



# COUNTY OF LOS ANGELES ENVIRONMENTAL HEALTH



## CANNABIS MANUFACTURING FACILITY CONSTRUCTION GUIDELINES



CANNABIS COMPLIANCE AND ENFORCEMENT PROGRAM

5050 Commerce Drive, Baldwin Park, CA 91706

Telephone: (626) 430-5635 Email: [cep@ph.lacounty.gov](mailto:cep@ph.lacounty.gov)

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ENVIRONMENTAL HEALTH  
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**PLAN CHECK GUIDELINES**

The Plan Check Guideline is intended to assist architects, building contractors, operators, consultants, and other interested professionals in the development of plans for commercial cannabis facilities. The guidelines are to aid in the development of construction plans to meet the standards of the Los Angeles County Department of Public Health, Environmental Health Division (DPH-EH). It is intended to serve as a general overview of the requirements and should not be considered as all-inclusive.

Additionally, the guide only encompasses the health and safety aspects of construction and should not be construed to include other agencies' requirements, e.g. local planning and zoning department, building and safety authority or local fire department. The owner, contractor or representative is advised to contact the appropriate local agencies involved to obtain any permits and/or to clarify other local codes.

**DEFINITIONS:**

**"Cannabis"** means all parts of the plant *Cannabis sativa* Linnaeus, *Cannabis indica*, or *Cannabis ruderalis*, whether growing or not; the seeds thereof; the resin, whether crude or purified, extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or resin. "Cannabis" also means the separated resin, whether crude or purified, obtained from cannabis.

**"Cannabis facility" or "facility"** means a permanent structure in a fixed location where a cannabis retailer, distributor, manufacturer, cultivator, or microbusiness operates or conducts business.

**"Cannabis product"** means cannabis that has undergone a process whereby the plant material has been transformed into a concentrate, including, but not limited to, concentrated cannabis, or an edible or topical product containing cannabis or concentrated cannabis and other ingredients.

**"Cannabis waste"** means waste that is not hazardous waste, as defined in Public Resources Code section 40141, that contains cannabis and that has been made unusable and unrecognizable in a manner required by State and local laws and regulations.

**"Component"** means any substance or item intended for use in the manufacture of a cannabis product, including those substances or items that are not intended to appear in the final form of the product. Component can include cannabis and cannabis products used as ingredients, other ingredients, and processing aids.

**"Construction"** means any building or structure that is being constructed as a new cannabis facility, an existing building or structure that is being converted into a cannabis facility. Additionally, any facility undergoing a change or use or change of business, or a remodel exceeding 301 sq. ft. of an existing cannabis facility.

**"Manufacturing"** or **"manufacturing operation"** means all aspects of the extraction and/or infusion processes, including processing, preparing, holding, storing, packaging, or labeling of cannabis products. Manufacturing also includes any processing, preparing, holding, or storing of components and ingredients used in cannabis products.

**"Remodel"** means construction, renovation or repair, less than 301 sq. ft. to an existing cannabis facility. It includes the installation of equipment, repair to a cannabis facility which alters the configuration, the premises, the usage of the premises, or the business operation conducted from the premises and requires a permit or approval from other local and state enforcement agencies.

**"Site Evaluation"** means an inspection that determines if a cannabis facility meets the current health and safety code requirements or if plans would be required to be submitted for review and approval.

## PLAN SUBMITTAL

### WHEN SHOULD I SUBMIT PLANS?

The following situations require that plans be submitted to the DPH-EH's Cannabis Compliance and Enforcement Program (CCEP) for review and approval:

- When constructing or remodeling any building for use as a commercial cannabis facility.
- When planning to open an existing commercial cannabis facility wherein the equipment has been removed or replaced.
- When planning to change the operation of a commercial cannabis facility, e.g. changing the operation from a cultivation to a manufacturing.
- When a site evaluation has determined that plans are required.

Additionally, DPH-EH's Cross Connection Program will simultaneously review plumbing plans for cross connection hazards.

NOTE: A remodel plan review service fee is based on a minimum charge of three (3) hours. A site evaluation service fee is based on a minimum charge of two (2) hours. Additional fees may apply to offset the costs incurred for services exceeding initial fee and shall be charged based on the Standard Billing Hourly Rate.

