Alcohol and Marijuana Control Office
550 W 7th Avenue, Suite 1600
Anchorage, AK 99501
marijuana.licensing@alaska.gov
https://www.commerce.alaska.gov/web/amco
Phone: 907.269.0350

Alaska Marijuana Control Board

Operating Plan Supplemental
Form MJ-04: Marijuana Cultivation Facility

What is this form?

This operating plan supplemental form is required for all applicants seeking a marijuana cultivation facility license and must accompany the **Marijuana Establishment Operating Plan (Form MJ-01)**, per 3 AAC 306.020(b)(11). Applicants should review **Chapter 306: Article 4** of the **Alaska Administrative Code.** This form will be used to document how an applicant intends to meet the requirements of those regulations. If your business has a formal operating plan, you may include a copy of that operating plan with your application, but all fields of this form must still be completed per 3 AAC 306.020 and 3 AAC 306.420(2).

What additional information is required for cultivation facilities?

Applicants must identify how the proposed establishment will comply with applicable regulations regarding the following:

- Prohibitions
- Cultivation plan
- Odor control
- Testing procedure and protocols
- Security

This form must be submitted to AMCO's main office before any marijuana cultivation facility license application will be considered complete.

Section 1 – Establishment Information

Enter information for the business seeking to be licensed, as identified on the license application.

Licensee:	Good LLC	**License Number:**	10166		
License Type:	Standard Marijuana Cultivation Facility				
Doing Business As:	Good LLC				
Premises Address:	1949 Frank St.				
City:	Fairbanks	**State:**	ALASKA	**ZIP:**	99708

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Section 2 – Prohibitions

Applicants should review 3 AAC 306.405 – 3 AAC 306.410 and be able to answer "Agree" to all items below.

The marijuana cultivation facility will not:	Agree	Disagree
Sell, distribute, or transfer any marijuana or marijuana product to a consumer, with or without compensation	■	☐
Allow any person, including a licensee, employee, or agent, to consume marijuana or marijuana product on its licenses premises or within 20 feet of the exterior of any building or outdoor cultivation facility	■	☐
Treat or otherwise adulterate marijuna with any organic or nonorganic chemical or compound to alter the color, appearance, weight, or odor of the marijuana	■	☐

Section 3 – Cultivation Plan

Review the requirements under 3 AAC 306.420, and identify how the proposed premises will meet the listed requirements.

Describe the size of the space(s) the marijuana cultivation facility intends to be under cultivation, including dimensions and overall square footage. Provide your calculations below:

Pursuant to 3 AAC 306.420, the proposed marijuana cultivation facility is a two-story pre-existing structure that is 7324 square footage ("SF") and is located at 1949 Frank Avenue. The spaces under cultivation for phase one include:
• Mother, which is 172.5 SF (15 SF x 11.5 SF) and includes 120 SF of plant canopy.
• Propagation/Vegetative 1, which is 500 SF (49.67 SF x 9 SF + 6 SF x 9 SF) and includes 230 SF of plant canopy.
• Propagation/Vegetative 2, which is 500 SF (49.67 SF x 9 SF + 6 SF x 9 SF) and includes 230 SF of plant canopy.
• Flowering 1, which is 1136 SF (28.4 SF x 40 SF) and includes 684 SF of plant canopy.
• Flowering 2, which is 1136 SF (28.4 SF x 40 SF) and includes 684 SF of plant canopy.
• Flowering 3, which is 405 SF (15 SF x27 SF) and includes 225 SF of plant canopy.
The proposed site has open green space adjacent to the existing structure, which will be utilized to expand the cultivation facility and increase yield if demand dictates.

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Describe the marijuana cultivation facility's growing medium(s) to be used:

Pursuant to 3 AAC 306.420, GOOD LLC will primarily utilize a soilless media base in fabric pots, using drip emitters served by an automatic fertigation injector system for nutrient delivery to marijuana plants. Marijuana requires three main macronutrients, including increased nitrogen in vegetation, increased phosphorous and potassium in flowering, as well as nine additional micronutrients and impeccable pH levels. GOOD LLC's subject matter experts, including tenured national marijuana consultants Denver Relief Consulting (DRC), have worked with environmental management solutions on nutrient formulas and rates to support the ideal and healthy growth of marijuana. DRC currently engages an ex-NASA Plant Scientist and University of Maryland Plant Science Professors on Research and Development projects to better understand nutrient delivery, plant uptake and leachate content in an effort to optimize irrigation management.
GOOD LLC will utilize two proprietary blends of growing media in the cultivation of all marijuana, as determined by the cultivation facility General Manager and DRC. The standard operating procedure implemented by GOOD LLC will provide guidelines for proprietary media mixing, packing, and amendments with inorganic materials, fertilizer and watering. Detailed instruction on operation of the system, nutrient dosing procedures and monitoring of hydroponic nutrients will be provided in the standard operating procedures. The dominant media blend being implemented is a predominantly inert, soilless media that harmonizes the strengths of organic methodologies with those of hydroponic cultivation, balancing yield, potency, terpene development and consistency, while limiting the potential for agent error by creating a buffer to fragile root systems. Pursuant to the Board and 3 AAC 306.420, the cultivation facility will implement procedures to maintain or improve soil/media organic matter content in a manner that does not contribute to contamination of crops, media, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Soil and media temperatures will be maintained below 95°F at all times to prevent root rot. The Cultivation Manager may utilize any type of media that is safe for cultivation, but will rely mostly on a proven proprietary blend that includes coco fibers, worm castings, hydroton, vermiculite, mykos and perlite. The Cultivation Manager will consider the following when selecting plant medium: cleanliness, saturation rate, uniformity, availability, and cost. GOOD LLC plans to use the following medium:
1. Small Perlite - PlantIt;
2. Large Perlite;
3. Tupur Mix - Royal Gold;
4. Basement Mix - Royal Gold;
5. Coco Fiber - Royal Gold;
6. 30 LB Earthworm Castings;
7. 50 Liter Hydroton Clay Pellets;
8. Vermiculite;
9. Diatomaceous Earth; and
10. Mykos

Describe the marijuana cultivation facility's fertilizers, chemicals, gases, and delivery systems, including carbon dioxide management, to be used:

Only greenhouse commercial-grade fertilizers that meet specification determined by the Cultivation Manager will be purchased to ensure maximum purity and solubility. Soluble-chemical fertilizers are an excellent choice for indoor container cultivation, as they dissolve in water and can be easily added to the growing medium. The Cultivation Manager is responsible for overseeing all fertilizer mixing and application in accordance with federal, state, and local regulations that are applicable to a specific fertilizer, if any. All fertilizers will be used in accordance with all label directions; for example, for application rates, for safe handling, etc. GOOD LLC will also utilize compost teas and materials. Compost teas and materials can result in positive coliform results if improperly applied to crops. Cultivation agents who apply compost will be properly trained in safe application to prevent contamination of the plant foliage.It is GOOD LLC's policy to avoid the acquisition and use of hazardous materials and pesticides, as such, hazardous materials and pesticides will only be acquired as a last resort. Cleaning compounds and cultivation agents used in the cultivation facility will be from microorganisms of public health significance, approved by the United States Environmental Protection Agency, and be safe and adequate under the conditions of use. Cleaning compounds and sanitizing agents, as well as pesticides, hazardous materials, if any, will be identified, stored, and used in a manner that protects against contamination of product constituents or contact surfaces. Implementing a supplementary CO2 system can increase yield by 20-40% and is very common in agriculture. The Cultivation Manager will ensure that all CO2 sensors are positioned near the center of the crop and not near a CO2 outlet. The Cultivation Manager will also ensure that there is proper ventilation to provide an exchange of air when using CO2. The Cultivation Manager will ensure that CO2 levels are being documented with nutrient levels as a component of the formula. In addition to these responsibilities, the Cultivation Manager is responsible for ensuring that all cultivation agents are thoroughly trained on how to identify CO2 poisoning, for both plants and humans, and how to respond appropriately to both of these situations. Emergency air evacuation and alarm systems will be installed in all rooms to detect and remove CO2 and alert staff via audible and visual alarms in the event of an unsafe CO2 concentration level.

