored. At least 50-foot candles of lighting intensity shall be provided in areas where employees are working with food, edible cannabis products or working with utensils or equipment.
- **Refuse:** All cannabis waste shall be quarantined, secured and rendered unusable and unrecognizable under video monitoring and shall be disposed of as stipulated by State and county regulations.
- **Water supply:** The water supply shall be from a water system approved by the Health Officer or the California Department of Public Health, Drinking Water Division. Water wells must be permitted and approved by the California Department of Public Health, Drinking Water Division. Provide appropriate documentation for state regulated transient non-community water systems and non-transient non-community water systems.
- **Sewage disposal:** The establishment must be connected to a municipal sewer system or an individual sewage disposal system. If the operation is to be served by an individual sewage disposal system, contact the Sonoma County Permit and Resource Management Department for current requirements.
- **Walk-in refrigeration/freezer units:** Walk-in refrigeration and freezer units must open directly into the facility.



Environmental Health ❖ 625 5th Street, Santa Rosa, CA 95404 ❖ 707-565-6565 ❖ EH@sonoma-county.org
<https://sonomacounty.ca.gov/Health/Environmental-Health-and-Safety/>

Quick Reference for Building Departments

City of Cloverdale
126 N. Cloverdale Blvd.
Cloverdale, CA 95425

Community Development
707-894-1701
www.cloverdale.net

City of Cotati
201 W. Sierra Ave.
Cotati, CA 94931

Building Department
707-665-3636
www.ci.cotati.ca.us

City of Healdsburg
435 Allan Ct.
Healdsburg, CA 95448

Community Development
707-431-3346
www.ci.healdsburg.ca.us

City of Petaluma
11 English St.
Petaluma, CA 94952

Community Development
707-778-4301
www.cityofpetaluma.net

City of Rohnert Park
130 Avram Ave.
Rohnert Park, CA 94928

Development Services- Building
707-588-2240
www.ci.rohnert-park.ca.us

City of Santa Rosa
100 Santa Rosa Ave.
Santa Rosa, CA 95401

Community Development
707-543-3200
<http://ci.santa-rosa.ca.us>

City of Sebastopol
7120 Bodega Ave.
Sebastopol, CA 95472

Building Department
707-823-8597
<http://ci.sebastopol.ca.us>

City of Sonoma
1 The Plaza
Sonoma, CA 95416

Building Department
707-933-2205
www.sonomacity.org

Town of Windsor
9291 Old Redwood Hwy.
Windsor, CA 95492

Building Department
707-838-5341
www.ci.windsor.ca.us

Permit Sonoma
2550 Ventura Ave., Santa Rosa, CA 95403
Unincorporated Sonoma County
Forestville
Guerneville
Bodega Bay
Bodega
Occidental
Graton
Geyserville
Penngrove

PRMD-Building Department
707-565-1900
www.sonoma-county.org/prmd

FLOORING GUIDELINE

When installing a new floor or replacing an existing floor, contact our office to ensure the floor and base meet current requirements. Existing edible manufacturing facilities will have a transition period to August 31, 2017 to install approved flooring.

The California Retail Food Code (CALCODE) Section 114268 states the following:

- (a) *Except in sales areas and as otherwise specified in subdivision (d), the floor surfaces in 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 handwashing areas shall be SMOOTH and of DURABLE CONSTRUCTION and nonabsorbent material that is EASILY CLEANABLE*
- (b) *Floor surfaces shall be coved at the juncture of the floor and wall with a **3/8-inch minimum radius coving** and shall extend up the wall at **least four inches**, except in areas where FOOD is stored only in unopened bottles, cans, cartons, sacks or other original shipping containers.*

The following floor types will meet the above CALCODE requirements:

Full kitchens (containing cooking equipment), **sculleries, meat or fish preparation areas, bars, bakeries,** and any areas with a power wash down:

1. Quarry tile (any color) with a four-inch quarry tile coved base. Epoxy grout is recommended.
2. Seamless troweled on epoxy floor (not paint) ¼ inch minimum thickness with a four-inch self-coved base.
3. 100% homogenous vinyl flooring recommended by the manufacturer for use in commercial kitchens. The floor must have heat-welded seams and a four-inch self-coved base.