### INFORMATION REQUIRED FOR PLAN SUBMITTAL

1. Provide the approval letter from the City.
2. Provide copy of State license(s) or completed State application.
3. Submit three (3) sets of detailed plans, complete an application for plan review, and pay required plan check fees. In addition, for a remodel, submit a copy of the city remodel permit, an operational letter on company letterhead signed by the owner of the facility, and provide detailed scope of work on the plans.
4. Plans shall be easily readable, drawn to scale, (e.g.  $\frac{1}{4}'' = 1'$ ) and include:
  - a. Site plan including proposed cannabis and non-cannabis waste storage receptacle locations.
  - b. Floor plan of entire cannabis facility, including but not limited to, cannabis storage and preparation areas, janitorial areas, toilet rooms, breakrooms, locker rooms, cannabis and non-cannabis areas, exterior and interior doors, processing rooms, including the total square footage of the cannabis facility.
  - c. Equipment schedule and equipment layout, listing type, quantity, dimensions, equipment make and model number, and if applicable, sanitation accreditation.
  - d. Manufacturer specification sheets assembled in numerical order that are labeled and numbered to match the equipment schedule.
  - e. Plumbing plan including details of hot and cold water lines and waste and vent.
  - f. Reflective ceiling plan including lights, ventilation, water lines, sewer lines, and soffits.
  - g. Ventilation plan including make-up air and return air.
  - h. Mechanical exhaust ventilation plan including hood equipment, elevations, and make-up air.
  - i. Finish schedule for the floors, cove base, walls, and ceilings that indicate the type of material, color, and the surface finish. Samples may be required.
  - j. Door and window schedule including details of frame, type of material, and surface finish.
  - k. List of components and finished cannabis products.

- I. Cannabis workflow procedure including a list of chemicals or Volatile Organic Compounds (VOCs) on company letterhead signed by the owner of the facility.
5. Submit the following standard operational plans on company letterhead signed by the owner of the facility:
- Odor Management Plan
  - Waste Management Plan
  - Training Program
  - Standard Operating Procedures
  - Recall Protocol
  - Track and Trace System

## NOTES:

- ❖ Plans will be approved or not approved within **twenty (20) working days** after receipt by CCEP and the owner, contractor or representative will be notified of the result. However, the approval may take longer if your plans are incomplete or in conflict with design layout. Upon approval, two (2) sets of plans will be returned to the owner, contractor or representative, and the third (3<sup>rd</sup>) set will be kept on file until the project has been completed.
- ❖ Construction of the cannabis facility must be completed and approved within **twelve (12) months** from the date of approval to avoid submitting new plans.
- ❖ Unapproved plans will be valid for **six (6) months**.
- ❖ Before beginning construction or remodel, it is the owner, contractor or representative's responsibility to obtain all required applicable permits and licensing.

## PLAN REVIEW AND INSPECTIONS

Services included in the plan check fee are as follows:

- Initial review to determine if plans are approved or not approved with corrections
- A scheduled plan revision review to obtain plan approval
- Two (2) inspections (Preliminary and Final)

Additional fees may apply when more than two (2) plan reviews are necessary to approve the plans and when more than two (2) inspections are necessary to approve the facility to operate.

The owner, contractor or representative shall contact CCEP at least three (3) working days in advance to request an inspection. The construction or remodel of the cannabis facility must conform to the current set of CCEP approved plans.

### NOTES:

- ❖ It is the responsibility of owner, operator, or representative to obtain all the necessary licenses and/or permits from applicable local agencies and state. Before commencing construction or remodel, approval must be obtained from CCEP, the local building and safety department, fire department, and any other applicable agencies. If any changes to the approved plans become necessary by other agencies, revised plans shall be submitted for review and approval prior to construction or remodel.
- ❖ The owner, contractor or representative is responsible to notify CCEP to schedule for an inspection.
- ❖ An approved set of plans **shall** be maintained on-site until final inspection approval.
- ❖ Any changes to the approved plans require additional review and approval by CCEP. Additional fee(s) may apply.

# GENERAL CONSTRUCTION REQUIREMENTS

## A. PROCESSING ROOM

The processing room(s) is a room in which cannabis and cannabis products and their components are prepared or manufactured including extraction, infusion, packaging or labeling.

