

Regulatory Issues Cannabis License Types

CULTIVATION

Description:

Cannabis cultivation is generally divided into four basic categories: outdoor, indoor, mixed light (utilizing both natural and artificial light) and nursery. A combination of these cultivation techniques may occur at a site. Cultivation licenses allow for activities involving planting, growing, harvesting, drying, curing, grading and trimming. Depending on the cultivation method, the size, location, and setting of cannabis cultivation sites could vary. (See Figure A: State License Types and Allowable Growing Area/Quantity)

Figure A: State License Types and Allowable Growing Area/Quantity

<i>State License Category</i>	<i>Allowed Growing Area/Quantity</i>		
	Outdoor	Indoor	
	Natural Light	Artificial Light (A)	Mixed-Light (B) (Natural and
Specialty Cottage (1C)	Up to 25 Mature Plants	Up to 500 sf	Up to 2,500 sf
Specialty (1)	Up to 5,000 sf or 50 Mature Plants	Up to 5,000 sf	Up to 5,000 sf
Small (2)	5,001 - 10,000 sf	5,001 - 10,000 sf	5,001 - 10,000 sf
Medium (3)	10,001 sf – 1 acre	10,001 – 22,000 sf	10,001 - 22,000
Nursery* (4)	Up to 1 acre	Up to 1 acre	Up to 1 acre

Pros and Cons:

Controlling cultivation entails control of the supply of this lucrative product. A number of cities are planning large cultivation operations in anticipation of significant revenue. However, the State of California has to date licensed more than enough cultivation operations to meet current demand, without factoring in the pre-existing illicit operations. For this reason, a glut of cultivation capacity is anticipated. In addition, of all the license types, cultivation tends to generate the most public opposition. Odor, along with energy, water and pesticide use are the concerns most cited. Six years ago, when Colorado licensed their first commercial cannabis businesses, odor was the most common quality of life complaint for local jurisdictions. For this reason, many cities permit indoor cultivation to the extent that commercial cultivation is allowed at all. Key factors are whether sufficient water, electricity, odor control measures and security have been planned for.

Summary of Pros and Cons:

1. Revenue Potential
2. Odor
3. Theft/Criminal activity

4. Use of Water/Electricity
5. Pesticide use
6. Light pollution and light spill onto adjacent properties
7. Anticipated glut of cultivation capacity may limit revenue

Regulatory Considerations:

Since the legalization of commercial cannabis in Colorado and Washington, the cities of Denver and Seattle have created general nuisance odor ordinances that require cannabis businesses to submit an odor control plan. Jurisdictions in California are beginning to follow suit. The plan is used to identify the source of potential odors and the control technologies used to prevent such odors from leaving the licensed premises. The commercial cannabis industry has also made significant effort to increase energy and water efficiency.

Summary of Regulatory Tools

1. Require Odor Control Plans
2. Require Renewable Energy Plans
3. Require a Water Management Plan
4. Restrict visible artificial lighting
5. Require Security Plans
6. Establish distance requirements from sensitive uses, i.e. schools, daycare centers, churches, youth centers, residences, etc.
7. Limit cultivation to indoor only

Regulatory Framework Example:

1. Indoor – Artificial Light Only (warehouse operations)

- a. Allow in industrial zones
- b. Allow Up to 22,000 sq. ft. of canopy space
- c. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks, residential)
- d. Prohibit location within ½ mile from another indoor cultivation operation
- e. Require Odor Control Plan
- f. Require Security Plan
- g. Require renewable energy plan that meets the South Coast Air Quality Management District (SCAQMD) requirements
- h. Require a Water Management Plan

2. Indoor Mixed-Light (greenhouse operations)

- a. Allow in limited agriculture zones
- b. Prohibit Artificial Lighting
- c. Up to 22,000 sq. ft. of canopy space
- d. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks, residential)
- e. Require Odor Control Plan
- f. Require Security Plan
- g. Renewable energy plan that meets the South Coast Air Quality Management District (SCAQMD) requirements
- h. Require a Water Management Plan
- i. Require screened view of cultivation from public right-of-way