Limited food preparation areas, service areas such as delicatessens, sandwich shops, espresso shops, areas behind service counters, employee change areas and janitorial rooms:

1. Those floors listed above for full kitchens.
2. The minimum flooring required is a commercial grade sheet vinyl having chemically-welded seams with a four-inch self-coved base.

Toilet facilities (employee or customer use)

1. Those floors listed for full kitchens and limited food preparation areas
2. Ceramic tile with four-inch coved base tile

Dry storage areas (all prepackaged, no open food containers, no food preparation, no sinks, no refrigerators and no ice machines):

1. Those floors listed for full service kitchens and limited food preparation areas.
2. The minimum flooring required is vinyl composition tile (VCT) with a four-inch vinyl/rubber top set coved base.

Walk-in refrigerators and freezers:

1. Metal floor and coved base installed as part of the NSF or equivalent walk-in.
2. Quarry tile with a quarry tile coved base or metal cove base provided by the manufacturer. Epoxy grout is recommended.
3. Seamless troweled on epoxy (not paint) minimum 1/4-inch-thick, 3/8-inch coved base supplied by the walk-in manufacturer.

4. New smooth, sealed concrete with four-inch coved concrete base, quarry tile cove base **or** metal coved base supplied by the walk-in manufacturer.

Dining area flooring materials are up to the discretion of the ownership. Mixed use or self-serve area requirements will be based on limited food preparation flooring requirements shown above.

Floor Drains

Upon new construction or extensive remodeling, floor drains shall be installed as follows:

1. In floors that are water-flushed for cleaning.
2. In areas where pressure spray methods for cleaning equipment are used.
3. In toilet facilities, floor drains are recommended, but not required.

Floor Sinks

For new construction or additions where floor sinks are required, the floor sinks must be flush mounted. Floor sinks must have adequate grates to prevent injury and be accessible for regular cleaning.

Please submit samples of new materials not listed for review and approval prior to installation.



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<https://sonomacounty.ca.gov/Health/Environmental-Health-and-Safety/>

WATER HEATER SIZING WORKSHEET

ESTABLISHMENT _____ Date _____

ADDRESS _____

Fill in Applicable Fixtures	# Units	x	GPH	=	Total GPH	GPM
3-Compartment Sink (____" x ____" x ____")	3 (basins)			=		
*Pre-Rinse Unit for 3-Comp Sink				=		
Bar 3-Compartment Sink				=		
Hand Sink(s), Including Restrooms				=		
*Prep. Sink w/Faucet or Pre-Rinse				=		
Dishwasher #1				=		
Dishwasher #2				=		
Mop Sink w/Backflow Faucet				=		
Pre-Rinse w/Scrap Tray				=		
_____				=		

*Compare the pre-rinse GPH to the GPH for the sink fixture, use the largest value.

Total GPH	=	_____	=	Total GPM	=	_____
Tank Units				Instantaneous		
				At a 60°F rise in temp		

_____ Total GPH x _____ % (See sizing requirements below) = _____ GPH required

Formula for Gas water heaters

_____ GPH required x 60°F rise x 11 = _____ Total BTU input

Formula for Electric water heaters

_____ GPH required x 0.149 = _____ Total KW input

SIZING REQUIREMENTS FOR STORAGE WATER HEATERS (not instantaneous water heaters)

- A. Food facilities with multi-service eating utensils, heavy use (serving 3 meals a day) 100% GPH required
- B. Food facilities with multi-service eating utensils, moderate use 90% GPH required
- C. Food facilities with single-service eating utensils, or don't use utensils at all 80% GPH required
- D. Food facilities that sell only prepackaged foods. A water heater with a minimum storage capacity of 10 gallons must be provided.

WATER HEATER SIZING WORKSHEET

3-Compartment utensil sinks

18" x 18" 14 gallons per compartment
24" x 24" 25 gallons per compartment

Custom sink sizes can be calculated using the following formula:

Length (ft) x Width (ft) x Depth (ft) x 7.5 = gallons per compartment

Bar 3-Compartment Sinks

6 gallons per compartment

Pre-Rinse Units

Hand spray type: 45 gallons
Other type: Refer to manufacturer's
 specifications for the equipment

Prep Sinks

5 gallons per sink

Janitorial(Mop) Sinks and Mat Washing Areas

15 gallons per sink or facility

Hand Sinks

5 gallons per sink

Clothes Washers

9 and 12 lb. washers 45 gallons
16 lb. washers 60 gallons

Employee Shower

20 gallons per shower

Other Fixtures That Use Hot Water

Refer to manufacturer's specifications for the equipment or NSF® listing.

