



## Cannabis Industry Requirements

### SCOPE:

This document shall serve as guidance for the permitting, construction, and operation of cannabis related business operations. This includes the cultivation, production, and distribution of cannabis related products.

### TERMS:

- Authority Having Jurisdiction (AHJ): A federal, state, local department, or individual such as a fire chief, fire marshal, or fire prevention bureau having statutory authority.
- California Fire Code (CFC): The regulations adopted by the State of California for the enforcement of fire regulations.
- California Building Code (CBC): The regulations adopted by the State of California for the enforcement of building regulations.
- California Electric Code (CEC): The regulations adopted by the State of California for the enforcement of electrical regulations.
- Tenant Improvement (TI): The addition, modification, or demolition of a building or structure.
- CO<sub>2</sub> Enrichment: Is a method used to increase plant growth response and yield.

### GENERAL REQUIREMENTS:

This guideline is intended to provide the applicant with the necessary information for the successful submittal of plans and specifications for the construction, and operation of a cannabis related business. All plans and specifications must meet the minimum requirements found within the CFC and CBC. Typically, most jurisdictions required specialized systems (fire protection systems, CO<sub>2</sub> enrichment, etc.) to be submitted as a deferred submittal. A permit must be obtained prior to the start of any construction unless specific written permission is obtained from the Oakland Fire Department.

Plant cultivation operations are regulated under the “F-1” occupancy classification

We understand that facility security and access control are paramount to the safety of your employees and the success of your business. However, the design, installation and operation of security measures must be in accordance with all applicable building and fire codes. We recommend contacting your security professional early during the design phase of the project in order to achieve the maximum level of security while still meeting the regulatory requirements.

## **PERMITS:**

Construction permits are required for the construction, enlargement, alteration, repair, demolition, or change in occupancy of a building or structure and are typically issued by the building department. Likewise, any work performed on the electrical, mechanical, or plumbing system may also require a permit. The installation and modification of fire protection systems requires a permit and is normally issued by the fire department.

Operational permit allows the applicant to conduct an operation or a business for which a permit is required and regulated by the CFC. The following are the most common annual operational permits that may be applicable for cannabis operations:

- Annual Establishment or Business License
- Annual LPG Use and Storage Permit - required for 1 pound or more of propane or butane (i.e. extractions)
- Annual CO<sub>2</sub> Enrichment System Permit – Including natural gas generators and for any system containing more than 100 lbs. of CO<sub>2</sub>
- Annual Compressed Gas Use and Storage Permit - required for 6,000 cu/ft or more of an inert. (1 pound of CO<sub>2</sub> = 8.74 cu/ft)
- Annual Fumigation / Thermal Insecticide Fogging Annual Extraction Process Permit
- Annual Flammable and Combustible Liquids Use and Storage Permit

Inspections normally take place during the construction phase and annually to ensure operations are in accordance with previously approved methods.

## **GENERAL FIRE SAFETY REQUIREMENTS:**

Fire safety requirements are maintained in chapter 3 of the CFC and regulate the occupancy and maintenance of all structures and premises for precautions against fire and the spread of fire as well as general fire safety requirements. Specific requirements include:

- Waste container size and location
- Ignition sources, and open flames
- Powered industrial trucks and equipment
- Impact protection
- Fueled equipment
- Smoking
- Hazards to firefighters

It should be noted that security devices that emit any medium (smoke, fog, etc) that could obscure a means of egress in any building or premise is strictly prohibited under section 316 Hazard to Fire Fighters.

## **FIRE DEPARTMENT ACCESS:**

Addressing: The proper addressing of the facility is paramount to ensure that personnel can quickly locate your business. Typically, address will be required to be placed on the building side that faces the street from which the business is addressed from. Additional address requirements may also be required for secondary buildings or where addressing is not readily visible or apparent. Please consult with the Building Department.

Fire Lanes: Fire department access is typically regulated in chapter 5 of the CFC. Access to the facility begins with the proper addressing of the building or facility unless modified by the Oakland Fire Department, the address numbers must be visible from the street.

Emergency Key Box: Key boxes hold keys to the facility and are used to rapidly gain access to the building in the event of an afterhours emergency. These key boxes are UL listed and provide a high level of security.

### **BUILDING UTILITIES:**

Utilities found within a building or facility are regulated in chapter 6 of the CFC and apply to the installation, operation, and maintenance of fuel-fired systems, emergency and standby power systems, electrical equipment, and mechanical systems.