DISTRIBUTION

Description:

The Distribution model is a fundamental component of the cannabis supply chain. Under state law, distributors are the only licensed business type that can transport inventory between licensed cannabis businesses. In addition to transporting inventory between licenses, distribution companies will also be responsible for ensuring the examination of inventory at a testing laboratory and the collection of the State's Excise Taxes, before releasing the product to a retailer. Cultivators, manufacturers, and retailers also have the opportunity hold a distribution license as well, provided the distributor's licensed premises are "separate and distinct". This is to ensure that the various administrative privileges and inventory tracking requirements are strictly adhered to. Licensed Distributors will be required to establish comprehensive security measures to ensure the inventory is secured during transit and accounted for with manifest documentation. Distributors will be required to be licensed in a commercial or industrial building, requiring little to no signage or advertisement.

Pros and Cons:

Effective distribution of cannabis and cannabis goods is key to the survival of the regulated market, so distributors will have significant influence. Distribution licensees will be responsible for securing large quantities of inventory, while ensuring it is all properly tested and transported to licensed businesses. Distributors will also be required to collect taxes and will be expected to verify compliance with state packaging and labelling requirements. Inventory tracking and money handling are potential issues that will have to be addressed through regulatory oversight, due to the predominantly all-cash nature of the industry.

Summary of Pros and Cons:

1. Adequate security and control of inventory while being stored on-site
2. Adequate security and control of inventory while inventory is being transported
3. Cash handling procedures and availability to banking
4. Expertise in product movement required
5. Responsibility for checking packaging and labelling requirements
6. Responsibility for collecting state excise tax
7. Responsibility for collecting state cultivation tax

Regulatory Framework Example:

1. Allow in Industrial zones
2. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks)
3. Require the entire distribution facility to be designated as a limited access facility, preventing visitor, contractors or non-employees from entering without an escort by a designated manager
4. Inspect and approve the safe, vault or secured room prior to issuance of license
5. Require that all vehicles used to transport inventory be equipped with GPS
6. Require that a computer-generated manifest occur prior to the transportation of inventory
7. Prohibit non-authorized employees within vehicles during deliveries to licensed businesses
8. Require that inventory should be locked and secured in an approved case, safe or cabinet, including when in transit
9. Require that all employees be subject to a criminal background check

MANUFACTURING

Description:

The Department of Public Health (DPH) defines Manufacturing as “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”. Manufacturing licenses are separated into two categories based upon the type of solvent used: Type 6 Manufacturing using non-volatile solvents, such as cold water, heat press and CO₂; and Type 7 Manufacturing using volatile solvents such as butane, propane and ethanol. Licensed cannabis manufacturing facilities are typically located in non-descript commercial buildings and require little to no signage or advertisement. As required by state law, manufacturers are expected to use professionally engineered, industrial hygienist-certified, closed-loop extraction equipment specifically designed to prevent any volatile solvents from being released into the atmosphere. When used by a trained extraction technician, the process is intended to be safe and environmentally responsible.

Infused products and edibles manufactured in these types of facilities are the fastest growing products in the cannabis industry. Currently, edible sales account for 47% of cannabis inventory sold, and that is expected to increase. For example, in Colorado, 63% of cannabis sales are derived from edible cannabis products.

Pros and Cons:

Manufacturing will likely be one of the most important licensed activities, since current use trends indicate that a growing number of users are not smoking cannabis, but rather consuming it in the form of edibles, oils, creams, tinctures, sprays and vaping. This means the demand for these manufactured products will be both high and sustained. Building and employee safety during extraction processes is a critical concern, as well as compliance with state requirements for the now legal form of butane extraction authorized as of 2016. Additionally, mechanisms preventing large quantities of unsecured inventory being removed from the licensed premises by employees will have to be devised.