Instantaneous Water Heaters (On-Demand)

Instantaneous water heaters must be sized to provide **120°F** water at a **60 degree rise** and at a rate of at least **2 GPM to each sink (hand sinks must receive at least ½ GPM)**. NSF listings are used to determine the minimum GPM hot water demand for commercial dishwashers.

Refer to the instantaneous water heater unit manual to verify sizing.

For additional information on sizing and installation of water heaters, see *Guidelines for Sizing Water Heaters* available at the Environmental Health & Safety offices.

****If more than one water heater is proposed for the facility please identify the units and connections.**

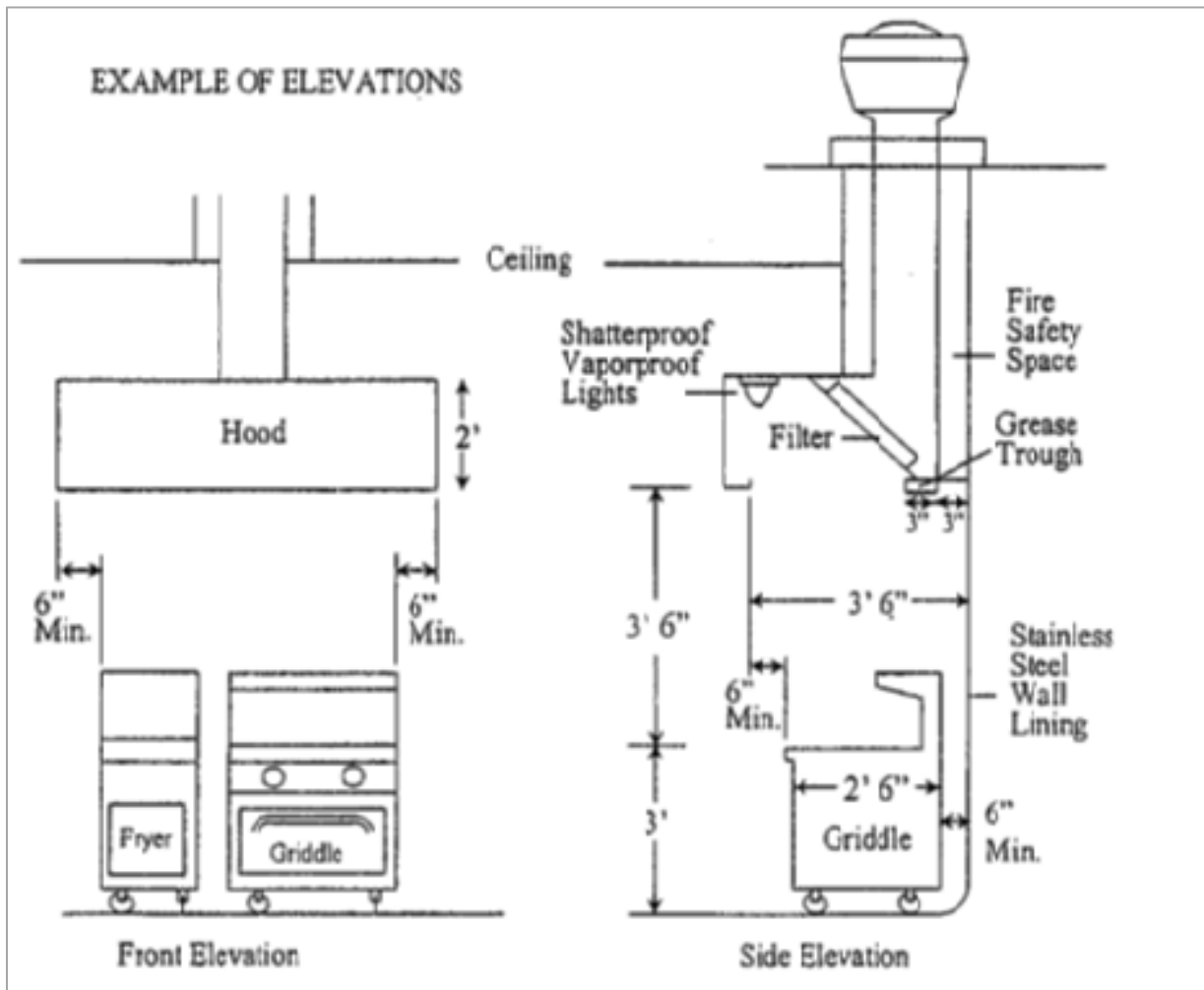
All approved plans are stamped with the minimum requirements for tank style gas, tank style electric, and instantaneous water heater units.