Describe the marijuana cultivation facility's irrigation and waste water systems to be used:

Pursuant to 3 AAC 306 Article 4, GOOD LLC will implement safe and environmentally practical irrigation and waste water systems in the cultivation facility. The irrigation practices to be used in the cultivation facility will serve to prevent the generation of irrigation runoff, containing excess nutrients that could potentially pollute water supplies if not managed properly. Irrigation runoff will drain from containers to cultivation flood tables, will evaporate and be taken up by the HVAC system. Air handler condensate water will be purified and reused. Any applied nutrient water that isn't evaporated will be recaptured from the flood tables, purified and stored for future crop applications. These practices will ensure that no excess nutrients or chemicals enter public water supplies or pollute natural resources.
GOOD LLC will primarily employ the H.E. Anderson Feeder Injector System, which is a fully-automated injector system for irrigating and fertilizing marijuana plants. The H.E. Anderson is a highly recommended system due to the efficiency and effectiveness of the system. A component of the H.E. Anderson Feeder Injector System, the Anderson Aqua controller, allows cultivation staff to program multiple EC and nutrient set points. This will ensure that crop applications are directly pulled from a mixing tank to vegetative and flowering rooms via hard supply lines in each room.
The Cultivation Manager, in coordination with the H.E. Anderson's system manufacturer, will program the injector system to deliver the appropriate volume and concentration of nutrients to each room, depending on the phase of growth of the plants within the designated room. The Cultivation Manager and all cultivation agents will operate the H.E. Anderson Feeder Injector System in accordance with manufacturer's instructions.
The H.E. Anderson Feeder Injector System will be connected to stock tanks containing GOOD LLC's proprietary nutrient solutions, which will be manually mixed in accordance with the Nutrient Mixing and Application Procedure developed by the Cultivation Manager and marijuana industry experts Denver Relief Consulting, and in compliance with the Nutrient Management Plan. Accurate measuring, mixing, and scheduling of nutrient solutions are critical for maintaining plant health and product quality. Nutrients must be stored and handled in accordance with the manufacturer's label instructions. Feeding schedules will be adjusted when plants in a given room reach a phase of growth that requires a different nutrient recipe according to the Nutrient Mixing and Application Procedure.

If GOOD LLC's cultivation facility does generate liquid marijuana waste, GOOD LLC's iquid waste disposal methods will be in full compliance with local water laws and will not allow disposal of marijuana products or any plant material to enter the local wastewater collection system, storm drain system, or any unsecure rubbish disposal system. GOOD LLC will adhere to sewer discharge limitations and prohibitions and general water regulations contained in local and state laws and regulations. Though measures will be in place to prevent the generation of liquid marijuana waste, any liquid marijuana waste produced will be disposed of in the on-site septic system. Liquid waste containing nutrient residues, marijuana, or by-products of marijuana at the cultivation facility will be disposed of in compliance with the Alaska Environmental Protection Act and all local laws. The cultivation facility's plumbing system will be periodically inspected to assure that sewage and other liquid waste are adequately transported from the facility via waste water lines that pose no threat of crossing with potable water lines.

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Describe the marijuana cultivation facility's waste disposal arrangements:

If GOOD LLC's cultivation facility does generate liquid marijuana waste, GOOD LLC's liquid waste disposal methods will be in full compliance with local water laws and will not allow disposal of marijuana products or any plant material to enter the local wastewater collection system, storm drain system, or any unsecure rubbish disposal system. GOOD LLC will adhere to sewer discharge limitations and prohibitions and general water regulations contained in local and state laws and regulations. Though measures will be in place to prevent the generation of liquid marijuana waste, any liquid marijuana waste produced will be disposed of in the on-site septic system. Liquid waste containing nutrient residues, marijuana, or by-products of marijuana at the cultivation facility will be disposed of in compliance with the Alaska Environmental Protection Act and all local laws. The cultivation facility's plumbing system will be periodically inspected to assure that sewage and other liquid waste are adequately transported from the facility via waste water lines that pose no threat of crossing with potable water lines.

The bathrooms and floor drains in the cultivation facility will be connected to an approved on-site septic system. All liquid waste potentially containing marijuana solids or residues, nutrients, chemicals, or any other potential pollutant will be disposed of in the on-site septic system, which will be pumped by a permitted septic disposal service as needed. GOOD LLC does not anticipate needing to have the tanks pumped because bacteria will break down the liquid waste before it is discharged to the drain field on-site. However, a permitted septic disposal service will be used if a clog or other issue arises that impacts the system's operation.
The cultivation facility's septic system will be periodically checked to assure that sewage, wastewater, and other liquid waste are adequately transported from the facility to the on-site septic system via waste water lines that pose no threat of crossing with potable water lines. Disposal of liquid chemical waste will be executed in full compliance with federal, state and local laws and regulations as well as in accordance with instructions on the product's label and any material safety data sheet (SDS), if applicable.

Section 4 – Odor Control

Review the requirements under 3 AAC 306.430, and identify how the proposed premises will meet the listed requirement.

Describe the odor control method(s) to be used and how the marijuana cultivation facility will ensure that any marijuana at the facility does not emit an odor that is detectable by the public from outside the facility:

Pursuant to 3 AAC 306.430, GOOD LLC will ensure that the cultivation facility does not emit an odor that is detectable to the public from outside of the facility by implementing specific design consideration, equipment, environmental controls, and procedural standards. Proper odor control in any cultivation facility is paramount for facility security and the maintenance of good relationships with the surrounding community. GOOD LLC recognizes odor from any marijuana operation could become disruptive to the community if not properly managed. However, GOOD LLC does not anticipate having issues with marijuana odor in a manner that would create an environmental nuisance. GOOD LLC has selected odor control equipment and ventilation systems that will ensure that all marijuana inside the cultivation facility has little or no detectable odor from the exterior of the building. Two independent air-filtration technologies and one type of air purification device will be utilized to destroy air-borne pathogens and eliminate marijuana odor inside and outside of the cultivation facility.
GOOD LLC will establish minimum indoor air quality standards to enhance indoor air quality performance and contribute to the health and well-being of the occupants and neighbors. GOOD LLC will maintain superior air quality inside the cultivation facility for occupants by investing in air-scrubbing technology. GOOD LLC will incorporate active carbon and high-efficiency particulate air (HEPA) filtration in all areas of the cultivation facility and ozone generators in unoccupied areas of the cultivation facility. The incorporation of these technologies and methods will help limit the spread of contaminants to other areas inside the structure and will aid GOOD LLC in acting as good neighbors and maintaining clean and healthy internal and external environments.
HEPA filters provide a very high level of filtration efficiency for small and large particulate contaminants and are widely applied in air filtration and air purification applications to control airborne particulate levels. A filter must capture a minimum of 99.97% of contaminants at 0.3 microns in size in order to meet U.S. standards for HEPA classification. HEPA filters are even more efficient in removing particles that are smaller than 0.3 microns and larger than 0.3 microns.
All mechanical air-handling units in the cultivation facility will be outfitted with commercial HEPA filters. These filters will serve all spaces and will be used not just for odor control, but to assist in mitigating environmental contaminants by catching airborne particulates, infectious agents, and pests, if present. HEPA filters will be added on the return side of all air-handling units serving the cultivation facility. In addition, ultraviolet light emitters will be installed ahead of these HEPA filters in the return duct, which will aid in the destruction of additional microorganisms in the room air. Filters will be replaced in accordance with manufacturer's recommendations.