Summary of Pros and Cons:

1. Manufacturing will be a key activity based on current use trends
2. Large quantities of volatile gases and industrial solvents are stored on-site
3. Diversion to the black market, often resulting from product theft by employees
4. Health and safety concerns: Products that are adulterated, or contaminated with mold, bacteria or pesticides, are harmful to consumers
5. Administrative holds and product recalls are resource intensive and time-consuming
6. Rigorous compliance with new laws critical to employee safety and continued ability to operate

Regulatory Considerations:

As required by state law, the use of professionally engineered, industrial hygienist inspected, and certified, closed-loop extraction equipment is intended to increase building and employee safety. It should be further required that all extraction activities take place in a room solely dedicated to the extraction process. If volatile gases are being used, the room must be constructed to meet National Fire Protection Association (NFPA) C1-D1 hazardous location classifications. In addition, all waste shall be disposed of in a manner so that it cannot be detected or used for any other purpose.

Regulatory Framework Example:

1. Allow in light Industrial and manufacturing zones
2. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks)
3. Prohibit location within ½ mile from another manufacturing business
4. Require extraction room construction meet C1, D1 classification
5. Require installation of fire suppression systems and flammable gas detection devices
6. Require notification of any change to product line and use of extraction solvents
7. Require all extraction equipment be inspected by an industrial hygienist
8. Require all extraction technicians be trained and certified
9. Include required food handling safety training in Employee handbook
10. Require the establishment of clearly defined administrative hold and product recall procedures
11. Require that all employees be subject to a criminal background check
12. Require proper disposing of all waste per state law

MICROBUSINESS

Description:

The Microbusiness is the newest and most complex license to be issued by the State. This type of license will be allowed to conduct cultivation of cannabis on an area of less than 10,000 square feet of canopy space and act as a licensed distributor, Level 1 manufacturer and retailer. The State will generally require microbusinesses to comply with standards applicable to cultivators, distributors, manufacturers and retailers, which means the City will have to take these activities into consideration when deciding on the appropriate zoning. The Microbusiness model was designed to create opportunities for small business owners to enter the cannabis market. Additionally, the model further helps social equity issues as they relate to economic and technical barriers. If efficiently run, the vertically integrated model of a microbusiness can be very profitable, as it reduces the overhead cost of operating multiple locations and paying various levels of taxes on the same product they own. The down side to the microbusiness model is that, if a business owner is unable to successfully manage all segments of the supply chain, they could ultimately become a compliance liability and a higher risk of failure, especially if they have no previous experience running a cannabis business in a regulated market.

Pros and Cons:

In this new era of regulation, many small cannabis operators fear they will be driven out of business by larger competitors. For those able to transition to a regulated market, the microbusiness is a license category that may be compatible with their business model and assure their survival. This license type can also ease the burden of local regulation, since it is a model that tends to favor both vertical integration and location of all means of production at a single site. Microbusinesses incorporate multiple commercial cannabis business activities. As such, they will have to comply with standards applicable to cultivators, distributors, manufacturers and retailers. Because of the various activities that take place under one roof, local licensing agencies will have to consider the appropriate zoning, buffering and setbacks for microbusinesses. Microbusinesses will experience the same concerns and potential issues as the other stand-alone licensees. One of the most concerning issues with microbusinesses is the control of the inventory as it flows throughout the internal supply chain. Other states have experienced inventory control problems at locations that have multiple licenses under one roof.

Summary of Pros and Cons:

1. Microbusiness licensees must conduct at least three of the four following commercial activities:
 - a. Cultivation (Less than 10,000 sq. ft.)
 - b. Manufacturing (Level 1, Type 6)
 - c. Distribution
 - d. Retail
2. Appealing business model to small operators
3. Effective regulation requires knowledge of requirements of multiple license types
4. Appropriate zoning may be more challenging with this license type
5. Licensee must comply with all the rules and regulations that apply to the activities they are conducting

Regulatory Considerations:

A microbusiness license should incorporate all the mitigation measures listed for the other licenses. Robust security and inventory tracking should be the priority when establishing regulatory ordinances, as well as the review and approval of business plans.