REQUIREMENTS FOR HOOD PLANS

- Provide 3 sets of plans, ¼-inch per foot, containing:
 - Hood Worksheet on the back of this page
 - Plan view:
 - Outline of hood over cooking equipment
 - Clearances around equipment and to walls
 - Exhaust and make-up air ducts
 - Exhaust and make-up air fans on roof
 - Make-up air diffusers on ceiling
 - All dimensions of equipment and ducts
 - Front and side elevations showing:
 - Cooking equipment
 - Hood overhang
 - Duct elbows and fans
 - Type and gauge of metal used in hood and ducts
 - Specify if hood is Type I, Type II, UL Listed, non-canopy, compensating, etc.
 - Name, address and phone number of facility and hood designer

- Submit one set of cut-sheets (manufacturers' specification sheets) for:
 - Cooking equipment
 - Exhaust fan
 - Make-up air fan
 - UL Listing Card for hood system (if applicable)

- Plans shall conform to Uniform Mechanical Code

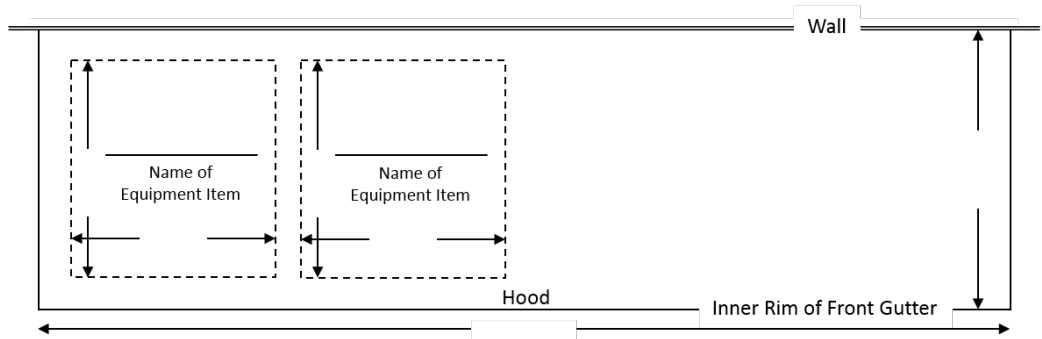


Hood Worksheet

Facility Name _____
 Address _____

Cooking and Equipment Hood

Fill in cooking equipment and hood dimensions in feet in the overhead view to the right.



- Casters and quick disconnects **strongly** recommended! Specified? _____ Y N
 Gas line should exit wall ≥ 24 " above floor to allow downward loop of quick disconnect gas line. Specified? _____ Y N
 Hood long enough to allow ≥ 6 " on sides of equipment? _____ Y N
 Hood wide enough to allow ≥ 6 " in front and back of equipment? _____ Y N
 Canopy lip $\geq 6.5'$ above floor and $\leq 4'$ above cooking surface? _____ Y N
 Canopy free of exposed horizontal electrical and Ansul lines? _____ Y N

CFM

What kind of hood? _____
 Hood opening _____ ft x _____ ft = _____ sq. ft x _____ Q factor from CMC = _____ CFM
 Hood opening $\frac{\text{Length}}{\text{Width}}$
 Other formula? _____ = _____ CFM