## B. FLOOR, WALL, AND CEILING

The floor, walls, and ceiling in all rooms in which cannabis, cannabis products, and their components are stored or prepared or packaged, where utensils are washed, where cannabis and non-cannabis waste are stored, where janitorial facilities are located, in all toilet rooms and hand washing areas, dressing or locker rooms, and walk-in refrigerators and freezers units shall be smooth, durable, non-absorbent, and easily cleanable, impervious to moisture and grease, and capable of withstanding repeated washing. All floors, walls, and ceiling shall be maintained clean and in good repair. All doors leading to a processing room or utensil wash area shall be self-closing, tight fitting, and shall not open directly to the outside or a toilet room.

Floor examples include, but are not limited to, sealed concrete, quarry tile, or epoxy. A minimum of six (6) inch high, approved cove base, with a minimum three-eighths inch (3/8”) radius shall be provided at the juncture of the wall and floor including walk-in refrigerators or freezer units. Walls and ceiling examples include, but are not limited to, tile, metal, plaster, or semi-gloss paint and drop ceiling.

## C. LIGHTING

The lighting in all rooms in which cannabis, cannabis products, and their components are stored or prepared or packaged, where utensils are washed, where cannabis or non-cannabis waste are stored, where janitorial facilities are located, in all toilet rooms and hand washing areas, dressing or locker rooms, and walk-in refrigerator and freezer units shall have sufficient natural or artificial lighting.

The lighting shall be protected against breakage through the use of plastic shields, plastic sleeves with end caps, or shatterproof bulbs located above where cannabis, cannabis products, and their components are stored or prepared or packaged, where utensils are washed, and in walk-in refrigerators and freezer units.

Table 1. Lighting Requirements

Foot Candles	Types of Rooms
50-foot candles	<ul style="list-style-type: none"> <li>• Any area where the safety of the employee is a factor while working with cannabis, utensils, or equipment</li> </ul>
20-foot candles	<ul style="list-style-type: none"> <li>• Hand wash sink area</li> <li>• Equipment and utensil storage area</li> <li>• Toilet rooms</li> <li>• Dry storage area</li> <li>• Utensil wash area</li> <li>• Refrigeration units</li> <li>• In all areas and rooms during periods of cleaning</li> </ul>

#### D. VENTILATION

Approved ventilation shall be provided throughout the facility to facilitate proper air circulation free from excessive heat and condensation; and to provide reasonable comfort for all employees.

**Mechanical Exhaust Ventilation** shall be provided in all processing rooms, over all cannabis extraction equipment, all cooking equipment and all heat generated equipment and shall be provided in all toilet rooms. Mechanical exhaust vents shall effectively remove toxic gases, steam, heat, grease, vapors, odors, and smoke from the facility. Specify the number and locations of make-up air diffusers.

#### E. EQUIPMENT

Standards for all equipment used in storing, preparing, or packaging of cannabis, cannabis products, and their components are recommended to be certified or classified for sanitation by the American National Standards Institute (ANSI) accredited certification program. In the absence of an ANSI certification, a cleaning sanitation standard operating procedure (SSOP) shall be provided. Equipment shall be maintained clean and in good repair; corrosion resistant, nontoxic, and designed to withstand repeated washing. Installation of equipment shall be easily movable, installed on raised minimum six inch (6") rounded metal legs, or sealed to the floor with a minimum three-eighths inch (3/8") coved radius. Adequate number of equipment shall be provided. Electrical equipment shall be tested and listed by Underwriters Laboratories (UL) for electrical safety. All equipment and installation shall be subject to field evaluation.