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Section 5 – Testing Procedure and Protocols

Review the requirements under 3 AAC 306.455 and 3 AAC 306.465, and identify how the proposed premises will meet the listed requirements.

Applicants should be able to answer "Agree" to the item below.

I understand and agree that:	Agree	Disagree
The board will or the director shall from time to time require the marijuana cultivation facility to provide samples of the growing medium, soil amendments, fertilizers, crop production aids, pesticides, or water for random compliance checks	■	☐

Describe the testing procedure and protocols the marijuana cultivation facility will follow:

Pursuant to 3 AAC 306.455 and 3 AAC 306.465, GOOD LLC will ensure it selects and utilizes an independent testing laboratory (laboratory) that has adopted a standard operating procedure to test marijuana that is approved by an accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement. The Cultivation Manager, in coordination with Compliance Committee, will select a laboratory registered with the state to perform statistically valid sampling methods to test, evaluate, and analyze marijuana batch samples to determine if pre-condition requirements established by the Alaska Marijuana Control Board and intended product specifications are met, prior to beginning operations at the licensed premises. Upon licensure, the Compliance Committee will review a list of those laboratories approved and registered by the state and develop a scoring rubric to compare each based on team qualifications, testing experience, pricing, services offered, sampling methods, testing limitations and proximity, and select the highest scorer. The selection process and updating the rubric will occur annually at a minimum.
GOOD LLC's Compliance Committee will ensure that 1) the laboratory will follow standard operating procedures ("SOPs") to confirm or refute original test results of product in the event a result falls out of specification, by retaining a sample of all batches for verification by a second laboratory, if needed. GOOD LLC will also require that laboratory SOPs are included as addenda to the services contract executed with the laboratory; 2) any laboratory contracted and utilized for marijuana sampling and testing services include in their services agreement, and be bound to a requirement, that a certificate of analysis will be issued and provided to GOOD LLC's Compliance Committee for each test accomplished.
Each certificate of analysis will be uploaded to GOOD LLC's automatic data processing/point-of-sale system in the corresponding batch record; 3) independent testing laboratories contracted and utilized for marijuana sampling and testing services include in their services agreement that all testing sample remains will be destroyed in accordance with State regulations. The laboratory will be required to provide a written description of the quantity of the sample used and disposed of in the analysis, as well as the timing and method of waste disposal; and 4) laboratories utilized for sampling and testing services include in their services agreement that a certificate of analysis will be issued to GOOD LLC's Compliance Committee for each test, to report batch conformance to THC, THCA, CBD, CBDA, CBG and CBN, and that terpene profiles are in accordance with and contaminants do not exceed the levels as required by the American Herbal Pharmacopoeia monograph.
GOOD LLC will establish a relationship with an Alaska Marijuana Control Board approved independent testing laboratory with marijuana testing protocols and methods. Immediately after drying and curing is complete, the Cultivation Manager will make each batch of marijuana available for sampling and testing by the Compliance Committee. The Cultivation Manager will direct the Compliance Committee to collect random, homogenous samples of each finished batch and facilitate their transportation to the selected laboratory where they will be analyzed in accordance with scientifically valid methods. Samples must be handled, transported, and stored in a manner that prevents contamination. All samples will be transported in a secured, locked container that fulfills the transportation storage requirements pursuant to the Alaska Marijuana Control Board regulations. A detailed chain of custody must be maintained at all times and a receipt must be provided for all samples taken. A shipping manifest will be completed and securely transmitted to the laboratory receiving the samples. Any motor vehicle transporting the marijuana samples will travel directly from the cultivation facility to the laboratory and will not make any stops except to other laboratories, for refueling purposes, or in case of emergency.

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Section 6 – Security

Review the requirements under 3 AAC 306.430 and 3 AAC 306.470 – 3 AAC 306.475, and identify how the proposed premises will meet the listed requirements.

Applicants should be able to answer "Agree" to the two items below.

The marijuana cultivation facility applicant has:	Agree	Disagree
Read and understands and agrees to the packaging of marijuana requirements under 3 AAC 306.470	☐	☐
Read and understands and agrees to the labeling of marijuana requirements under 3 AAC 306.475	☐	☐

Restricted Access Area (3 AAC 306.430):

	Yes	No
Will the marijuana cultivation facility include outdoor production?	☐	☐

If "Yes", describe the outdoor structure(s) or the expanse of open or clear ground fully enclosed by a physical barrier:

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Describe the method(s) used to ensure that any marijuana at the marijuana cultivation facility cannot be observed by the public from outside the facility:

Pursuant to 3 AAC 306.430, GOOD LLC will utilize a combination of physical design features, technologies, and procedures to prevent any marijuana at the cultivation facility from being observed by the public from outside the facility, primarily through housing operations in a discreet, opaque and windowless existing concrete building. GOOD LLC will secure and monitor access to facility through the installation and use of a highly secured access control system. The access control system will be used to monitor and record the movement of personnel onto the site, into the building and throughout the facility, and selectively allow and prevent access to restricted areas. GOOD LLC will utilize a stand-alone surveillance system, including a combination of fixed, pan-tilt-zoom 180 degree and 360 degree cameras throughout the facility to provide continuous monitoring and surveillance. Entry through a private entrance door and a minimum of two additional locked doors is necessary to reach any room where marijuana is present. All doors will be 18-gauge hollow metal with commercial-grade I, commercial locks. Exterior doors and restricted access entries will be equipped with electric strike and electronic access hardware that automatically lock. Emergency door systems are connected to access control and alarms systems that will produce an audible alarm upon door opening. Inter-system connectivity will exist for alarm, access control and surveillance systems.
A high security fence will border the perimeter of the operational and loading areas with one access gate for all ingress and egress, with the gate controlled via key FOB. Additional features include adequate security lighting, barrier delay countermeasures, metal mesh guards over HVAC openings, and landscaping, which will be maintained to easily detect unauthorized activity and prevent concealment. GOOD LLC will require a recurring annual third-party security audit for the re-evaluation and analysis of all installed physical security.

I certify that as a marijuana cultivation facility, I will submit monthly reports to the Department of Revenue and pay the excise tax required under AS 43.61.010 and 43.61.020 on all marijuana sold or provided as a sample to a marijuana establishment, as required under 3 AAC 306.480.

I declare under penalty of perjury that I have examined this form, including all accompanying schedules and statements, and to the best of my knowledge and belief find it to be true, correct, and complete.

Signature of licensee

CHRISTIAN HOOD

Printed name

Subscribed and sworn to before me this 25th day of May, 2016.

Notary Public in and for the State of Alaska.