Regulatory Framework Example:

1. Allow in Mix-Use, Light Industrial, Commercial zones
2. Allow only Indoor – Artificial Light only operations
3. Allow up to 10,000 sq. ft. of canopy space for cultivation
4. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks)
5. Require all inventory (including edibles and concentrates) to be locked and secured in a safe, vault or secured room when the business is closed.
6. Standard Operating Procedures should require that all employees receive ongoing point of sale and inventory tracking data entry training
7. Limit the amount of inventory on display to the equivalent of two days sales (increases inventory accountability and reduces volume of odor)
8. Require the business to assign one individual to the position of inventory manager
9. Require that all inventory and sales transactions be reconciled by end of business
10. Consider security by environmental design when reviewing and approving site plans
11. Require that all employees be subject to a criminal background check
12. Require the entire distribution facility to be designated a limited access facility, preventing visitor, contractors or non-employees from entering without an escort by a designated manager
13. Inspect and approve the safe, vault or secured room before issuance of license
14. Require that all vehicles used to transport inventory should be equipped with GPS
15. Require that a computer-generated manifest occur prior to the transportation of inventory
16. Prohibit non-authorized employees within vehicles during deliveries to licensed businesses
17. Require that inventory should be locked and secured in an approved case, safe or cabinet, including when in transit
18. Require Odor Control Plan
19. Require Security Plan
20. Renewable energy plan that meets the South Coast Air Quality Management District (SCAQMD) requirements
21. Require a Water Management Plan
22. Limit visible artificial lighting
23. Require extraction room construction meet C1, D1 classification
24. Require installation of fire suppression systems and flammable gas detection devices

25. Require notification of any change to product line and use of extraction solvents
26. Require all extraction equipment be inspected by an industrial hygienist
27. Require all extraction technicians be trained and certified
28. Include required food handling safety training in Employee handbook
29. Require the establishment of clearly defined administrative hold and product recall procedures
30. Require that all employees be subject to a criminal background check
31. Require proper disposing of all waste per state law

RETAIL

Description:

As defined by the Bureau of Cannabis control, a Cannabis Retailer is a person licensed to sell cannabis goods to customers as “a retailer, microbusiness, or nonprofit.” The retail component of the supply chain is by design the most visible segment of the commercial cannabis industry. As such, retail sales locations have been subject to the most scrutiny. Retail sales locations should be thoughtfully zoned, designed, and constructed in a manner that is suitable for the neighborhood to create the least amount of impact on the surrounding businesses and neighborhood.

In addition to being highly visible to the public, the retailer is at the end of the cannabis supply chain and thus where the inventory is under the most stringent control. The final product has been tested, packaged, labeled and accounted for down to the gram. Also, retailers tend to employ the fewest number of staff members and have the highest rate of employee retention among the license types such as cultivation or manufacturing. Under robust security measures and accessible to the fewest number of employees, there is generally very little theft from a retail sale establishment. In the six years that Colorado has been overseeing commercial cannabis activities, there have only been 8 reported violent crimes at retail sales locations.

Based on the current demand for retailer locations (dispensaries), retail locations can generate substantial revenues compared to other retail establishments within jurisdictions. For example, cannabis retailers currently generate on average \$933 per square foot, which exceeds other retail stores such as Whole Foods (\$903), Walgreens (\$720), Wal-Mart (\$446), The Gap (\$334), Kohl’s (\$228) and Dick’s Sporting Goods (\$184). A reason for this that most retail stores take up much more space than dispensaries, cannabis retailers stock a lot of product into a relatively small amount of space, and the average price point for marijuana is attractive to consumers.

Pros and Cons:

When Colorado and Washington licensed their first commercial cannabis retail outlets, very little thought was given to their location. Shortly thereafter local agencies started experiencing a high concentration of cannabis activity in certain neighborhoods. While it is difficult to develop the right formula, well defined buffers, minimum distance requirements, and preventing oversaturation by limiting the number of permits should be considered when designing an ordinance. A well-regulated retail business with an appropriate tax measure in place can potentially net revenue for a city in the low millions, depending on a number of factors, including regional competition. The all-cash nature of retail outlets poses public safety hazards to employees, as well as challenges for the city in capturing an accurate accounting of all sales as well as sales tax revenue, assuming the existence of a local tax

measure. Heightened security measures such as interior and exterior video surveillance and security guards may be advisable, since customers may also be at risk while entering and leaving the premises.