Emergency and standby power systems are required to meet the provisions of CFC and CBC as well as meeting NFPA and UL requirements.

The CFC prohibits the use of extension cords or power strips as permanent wiring to equipment, lighting, fans, etc. The electrical loads and wiring for grow lighting, fans, etc. will need to be reviewed and permitted for use. An electrical analysis will need to be submitted along with manufacturer specification sheets, calculations, single line diagrams.

The electrical design and installation shall meet the requirements of the CEC.

### **FIRE PROTECTION SYSTEMS:**

Fire protection systems involves the design, installation, inspection, operation, testing and maintenance of all fire protection systems. This includes:

- Automatic Sprinkler Systems
- Alternative Automatic Fire-Extinguishing Systems
- Standpipe Systems
- Portable Fire Extinguishers
- Fire Alarm and Detection Systems
- Emergency Alarm Systems
- Smoke Control Systems
- Explosion Control
- Fire Pumps

Typically, these systems are submitted as a deferred submittal because of the specialized and technical nature of the system. California requires specialized licensing for contractors involved in fire protection systems.

A Building Code analysis should be submitted with any construction permit or change of occupancy use. Typically, a building code analysis is performed by the design professional preparing the initial submittal documents. This analysis will identify if the building will require any of the above listed fire protection systems.

### **EXITING:**

Buildings and facilities are required to be provided with exiting meeting the provisions of chapter 10 of the CBC. The provisions of this chapter regulate the design, construction, and arrangement of exiting systems. The following elements highlight the key provisions found within Chapter 10:

- Minimum exit access shall be maintained at all times.
- Minimum aisle widths shall be maintained at all times.

- Enhanced building security shall not interfere with exiting measures shall by no means impede egress for the facility’s occupants or firefighters in the event of an emergency.
- Electronic access control shall not interfere with the exiting components
- All locking hardware on doors (interior or exterior) shall meet the minimum requirements for exiting.
- All doors and door hardware shall be identified on the specifications and plans

**ENRICHMENT:**

CO<sub>2</sub> enrichment is a method used to enhance plant growth and leads to a faster plant growth and higher plant yield. CO<sub>2</sub> enrichment systems found in grow rooms intentionally flood the rooms with CO<sub>2</sub> whereby creating a potential asphyxiation hazards and are regulated by operational and system installation permits issued by the Fire Department. Additional alarm and monitoring requirement may also be required.

CO<sub>2</sub> generators operating from a fuel-fired source that, as a part of the combustion process, off-gases CO<sub>2</sub> and carbon monoxide (CO) is regulated by the California Mechanical Code as a non-vented fuel-fired appliance and requires a CO detector interlocked to an exhaust fan that operates on high levels of CO. The use of portable propane tanks and cylinders to supply these generators is generally prohibited.

**EXTRACTION:**

If plant oil extractions will be performed, provide complete details of the proposed extraction process, equipment, mechanical exhaust system, and room construction in a complete permit submittal. All extractions must be performed in an enclosed room. All exhaust system installations and room construction requires a permit. Unless listed extraction equipment is used (i.e. UL or equivalent), CFC §104.7.2 §2703 require an engineering report justifying that the equipment is adequately constructed to process a hazardous material.

The use of butane or other similar flammable gases in open systems (i.e. where the agent is directly released to the atmosphere) is prohibited by the CFC. Closed systems are approved by permit only. A review is required to confirm that the system is in compliance with CFC requirements.

A local hydrocarbon detector shall be used at all times the extraction equipment is in operation. Exhaust system shall be rated for the use. Where closed systems use refrigeration recovery machines, the unit must be rated for use with hydrocarbon refrigerants. Where butane is stored/used on site an annual operational hazardous material permit is required.

Alcohol or other flammable/combustible liquid extractions where the liquid is boiled, distilled, or evaporated shall be in compliance with California Fire Code and NFPA 30. The solvent used in the process (typically alcohol) must be identified by the applicant. The operation must be conducted under a hazardous exhaust hood that is rated for exhausting flammable vapors.

A permit for the generation of hazardous waste and storage of hazardous materials shall be obtained by the Alameda County Environmental Health Certified Unified Program Agency (CUPA).

**REGULATORY CONSIDERATIONS**

Any and all occupancies discovered operating cannabis establishments or businesses (including, but not limited to, infused product operations, cultivation, testing labs, and sales occupancies) not in compliance with all requirements of state and local regulatory requirements may result in the issuance of a “Stop Work Order” and/or issuance of violations.