My commission expires: 6/12/19

NICK AKERS
My Commission Expires
NOTARY PUBLIC
Jun 12, 2019
STATE OF ALASKA

Cultivation Application

Form 04: Marijuana Cultivation Facility

Describe the size of the space(s) the marijuana cultivation facility intends to be under cultivation, including dimensions and overall square footage. Provide your calculations below:

Pursuant to 3 AAC 306.420, the proposed marijuana cultivation facility is a two-story pre-existing structure that is 7324 square footage ("SF") and is located at 1949 Frank Avenue. The spaces under cultivation for phase one include:

- Mother, which is 172.5 SF (15 SF x 11.5 SF) and includes 120 SF of plant canopy.
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- Propagation/Vegetative 2, which is 500 SF (49.67 SF x 9 SF + 6 SF x 9 SF) and includes 230 SF of plant canopy.
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- Flowering 2, which is 1136 SF (28.4 SF x 40 SF) and includes 684 SF of plant canopy.
- Flowering 3, which is 405 SF (15 SF x27 SF) and includes 225 SF of plant canopy.

The proposed site has open green space adjacent to the existing structure, which will be utilized to expand the cultivation facility and increase yield if demand dictates.

Describe the marijuana cultivation facility's growing medium(s) to be used:

Pursuant to 3 AAC 306.420, GOOD LLC will primarily utilize a soilless media base in fabric pots, using drip emitters served by an automatic fertigation injector system for nutrient delivery to marijuana plants. Marijuana requires three main macronutrients, including increased nitrogen in vegetation, increased phosphorous and potassium in flowering, as well as nine additional micronutrients and impeccable pH levels. GOOD LLC's subject matter experts, including tenured national marijuana consultants Denver Relief Consulting (DRC), have worked with environmental management solutions on nutrient formulas and rates to support the ideal and healthy growth of marijuana. DRC currently engages an ex-NASA Plant Scientist and University of Maryland Plant Science Professors on Research and Development projects to better understand nutrient delivery, plant uptake and leachate content in an effort to optimize irrigation management.

GOOD LLC will utilize two proprietary blends of growing media in the cultivation of all marijuana, as determined by the cultivation facility General Manager and DRC. The standard operating procedure implemented by GOOD LLC will provide guidelines for proprietary media mixing, packing, and amendments with inorganic materials, fertilizer and watering. Detailed instruction on operation of the system, nutrient dosing procedures and monitoring of hydroponic nutrients will be provided in the standard operating procedures. The dominant media blend being implemented is a predominantly inert, soilless media that harmonizes the strengths of organic methodologies with those of hydroponic cultivation, balancing yield, potency, terpene development and consistency, while limiting the potential for agent error by creating a buffer to fragile root systems. The media blend will follow the USDA organic standards for production.

Pursuant to the Board and 3 AAC 306.420, the cultivation facility will implement procedures to maintain or improve soil/media organic matter content in a manner that does not contribute to contamination of crops, media, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Soil and media temperatures will be maintained below 95°F at all times to prevent root rot. The Cultivation Manager may utilize any type of media that is safe for cultivation, but will rely mostly on a proven proprietary blend that includes coco fibers, worm castings, hydroton, vermiculite, mykos and perlite. The Cultivation Manager will consider the following when selecting plant medium: cleanliness, saturation rate, uniformity, availability, and cost. The Cultivation Manager will assign responsibilities for medium testing, will test the media prior to each use for pH level, temperature, and pests. GOOD LLC plans to use the following medium:

1. Small Perlite - Plant!t;
2. Large Perlite;
3. Tupur Mix - Royal Gold;
4. Basement Mix - Royal Gold;
5. Coco Fiber - Royal Gold;
6. 30 LB Earthworm Castings;
7. 50 Liter Hydroton Clay Pellets;

8. Vermiculite;
9. Diatomaceous Earth; and
10. Mykos.

The following are also taken into consideration by the Cultivation Manager:

Electrical conductivity (EC), or salinity, is a measure of the ability of a solution to conduct electricity. That ability is directly related to the amount of ions of salts dissolved into the solution. Roots draw nutrient solution up the plant by the process of osmosis. Osmosis is the tendency of the fluids to pass through a semi-permeable membrane and mix with each other until the fluids are equally concentrated on both sides of the membrane. Semi-permeable membranes located in the root hairs allow specific nutrients that are dissolved in the water to enter the plant while other nutrients and impurities are excluded. Since salts and sugars are concentrated in the roots, the EC inside the roots is almost always higher than outside the roots. Transporting the nutrients by osmosis works because it depends on relative concentrations of each individual nutrient on each side of the membrane; it does not depend on the total dissolved solids or EC of the solution. For nutrients to be drawn in by the roots via osmosis, the strength of the individual elements must be greater than that of the roots. However, the transport of water (instead of nutrients) across the semi-permeable membrane *does* depend on EC. If the EC is greater outside the roots than inside, the plant dehydrates as the water is drawn out of the roots. Reverse-osmosis machines convert tap water to purified water with an EC close to 0.

pH is a logarithmic measure of the acid-alkaline balance in soil or water. A pH of 1 is the most acidic solution, 7 is neutral, and 14 is the most alkaline. In other words, pH is a measure of the free positively charged Hydrogen ions (H^+) in a solution. The more Hydrogen ions in the solution, the more acidic it is and the lower the pH value. The effect of source water pH on plants is different depending on whether the grower is using soilless media or hydroponic methods. Marijuana can be grown in hydroponic solutions with a pH as low as 5.5, but it does best when grown in soil or water with a pH range of 5.8-6.5, which is slightly acidic. All plant nutrients are water soluble in this range so they are readily available to the plants. Outside of this range they become less available. Nutrient uptake and pH are addressed in further detail below.

Incorrect pH contributes to most serious nutrient disorders in organic-soil gardens. Many complex biological processes occur between organic fertilizers and the soil during nutrient uptake. The pH is critical to the livelihood of these activities. When the pH fluctuates in a hydroponic garden, the nutrients are still available for uptake, meaning the pH is not as critical. EC is the most critical indicator of plant health and nutrient uptake in hydroponic cultivation.

Describe the marijuana cultivation facility's fertilizers, chemicals, gases, and delivery systems, including carbon dioxide management, to be used:

GOOD LLC is research-driven in its intent to create a world-class marijuana cultivation facility, which starts with robust data collection and analysis. GOOD LLC's fertigation system will integrate with a building automation system and scores of sensors throughout the facility, which will control and collect data from lighting, mechanical and irrigation systems, allowing GOOD LLC to gain a thorough understanding of how each environmental factor affects plant output. Inventory management and plant application of products, schedules and rates for all fertilizers, growth additives and other crop inputs will be manually documented within the automatic data processing/point-of-sale system and the Crop Input Log by cultivation agents, as well as all crop input applications automatically by the fertigation system. Each system will be capable of producing reports from all crop application data collected, which will be compared against environmental conditions in each space to understand overall optimal conditions for each strain of marijuana grown. The optimization of crop inputs will be regularly monitored and revised by the Cultivation Manager to achieve maximum efficiency and environmental stewardship of operations.

Appropriate personal protective equipment (PPE) must be worn at all times, according to the requirements of the job task. Manufacturing agents will be encouraged to contact their supervisor and reference the PPE job hazard analysis if in need of PPE or if questions arise. Agents must wear approved eye and face protection when sawing, grinding, drilling, using air tools or performing any other task that could generate flying debris. When working with hazardous chemicals, agents must wear all PPE specified on the material safety data sheets (SDS) and/or manufacturer's label. Agents must wear gloves when handling harvested marijuana, metal, rough wood, fiberglass and other sharp objects. All agents must also wear a hard hat when there are overhead hazards. Appropriate non-slip footwear and specific pocket-less uniform items must be worn as required.

The Cultivation Manager will maintain a list of all the chemicals and products used within the processing facility. This list will be kept in the front of the SDS book. Each hazardous chemical on the inventory list has a corresponding SDS available for providing specific hazard information and personal protective measures. This list will be updated quarterly by the Safety Coordinator to remove chemicals that are no longer in use at the processing facility and to add new products.