Summary of Pros and Cons:

1. Control volume of inventory on display at any given time
2. Point of sales and inventory control data must be entered by employees properly
3. Poorly trained employees create inventory tracking problems
4. Significant revenue potential if well-regulated and taxed at appropriate level
5. Combination of all-cash business and significant product on site pose public safety hazard for employees and customers alike
6. Non-Store Front Retail could generate revenue without having traditional store fronts

Regulatory Considerations:

Although inventory is accounted for down to the gram, robust inventory tracking requirements should be required and strictly enforced to mitigate employee theft. Robust inventory control measures should be considered in order to increase accountability and deter diversion.

Regulatory Framework Example:

1. Allow in Commercial zones
2. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks)
3. Require all inventory (including edibles and concentrates) be locked and secured in a safe, vault or secured room when the business is closed
4. Require that the Standard Operating Procedures provide ongoing point of sale and inventory tracking data entry training to all employees
5. Limit the amount of inventory on display to the equivalent of two days sales (increases inventory accountability and reduces volume of odor)
6. Require the business to assign one individual to the position of inventory manager
7. Require that all inventory and sales transactions be reconciled by end of businesses
8. Consider security by environmental design when reviewing and approving site plans
9. Require that all employees be subject to a criminal background check

TESTING LABORATORIES

Description:

As defined by the Bureau of Cannabis Control, Cannabis Testing Laboratories will be required to perform testing on cannabis goods to measure: cannabinoids, foreign material, heavy metals, microbial impurities, mycotoxins, moisture content and water activity, residual pesticides, residual solvents and processing chemicals and terpenoids. Additionally, edible cannabis products that contain more than one serving per unit will be tested for homogeneity to endure consistent concentrations of tetrahydrocannabinol (THC) or cannabidiol (CBD). Upon completion of the test, the laboratory will generate a certificate of analysis that contains the results of the testing and whether the tested batch passed or failed.

Testing laboratories are required to develop and implement a quality assurance program that is sufficient to ensure the reliability and validity of the analytical data produced by the laboratory. Testing

requirements will be phased in throughout 2018. Testing laboratories will be required to test cannabis goods for both A-licenses and M-Licenses. Owners of a testing laboratory are prohibited from conducting other commercial cannabis activities.

Concerns/Potential Issues:

Testing labs pose the fewest public safety challenges because they have so little cannabis on the premises compared to other license types that they are far less likely to attract criminal activity, or to become a source of diversion. Testing lab operators are prohibited by law from operating or having an ownership interest in any other license category. However, because testing labs are critical to enforcing the state's health and safety standards, they must have both rigorous chain-of-custody protocols and testing equipment that can consistently comply with state standards.

Summary of Concerns and Issues:

1. Adequate security and control of inventory while being stored on-site
2. Adequate security and control of inventory while inventory is being transported
3. Cash handling procedures and availability to banking
4. Periodic compliance checks for adherence to state standards for testing equipment

Regulatory Considerations:

Testing Laboratories should incorporate all the mitigation measures listed for the other licenses. Robust security and inventory tracking should be the priority when establishing regulatory ordinances, as well as the review and approval of business plans.

Regulatory Framework Example:

1. Allow in Light Industrial and Manufacturing zones
2. Prohibit location within 600 ft of sensitive receptor (schools, day cares, youth centers, parks)
3. Require the entire testing laboratory facility be designated as a Limited-Access facility, preventing visitor, contractors or non-employees from entering without an escort by a designated manager
4. Inspect and approve the safe, vault or secured room prior to issuance of license
5. Require that cannabis goods be locked and secured in an approved locked and secured room vault or safe when being stored
6. Require that all employees be subject to a criminal background check