- 1. Hand wash sink**, of at least one (1), shall be installed within each processing rooms and in the utensil wash area. The hand wash sink shall be sufficient in number, conveniently located, maintained clean, unobstructed and accessible at all times. All hand wash sinks shall be equipped with an adequate supply of warm, minimum of 100°F, and cold running water under pressure through a mixing valve or combination faucet. Hand wash sinks from a premixing faucet shall measure warm water between 100°F - 108°F. All hand wash sinks shall be equipped with single use soap and paper towels in a dispenser or hand dryer.
- 2. Janitorial sink or basin**, of at least one (1), shall be installed in a room, area, or cabinet separate from the processing rooms, storage, and utensil wash area and be equipped with storage for cleaning supplies, such as mops, buckets, brooms, and cleaners. Janitorial sinks shall be one (1) compartment, nonporous sink and be directly connected to the sewer, provided with hot, minimum 120° F, and cold running water through a mixing valve or combination faucet and protected with a backflow prevention device. Janitorial sinks shall be separated from other equipment.
- 3. Preparation sink** (if applicable), of at least one (1), shall be installed within the processing rooms. The preparation sink shall be at least one (1) compartment with one (1) integral drain board sloped toward the sink and drain indirectly into a floor sink with an air gap, supplied with hot, minimum 120° F, and cold running water through a mixing valve or combination faucet, and be free standing.
- 4. Utensil wash sink**, of at least one (1), shall be installed in a room, area, or within the processing rooms. Utensil wash sink is required to have a minimum of a three (3) compartment metal sink with two (2) integral metal drain boards sloped toward the sinks. The utensil wash sink compartments shall be large enough to accommodate immersion of the largest utensil or piece of equipment. The utensil wash sink shall be supplied with hot, minimum 120° F, and cold running water through a mixing valve or combination faucet, and be free standing, and drain directly into the sewer. Provide a metal backsplash extending up the wall above the rim and sealed to the wall.



**5. Refrigerators or freezers**, whether a reach-in or walk-in, shall be located within the facility and shall open into an approved area. Refrigerators shall measure 41° F or below. Freezers shall measure 32° F or below. All units shall be provided with an accurate thermometer, shelving that is nonabsorbent, non-corrodible, and easily cleanable. Condensate from all units shall drain indirectly to a floor sink with an air gap. Reach-in units may drain indirectly to a functioning electric evaporator if equipped by the manufacturer. Walk-in units shall drain indirectly to a floor sink with an air gap that is located outside the unit within the facility. Walk-in units shall be flushed and sealed to the floor. Coved base shall be provided.

**F. STORAGE ROOM**

Storage shall be adequate for cannabis, cannabis products, and their components, utensils, and packaging material and separated by doors from all processing rooms and stored at least six inches (6") off the floor. Minimum twenty-five percent (25%) of the processing rooms shall be dedicated for cannabis, cannabis products, and their components, utensils, and packaging materials. Only one (1) days use of components shall be permitted in the processing room. Shelving shall be provided and be smooth, durable, and easily cleanable.

**G. VERMIN EXCLUSION**

A facility shall be fully enclosed to prevent the entrance and harborage of animals, birds and vermin, including but not limited to rodents and insects. Vermin proofing shall be implemented at all exterior openings not to exceed one-fourth inch (1/4"). All exterior wall pipes or other openings shall be tightly sealed. All exterior wall vents shall be properly screened with one-fourth inch (1/4") hardware mesh screening. All exterior doors, including roll-up doors, shall be equipped with a microswitch activated air curtain. All exterior doors shall be self-closing. All windows shall be fixed.

**H. TOILET ROOM**

The toilet room shall be provided within each facility and accessible to all employees. Separate toilet rooms are required if there are five (5) or more employees of different gender per shift. One (1) toilet for each fifteen employees. Urinals may be substituted for toilets but cannot exceed half (1/2) the number of toilets. Hand wash sinks shall be provided within toilet rooms and upon the basis of one (1) hand wash sink for each two (2) toilets. Toilet tissue shall be provided in a permanently installed dispenser at each toilet. Toilet rooms shall be vented to the outside by means of an openable window with a screen of not less than 16 mesh per square inch, or a light switch activated exhaust fan. Toilet rooms shall not open directly into processing rooms. Toilet rooms shall not be used for the storage of cannabis, cannabis products, and their components, equipment, or supplies.

**I. LOCKER AREA**

Lockers shall be provided in a designated area. Lockers shall be maintained clean and in good repair. Dressing room shall be provided and used by employees if the employees regularly change their clothes in the facility.