The Cultivation Manager will implement fertilization methods appropriate for each crop including hand application chart, ebb and flow systems, and injection systems. Generally, small fertilizer doses will be applied to crops over a determined period of time to avoid over-feeding and burning of the leaves. The Cultivation Manager will only utilize fertilizers that are rated food or pure quality. Nutrient solutions, compost teas, and other substance mixtures applied to plants will be prepared by the Cultivation Manager or a designated, highly trained cultivation agent. Each application will be recorded in GOOD LLC's internal nutrient recipe records, assigned an internal identification number, and will be recorded in the Crop Application Log and the automatic data processing/point-of-sale system.

The chart below provides satisfactory elemental nutrient limits for indoor marijuana, expressed in ppm. Cultivation agents will use these ranges as a guide in order to avoid nutrient deficiencies or excesses.

Element	Average	Limits
Nitrogen	150-1000	250
Calcium	100-150	200
Magnesium	50-100	75
Phosphorus	50-100	80
Potassium	100-400	300
Sulfur	200-1000	400
Copper	0.1-0.5	0.5
Boron	0.5-5.0	1.0
Iron	2.0-10	5.0
Manganese	0.5-5.0	2.0
Molybdenum	0.01-0.05	0.02
Zinc	0.5-1.0	0.5

Only greenhouse commercial-grade fertilizers that meet specification determined by the Cultivation Manager will be purchased to ensure maximum purity and solubility. Soluble-chemical fertilizers are an excellent choice for indoor container cultivation, as they dissolve in water and can be easily added to the growing medium. The Cultivation Manager is responsible for overseeing all fertilizer mixing and application in accordance with federal, state, and local regulations that are applicable to a specific fertilizer, if any. All fertilizers will be used in accordance with all label directions; for example, for application rates, for safe handling, etc.

GOOD LLC will also utilize compost teas and materials. Compost teas and materials can result in positive coliform results if improperly applied to crops. Cultivation agents who apply compost will be properly trained in safe application to prevent contamination of the plant foliage.

Mobile nutrients — nitrogen (N), phosphorus (P), potassium (K), and magnesium (Mg)— are able to move from one portion of the plant to another as needed (translocate). For example, nitrogen accumulated in older leaves will translocate to younger leaves to solve a deficiency. The result is that deficiency symptoms appear on the older, lower leaves first.

Immobile nutrients — calcium (Ca), boron (B), chlorine (Cl), cobalt (Co), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), and sulfur (S)— do not translocate to new growing areas as needed. They remain deposited in their original place in older leaves. This is the reason their deficiency symptoms appear first in the upper, new leaves on top of the plant.

It is GOOD LLC's policy to avoid the acquisition and use of hazardous materials and pesticides, as such, hazardous materials and pesticides will only be acquired as a last resort. Cleaning compounds and cultivation agents used in the cultivation facility will be from microorganisms of public health significance, approved by the United States Environmental Protection Agency, and be safe and adequate under the conditions of use. Cleaning compounds and sanitizing agents, as well as pesticides, hazardous materials, if any, will be identified, stored, and used in a manner that protects against contamination of product constituents or contact surfaces.

Implementing a supplementary CO_2 system can increase yield by 20-40% and is very common in agriculture. The Cultivation Manager will ensure that all CO_2 sensors are positioned near the center of the crop and not near a CO_2 outlet. The Cultivation Manager will also ensure that there is proper ventilation to provide an exchange of air when using CO_2. The Cultivation Manager will ensure that CO_2 levels are being documented with nutrient levels as a component of the formula. In addition to these responsibilities, the Cultivation Manager is responsible for ensuring that all cultivation agents are thoroughly trained on how to identify CO_2 poisoning, for both plants and humans, and how to respond appropriately to both of these situations. Emergency air evacuation and alarm systems will be installed in all rooms to detect and remove CO_2 and alert staff via audible and visual alarms in the event of an unsafe CO_2 concentration level.

Monitoring Equipment Requirements

Any environmental monitoring and control equipment installed in the cultivation facility will be approved by the Cultivation Manager, and at a minimum:

1. Use a type-3 chemical detector capable of detecting carbon monoxide, low oxygen, CO_2, and explosive environments;
2. Provide 24-hour monitoring, text alerts and audible alarms;
3. Contain a supplemental power source that provides twenty-four hours of operation in the event of a power failure; and
4. Record and store at least thirty days of recordings including:
    a. Light readings;
    b. Temperature;
    c. Humidity; and
    d. Carbon dioxide levels.

Cleaning compounds and sanitizing agents must be free from microorganisms of public health significance, approved by the EPA, and be safe and adequate under the conditions of use. Cleaning compounds, sanitizing agents, pesticides, pesticide chemicals, and other toxic materials, if any, will be identified, stored, and used in a manner that protects against contamination of product constituents or contact surfaces. All hazardous materials and cleaning and sanitizing agents will be stored in an area that is completely separate from any area used for the production or storage of product constituents and low-THC cannabis or derivative products, whether in process or finished. Hazardous materials, including but not limited to toxic chemicals and flammable materials, may not be used or handled in production

areas where product constituents or contact surfaces are manufactured or exposed, unless those materials are necessary as follows:

1. To maintain clean and sanitary conditions;
2. For use in laboratory testing procedures, if applicable;
3. For maintaining or operating the facility or equipment; or
4. For use in the production operations, if no non-hazardous materials are available that can achieve the intended effect.

When hazardous materials must be used or handled in production areas, they will be used and handled in accordance with instructions on the SDS for that product and while using the appropriate PPE, then returned to the hazardous materials storage area promptly after use.

Cleaning compounds and cultivation agents used in cleaning and sanitizing procedures will be free from undesirable microorganisms and will be safe and adequate under the conditions of use. Compliance with this requirement may be verified by any effective means including purchase of these substances under a supplier's guarantee or certification and examination of these substances upon acquisition and prior to use for contamination.

Toxic or otherwise hazardous cleaning compounds, sanitizing agents, and other chemicals, if any, will be identified, held, and stored in a manner that protects against contamination of marijuana derivative products, product constituents, production surfaces, and packaging materials. All relevant regulations promulgated by other Federal, State, and local governments for the application, use, or holding of these products will be followed.

All parts of the cultivation facility premises will be kept neat, clean and free of litter and rubbish. Cleaning operations will be conducted in such a manner as to minimize contamination. Vacuum cleaning, wet cleaning, steam cleaning and other dustless methods will be used for cleaning floors, walls and ceilings, but dust-arresting sweeping compounds and push brooms may be employed for floors. All such cleaning, except emergency floor cleaning, will be done during periods when the least amount of product is exposed, such as between any harvest or before plants are moved into a room.

GOOD LLC will utilize only green products for all facility cleaning, ensuring not to contaminate any marijuana plants or areas where marijuana plants will be handled. No products will be used in an active area with plants and will be compliance.

Good LLC will use items such as Food Grade H2O2 (Hydrogen Peroxide), Signet Glass and Multi Surface Cleaner, and Signet Neutral Floor Cleaner in areas. These products are safe for both handlers and consumers and will be used according to their Safety Data Sheets (SDS).