Filters

Filter size _____ " H x _____ " W x _____ " D = _____ sq. ft = _____ sq. ft
 $\frac{\text{CFM}}{\text{# of Filters} \times \text{Usable area per filter}} = \text{Total filter area}$
 _____ CFM \div _____ sq. ft (total filter area) = _____ fpm
 Baffle filter ideal fpm = 300; should be 250-350. Is it? _____ Y N NA
 Horizontal slot filter ideal fpm = 1000; should be 800-1200. Is it? _____ Y N NA
 Fpm can be $<$ or $>$ above if this is a "LISTED" hood. Is it? _____ Y N
 Total of filter widths (_____") must be $<$ hood length. Is it? _____ Y N

Duct

Duct dimensions: _____ " x _____ " = _____ " \div 144 = _____ sq ft
 Hood > 12 ft long shows > 1 exhaust outlet to main duct? _____ Y N NA
 _____ CFM \div _____ sq. ft = _____ fpm
 Fpm should be ≈ 1800 ; must be 1500-2500 (Type I). Is it? _____ Y N NA

Static Pressure and Exhaust Fan

of elbows = _____ Static pressure \approx _____ " SP
 Cleanout at each elbow? _____ Y N NA
 Exhaust fan: Make _____ Model # _____ H.P. _____
 UL 762 Restaurant Application specified for Type I? _____ Y N
 Easily pulls CFM at SP? _____ Y N

Make-Up Air

_____ CFM \div 2000 CFM = _____ Next higher whole number = _____ Diffusers recommended
 Make-up air static pressure \approx _____ "SP
 Make-up air fan: Make _____ Model # _____ H.P. _____
 Supplies 95-100% of exhaust CFM at SP? _____ Y N
 Make-up air on roof ≥ 10 ft from exhaust? _____ Y N
 Diffusers on ceiling ≥ 10 ft from hood? _____ Y N
 Exhaust and make-up air interlocked? _____ Y N

Prepared by: _____ / /
 Name Phone # Company Date



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**CANNABIS PLAN REVIEW APPLICATION
CANNABIS SITE EVALUATION FORM**

APPLICANT: Complete all areas below (please print or type), sign and date below, and submit to Environmental Health and Safety with the applicable fee.

- New Construction Remodel Existing Cannabis Facility Change of Ownership
- Dispensary Edible Manufacturing Microbusiness

Facility Name _____ Sq. Ftg. of Facility Interior _____

Site Address _____ Ste # _____ City _____ Zip _____

Business Owner Name(s) _____ Phone _____ Email _____

Mailing/Billing Address _____ Ste # _____ City/State _____ Zip _____

Contact Person _____ Phone _____ Email _____

Mailing Address _____ Ste # _____ City/State _____ Zip _____

SCOPE OF WORK: _____

Water Supply: Public Private Well* Sewage Disposal: Public On-Site/Septic** Name of Water System _____

*CDPH Drinking Water Branch clearance is required prior to issuance of permits **PRMD clearance is required prior to issuance of permits

Change of Ownership/ Proposed First Date of Operation _____

Additional information for a change of ownership of an edible cannabis manufacturing facility or a cannabis microbusiness may be required.

I understand that these plans will be approved or disapproved (letter sent to contact person requesting additional information) within 20 working days for cannabis facility plans after being submitted to Environmental Health. The plans will not be approved until all the required information is submitted. It is the applicant's responsibility to obtain all necessary building permits. The building department will not issue a building permit for a cannabis facility until it has received an approved set of plans from this office. Plan check review and construction inspection fees (including travel time) are separate from the operational permit fee. Plan check fees are a prepaid estimate of time and are based on the current hourly rate fee (see fee schedule). Before opening for business, the following must be completed:

- Any additional time beyond the initial paid plan check fees must be paid
- All final construction must be approved
- The Cannabis Facility operational permit application must be completed and submitted with all fees paid
- The Cannabis Facility Permit must be received
- Approval by all applicable agencies must be obtained

If a cannabis facility opens for business without a valid Cannabis Facility Permit, the operator is subject to closure of the facility and a penalty of up to three times the cost of the Cannabis Facility Permit.

Applicant Signature _____ Date _____

Print Name _____ Title _____

For office use only:

Application Date _____ FA # _____ SR # _____ Dist. _____

Comments: _____

Plans Reviewed by _____ Date _____ Plans Approved by _____ Date _____

Cash Check Credit Card Trans# _____ Date rec'd _____ by _____ Amount rec'd \$ _____