**J. DRESSING ROOM (IF APPLICABLE)**

Dressing rooms with lockers shall be provided for each gender when there are five (5) or more employees. Dressing rooms shall be provided with self-closing doors and be separated from toilet rooms, dry storage rooms, and processing rooms. Dressing rooms shall be maintained clean and in good repair.

## **K. CANNABIS AND NON-CANNABIS WASTE**

All waste generated from the facility must be properly stored in refuse bins and secured. All waste on the premises shall be stored in nonabsorbent, water-tight, durable, easily cleanable, galvanized metal or heavy plastic containers with tight-fitting lids. If any waste is located within the facility, the waste area shall meet the requirements for walls, floors, ceiling, and vermin exclusion. If provided, an outdoor storage area or enclosure shall be constructed of nonabsorbent material that is easily cleanable and durable. The facility shall be kept clean and free from litter, rubbish and garbage.

## **L. PLUMBING, GAS AND ELECTRIC**

All plumbing, plumbing fixtures, gas lines, and electrical conduits shall be installed in compliance with local building and safety codes and kept clean, maintained, and in good repair.

- 1. Water supply** shall be adequate, protected, pressurized, potable and come from an approved source. The water supply shall be protected with a backflow or back siphonage prevention device.
- 2. Water heater** shall be adequate in size and rating to supply hot water on demand, of at least 120°F measured at the faucet, during operational hours.
- 3. Floor drains** shall be installed in all processing rooms, where utensils are washed, where cannabis and non-cannabis waste are stored inside the facility, where floors are water-flushed for cleaning and in areas where pressure spray methods for cleaning equipment are used. A trench drain is recommended for the cleaning of fixed equipment. Floor surfaces in these areas shall be sloped 1/8" per foot (1:100) to the floor drains.
- 4. Floor sinks** shall be installed for all condensate and liquid waste for the drainage of equipment by means of an indirectly connected, rigid, drain line. Equipment drain lines shall have horizontal runs and be at least six inches (6") above the floor, sloped toward floor sinks at a rate of one-quarter inch (1/4") per foot, and shall terminate at least one inch (1") above the overflow rim of the floor sink. Floor sinks shall be installed flush with the floor surface. Floor sinks shall be located so that they are readily accessible for inspection, cleaning, and repairs. Equipment drain lines shall not be installed in a walkway or door opening.
- 5. Conduits or pipelines** whether plumbing, electrical, or gas, shall be concealed within the wall. When approved, runs may be at least one-half inch (1/2") away from the walls or ceiling and six inches (6") above the floor. Conduit or pipelines shall not be installed across any aisle or door openings. Multiple runs or clusters of conduit or pipelines shall be encased in an approved runway, or other enclosure.
- 6. Grease traps and interceptors**, when required, shall be easily accessible and not located in a processing room or utensil wash area.

**NOTE:** This guideline is subject to change, concurrent with state and local laws and regulations. It is the responsibility of the owner or operator to stay current with any changes in state or local laws and regulations.

## STATE CONTACT INFORMATION

Submit license application for a commercial cannabis activity to the appropriate State agency. Follow all the requirements to obtain a license.

Licensing Agency	Contact Number	Email / Website	Facility Type
Bureau of Cannabis Control (BCC) (Department of Consumer Affairs)	800-952-5210	<a href="mailto:bcc@dca.ca.gov">bcc@dca.ca.gov</a> <a href="http://www.bcc.ca.gov">http://www.bcc.ca.gov</a>	<ul style="list-style-type: none"> <li>○ Retail</li> <li>○ Distributor</li> <li>○ Microbusiness</li> <li>○ Laboratory</li> <li>○ Temporary Event</li> </ul>
Manufactured Cannabis Safety Branch (CA Department of Public Health - CDPH)	916-440-7861	<a href="mailto:mcsb@cdph.ca.gov">mcsb@cdph.ca.gov</a> <a href="http://www.cdph.ca.gov/mcsb">http://www.cdph.ca.gov/mcsb</a>	Manufacturer
CalCannabis Cultivation Licensing (California Department of Food and Agriculture - CDFA)	833-225-4769	<a href="mailto:calcannabis@cdfa.ca.gov">calcannabis@cdfa.ca.gov</a> <a href="http://calcanabis.cdfa.ca.gov">http://calcanabis.cdfa.ca.gov</a>	Cultivator