Describe the marijuana cultivation facility's irrigation and waste water systems to be used:

Pursuant to 3 AAC 306 Article 4, GOOD LLC will implement safe and environmentally practical irrigation and waste water systems in the cultivation facility. The irrigation practices to be used in the cultivation facility will serve to prevent the generation of irrigation runoff, containing excess nutrients that could potentially pollute water supplies if not managed properly. Irrigation runoff will drain from containers to cultivation flood tables, will evaporate and be taken up by the HVAC system. Air handler condensate water will be purified and reused. Any applied nutrient water that isn't evaporated will be recaptured from the flood tables, purified and stored for future crop applications. These practices will ensure that no excess nutrients or chemicals enter public water supplies or pollute natural resources.

GOOD LLC will primarily employ the H.E. Anderson Feeder Injector System, which is a fully-automated injector system for irrigating and fertilizing marijuana plants. The H.E. Anderson is a highly recommended system due to the efficiency and effectiveness of the system. A component of the H.E. Anderson Feeder Injector System, the Anderson Aqua controller, allows cultivation staff to program multiple EC and nutrient set points. This will ensure that crop applications are directly pulled from a mixing tank to vegetative and flowering rooms via hard supply lines in each room.

The Cultivation Manager, in coordination with the H.E. Anderson's system manufacturer, will program the injector system to deliver the appropriate volume and concentration of nutrients to each room, depending on the phase of growth of the plants within the designated room. The Cultivation Manager and all cultivation agents will operate the H.E. Anderson Feeder Injector System in accordance with manufacturer's instructions.

The H.E. Anderson Feeder Injector System will be connected to stock tanks containing GOOD LLC's proprietary nutrient solutions, which will be manually mixed in accordance with the Nutrient Mixing and Application Procedure developed by the Cultivation Manager and marijuana industry experts Denver Relief Consulting, and in compliance with the Nutrient Management Plan. Accurate measuring, mixing, and scheduling of nutrient solutions are critical for maintaining plant health and product quality. Nutrients must be stored and handled in accordance with the manufacturer's label instructions. Feeding schedules will be adjusted when plants in a given room reach a phase of growth that requires a different nutrient recipe according to the Nutrient Mixing and Application Procedure.

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If GOOD LLC's cultivation facility does generate liquid marijuana waste, GOOD LLC's liquid waste disposal methods will be in full compliance with local water laws and will not allow disposal of marijuana products or any plant material to enter the local wastewater collection system, storm drain system, or any unsecure rubbish disposal system. GOOD LLC will adhere to sewer discharge limitations and prohibitions and general water regulations contained in local and state laws and regulations. Though measures will be in place to prevent the generation of liquid marijuana waste, any liquid marijuana waste produced will be disposed of in the on-site septic system. Liquid waste containing nutrient residues, marijuana, or by-products of marijuana at the cultivation facility will be disposed of in compliance with the Alaska Environmental Protection Act and all local laws. The cultivation facility's plumbing system will be periodically inspected to assure that sewage and other liquid waste are

adequately transported from the facility via waste water lines that pose no threat of crossing with potable water lines.

The bathrooms and floor drains in the cultivation facility will be connected to an approved on-site septic system. All liquid waste potentially containing marijuana solids or residues, nutrients, chemicals, or any other potential pollutant will be disposed of in the on-site septic system, which will be pumped by a permitted septic disposal service as needed. GOOD LLC does not anticipate needing to have the tanks pumped because bacteria will break down the liquid waste before it is discharged to the drain field on-site. However, a permitted septic disposal service will be used if a clog or other issue arises that impacts the system's operation.

The cultivation facility's septic system will be periodically checked to assure that sewage, wastewater, and other liquid waste are adequately transported from the facility to the on-site septic system via waste water lines that pose no threat of crossing with potable water lines. Disposal of liquid chemical waste will be executed in full compliance with federal, state and local laws and regulations as well as in accordance with instructions on the product's label and any material safety data sheet (SDS), if applicable.

Describe the odor control method(s) to be used and how the marijuana cultivation facility will ensure that any marijuana at the facility does not emit an odor that is detectable by the public from outside the facility.

Pursuant to 3 AAC 306.430, GOOD LLC will ensure that the cultivation facility does not emit an odor that is detectable to the public from outside of the facility by implementing specific design consideration, equipment, environmental controls, and procedural standards. Proper odor control in any cultivation facility is paramount for facility security and the maintenance of good relationships with the surrounding community. GOOD LLC recognizes odor from any marijuana operation could become disruptive to the community if not properly managed. However, GOOD LLC does not anticipate having issues with marijuana odor in a manner that would create an environmental nuisance. GOOD LLC has selected odor control equipment and ventilation systems that will ensure that all marijuana inside the cultivation facility has little or no detectable odor from the exterior of the building. Two independent air-filtration technologies and one type of air purification device will be utilized to destroy air-borne pathogens and eliminate marijuana odor inside and outside of the cultivation facility.

GOOD LLC will establish minimum indoor air quality standards to enhance indoor air quality performance and contribute to the health and well-being of the occupants and neighbors. GOOD LLC will maintain superior air quality inside the cultivation facility for occupants by investing in air-scrubbing technology. GOOD LLC will incorporate active carbon and high-efficiency particulate air (HEPA) filtration in all areas of the cultivation facility and ozone generators in unoccupied areas of the cultivation facility. The incorporation of these technologies and methods will help limit the spread of contaminants to other areas inside the structure and will aid GOOD LLC in acting as good neighbors and maintaining clean and healthy internal and external environments.

HEPA filters provide a very high level of filtration efficiency for small and large particulate contaminants and are widely applied in air filtration and air purification applications to control airborne particulate levels. A filter must capture a minimum of 99.97% of contaminants at 0.3 microns in size in order to meet U.S. standards for HEPA classification. HEPA filters are even more efficient in removing particles that are smaller than 0.3 microns and larger than 0.3 microns.

All mechanical air-handling units in the cultivation facility will be outfitted with commercial HEPA filters. These filters will serve all spaces and will be used not just for odor control, but to assist in mitigating environmental contaminants by catching airborne particulates, infectious agents, and pests, if present. HEPA filters will be added on the return side of all air-handling units serving the cultivation facility. In addition, ultraviolet light emitters will be installed ahead of these HEPA filters in the return duct, which will aid in the destruction of additional microorganisms in the room air. Filters will be replaced in accordance with manufacturer's recommendations.

Carbon filtration is a type of filtration in which activated carbon (i.e., charcoal) is used to remove contaminants, impurities, and odors through the process of chemical adsorption. As odor-producing gases come in contact with the activated carbon in the filter, they are adsorbed, trapped and held in millions of microscopic carbon pores. Impurities and odors will be greatly reduced, as all exhaust air will pass through the active carbon filters prior to discharge from the building and into the atmosphere.

GOOD LLC will install active carbon filters at all air exhaust points from the cultivation facility, ensuring that marijuana odor particles in the air leaving the facility will be trapped. Active carbon filters were selected because of their improved ability over particulate filters, such as HEPA, to remove extremely small particulates (<.01 microns) like vapors and gases and because they are well-known to be useful for safely removing odors. Active carbon filters stop working as soon as all of the potential bonding sites are filled, so periodic replacement of the filters will be critical. A cultivation agent will be responsible for replacing the carbon filters as directed by the manufacturer.

Ozone generators produce ozone (O_3), which attaches to odors, mold, mildew, bacteria, microorganisms, and other pollutants in a space, if present, and oxidizes them. This process purifies the air and leaves the space odor and contaminant free. If all ozone molecules are not used in oxidation, they then convert back to normal oxygen (O_2) after about an hour. Ozone generators are effective at eliminating strong odors and contaminants such as mold spores in contained non-occupied spaces, but are not approved for use in occupied spaces due to potential health hazards in very high concentrations.

Though high concentrations of ozone will not be generated, commercial ozone generators will be installed and used only in non-occupied spaces in the cultivation facility in order to comply with federal regulations of ozone and promote agent safety. GOOD LLC plans to install commercial stationary ozone generator units in non-accessible and non-occupied open spaces above rooms. These generators are designed specifically for use in unoccupied spaces. Non-accessible open spaces will be built in above the ceilings in the cultivation production areas to accommodate ozone generators. Ozone generators will be set between 0.03 ppm and 0.10 ppm to ensure safe levels of ozone are maintained at all times, and will be maintained in accordance with manufacturer’s recommendations.

Describe the testing procedure and protocols the marijuana cultivation facility will follow:

Pursuant to 3 AAC 306.455 and 3 AAC 306.465, GOOD LLC will ensure it selects and utilizes an independent testing laboratory (laboratory) that has adopted a standard operating procedure to test marijuana that is approved by an accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement. The Cultivation Manager, in coordination with Compliance Committee, will select a laboratory registered with the state to perform statistically valid sampling methods to test, evaluate, and analyze marijuana batch samples to determine if pre-condition requirements established by the Alaska Marijuana Control Board and intended product specifications are met, prior to beginning operations at the licensed premises. Upon licensure, the Compliance Committee will review a list of those laboratories approved and registered by the state and develop a scoring rubric to compare each based on team qualifications, testing experience, pricing, services offered, sampling methods, testing limitations and proximity, and select the highest scorer. The selection process and updating the rubric will occur annually at a minimum.

GOOD LLC's Compliance Committee will ensure that 1) the laboratory will follow standard operating procedures ("SOPs") to confirm or refute original test results of product in the event a result falls out of specification, by retaining a sample of all batches for verification by a second laboratory, if needed. GOOD LLC will also require that laboratory SOPs are included as addenda to the services contract executed with the laboratory; 2) any laboratory contracted and utilized for marijuana sampling and testing services include in their services agreement, and be bound to a requirement, that a certificate of analysis will be issued and provided to GOOD LLC's Compliance Committee for each test accomplished.

Each certificate of analysis will be uploaded to GOOD LLC's automatic data processing/point-of-sale system in the corresponding batch record; 3) independent testing laboratories contracted and utilized for marijuana sampling and testing services include in their services agreement that all testing sample remains will be destroyed in accordance with State regulations. The laboratory will be required to provide a written description of the quantity of the sample used and disposed of in the analysis, as well as the timing and method of waste disposal; and 4) laboratories utilized for sampling and testing services include in their services agreement that a certificate of analysis will be issued to GOOD LLC's Compliance Committee for each test, to report batch conformance to THC, THCA, CBD, CBDA, CBG and CBN, and that terpene profiles are in accordance with and contaminants do not exceed the levels as required by the American Herbal Pharmacopoeia monograph.

GOOD LLC will establish a relationship with an Alaska Marijuana Control Board approved independent testing laboratory with marijuana testing protocols and methods. Immediately after drying and curing is complete, the Cultivation Manager will make each batch of marijuana available for sampling and testing by the Compliance Committee. The Cultivation Manager will direct the Compliance Committee to collect random, homogenous samples of each finished batch and facilitate their transportation to the selected laboratory where they will be analyzed in accordance with scientifically valid methods. Samples must be handled, transported, and stored in a manner that prevents contamination. All samples will be transported in a secured, locked container that fulfills the transportation storage requirements pursuant to the Alaska Marijuana Control Board regulations. A detailed chain of custody must be maintained at all times and a receipt must be provided for all samples taken. A shipping manifest will be completed and securely transmitted to the laboratory receiving the samples. Any motor vehicle transporting the

marijuana samples will travel directly from the cultivation facility to the laboratory and will not make any stops except to other laboratories, for refueling purposes, or in case of emergency.

GOOD LLC ensures that, upon review of the certificate of analysis from a laboratory and determination that a batch meets the intended specification for the variety, the Compliance Committee will assign the batch an expiration (best if used by) date, which will be established at six months from the date of packaging. The intent of the expiration date is to assure the marijuana products sold by GOOD LLC meet applicable standards and product specifications related to safety, identity, strength, quality, and purity at the time of use, as determined by appropriate stability testing. Currently there are no tested, established and verified expiration dates for marijuana flower products. Challenges to establishing these dates includes: complex product matrices; duration of studies make it difficult to get data quickly, especially in a young regulated industry; lack of accurate and scientifically valid methods (AOAC International or FDA) for many botanical/herbal products, especially marijuana; many botanical/herbal products have no testable marker compounds; no current regulatory guidance; manufacturing and mixing challenges that create variability; and varied and ever-evolving packaging materials for the marijuana industry. Because of this, GOOD LLC prefers to use a “best if used by date.”

The shelf life of a product specifies the period of time which a product can be stored, under specific conditions, and remain in optimum condition and suitable for consumption. Product stability refers to the extent to which a product retains, within specified limits, throughout its period of storage and use, the same properties and characteristics possessed at the time of packaging. GOOD LLC’s marijuana consultants, Denver Relief Consulting, have conducted in-house shelf life testing at their licensed facilities in Denver, CO, as well as with clients throughout North America, and found that maintaining marijuana under certain conditions can extend product stability to well over 12 months after harvest. These conditions include storing marijuana in packaging that is: opaque (absence of light), airtight and with a moisture barrier; held in a room at 64-66°F and with a relative humidity between 45-50%; flushed with nitrogen using a variety of reduced oxygen packaging methods. To ensure marijuana maintains its shelf life, GOOD LLC has adopted a practice of determining “best if used by date” at six months after time of harvest, which will ensure impeccable quality control in all finished product sold to customers. If GOOD LLC is unable to distribute marijuana prior to its “best if used by date,” that product will be distributed to a manufacturing facility for concentrate and infused product production.

All “best if used by dates” will be related to ideal storage conditions, which will be provided to customers to continue that process at home. Samples of all batches will be retained to support “best if used by dates” imposed by GOOD LLC. GOOD LLC understands much will be learned about marijuana stability in the coming years as the regulated industry continues to progress and will develop a written testing program designed to continually assess the stability characteristics of marijuana and use the results of the stability testing to determine appropriate storage conditions and “best if used by dates.” This program will consider guidelines established by International Conference on Harmonization and the United States Pharmacopeia. GOOD LLC will also engage in the execution of additional real-time or accelerated studies to verify shelf life if laboratories in the state are capable of offering these services. Testing will include consideration for stability indicating components to be tested, which are susceptible to change during storage and are likely to influence quality, safety and/or efficacy; scientifically valid quantitative analytical methods that can detect changes over time in the chemical, physical or microbiological properties of the product; other relevant analyses at all time points; physical properties such as appearance, dissolution, hardness, etc.; microbiology; and water activity. All data related to the

issuance of “best if used by dates” and stability and shelf life testing will be recorded in automatic data processing/point-of-sale system (ADP/POS) in the corresponding batch record.

GOOD LLC will ensure that, upon review of the certificate of analysis from a laboratory and determination that a batch meets the intended specification for the variety, the Inventory Manager will release the batch for distribution. Upon receipt of the certificate of analysis, the Compliance Committee will compare the results against the intended product specification. If the intended specification the batch is not met, it will be retested and maintained in quarantine. If the analysis confirms the batch meets specification, it will be released for distribution, which will occur by the Inventory Manager notifying the Cultivation Manager that the batch can be removed from quarantine; by uploading the certificate to the corresponding batch record in the ADP/POS; and by removing the batch hold in the ADP/POS. All certificates of analysis will be retained by GOOD LLC for a minimum of five years in the ADP/POS and at GOOD LLC’s secure offsite records storage location

GOOD LLC will ensure the retention, tracking, and proper storage conditions of a sample in secure product storage by the Compliance Committee from each released batch of marijuana for the purpose of providing it to a laboratory at six-month intervals in order to perform potency and purity stability testing. All samples will be stored in reduced oxygen packaging and flushed with nitrogen to match conditions of marijuana distributed by GOOD LLC.

GOOD LLC will ensure the retention, tracking, and proper storage conditions of a sample from each released batch to provide it to an independent testing laboratory at product “best if used by date” in order to provide support for that imposed “best if used by date.” All samples will be stored in reduced oxygen packaging and flushed with nitrogen to match conditions of marijuana distributed by GOOD LLC, to ensure product specifications are still met at “best if used by date.”

GOOD LLC will ensure the retention, tracking, and proper storage conditions of released batch samples sufficient in size to provide for follow-up testing if necessary, to verify and test one year beyond “best if used by dates,” and to retest failed batches. GOOD LLC’s Compliance Committee will coordinate with the laboratory to determine what quantity of marijuana is necessary to fulfill the testing obligations, and implement this amount as Good LLC policy for sample retention size.

GOOD LLC will ensure that all marijuana will be held in a highly secure, segregated and environmentally hyper-controlled product storage room within a restricted access area until released for distribution. All marijuana packages in the Secure Product Storage Room will be labeled and assigned a unique package identifier, which is tracked in the ADP/POS, and will remain there until the Inventory Manager releases it for distribution.

Any leftover sample material will be disposed of in accordance with the procedures and requirements set forth in all applicable laws and regulations. The Inventory Manager will record the sample receipt and disposal.

Describe the method(s) used to ensure that any marijuana at the marijuana cultivation facility cannot be observed by the public from outside the facility:

Pursuant to 3 AAC 306.430, GOOD LLC will utilize a combination of physical design features, technologies, and procedures to prevent any marijuana at the cultivation facility from being observed by the public from outside the facility, primarily through housing operations in a discreet, opaque and windowless existing concrete building. GOOD LLC will secure and monitor access to facility through the installation and use of a highly secured access control system. The access control system will be used to monitor and record the movement of personnel onto the site, into the building and throughout the facility, and selectively allow and prevent access to restricted areas. GOOD LLC will utilize a stand-alone surveillance system, including a combination of fixed, pan-tilt-zoom 180 degree and 360 degree cameras throughout the facility to provide continuous monitoring and surveillance.

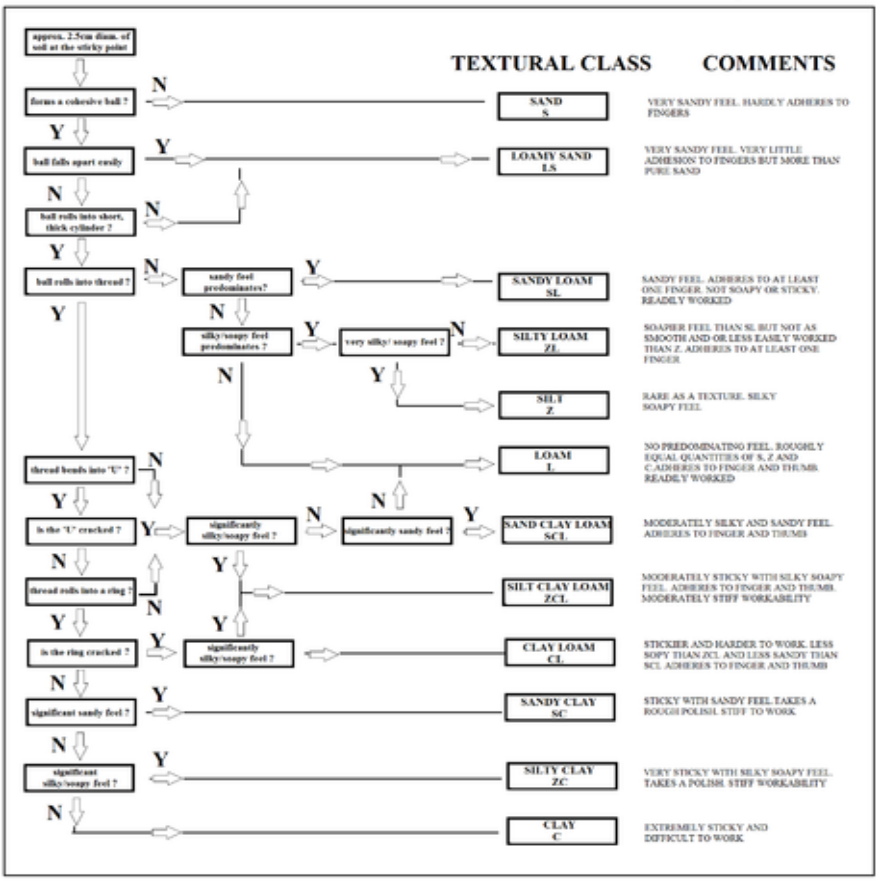
Entry through a private entrance door and a minimum of two additional locked doors is necessary to reach any room where marijuana is present. All doors will be 18-gauge hollow metal with commercial-grade I, commercial locks. Exterior doors and restricted access entries will be equipped with electric strike and electronic access hardware that automatically lock. Emergency door systems are connected to access control and alarms systems that will produce an audible alarm upon door opening. Inter-system connectivity will exist for alarm, access control and surveillance systems.

A high security fence will border the perimeter of the operational and loading areas with one access gate for all ingress and egress, with the gate controlled via key FOB. Additional features include adequate security lighting, barrier delay countermeasures, metal mesh guards over HVAC openings, and landscaping, which will be maintained to easily detect unauthorized activity and prevent concealment. GOOD LLC will require a recurring annual third-party security audit for the re-evaluation and analysis of all installed physical security.

References

Exhibit A

Hand Identification Chart for Soil Texture Analysis



Sticky point: moisture content at which dry soil being wetted just begins to adhere to fingers

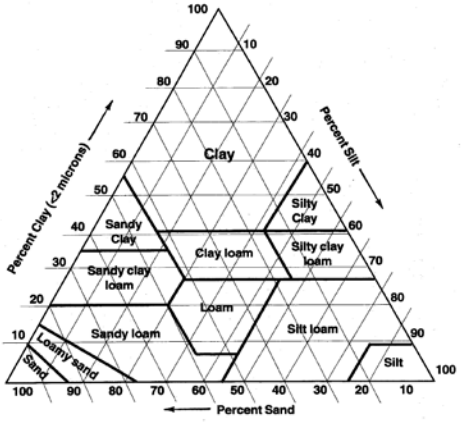
Workability: easy with which soil can be moulded between the fingers. Because consistence varies greatly with moisture, samples must be properly and uniformly wetted up

Cylinder: approx 5cm long and 1.5cm diameter

Thread: approx 13cm long and 0.6cm diameter

Ring: approx 2.5cm diameter formed from about 6cm of above thread.

Guide to field assessment of mineral soil texture by S. Nortcliff & J.R. Lang. From Rowell (1994)



CROP APPLICATION LOG

Use this log to track all crop applications.

HOUSE AND GARDEN OR ELEMENTAL APPLICATIONS								
Date	**Grow Day**	**Agent Initials**	**Plant, Batch, or Lot #**	**Crop Input Identifier (Recipe)**	**Supplemental Crop Input**	**pH/PPM**	**Nutrient Temp (°F)**	**Notes**