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

Form MJ-01: Marijuana Establishment Operating Plan

What is this form?

An operating plan is required for all marijuana establishment license applications. Applicants should review **Title 17.38** of **Alaska Statutes** and **Chapter 306** of the **Alaska Administrative Code.** This form will be used to document how an applicant intends to meet the requirements of those statutes and 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(c).

What must be covered in an operating plan?

Applicants must identify how the proposed premises will comply with applicable statutes and regulations regarding the following:

- Security
- Inventory tracking of all marijuana and marijuana product on the premises
- Employee qualification and training
- Waste disposal
- Transportation and delivery of marijuana and marijuana products
- Signage and advertising
- Control plan for persons under the age of 21

Applicants must also complete the corresponding operating plan supplemental forms (**Form MJ-03, Form MJ-04, Form MJ-05,** or **Form MJ-06)** to meet the additional operating plan requirements for each license type.

Section 1 – Establishment Information

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

Licensee:	Broken Dirt, LLC	**License Number:**	10284		
License Type:	Standard Marijuana Cultivation Facility				
Doing Business As:	Catalyst Cannabis Company				
Premises Address:	5001 Eagle St., Suite B				
City:	Anchorage	**State:**	ALASKA	**ZIP:**	99503

Mailing Address:	6967 Laser Dr.				
City:	Anchorage	**State:**	ALASKA	**ZIP:**	99504

Primary Contact:	Will Schneider		
Main Phone:	907-205-1181	**Cell Phone:**	
Email:	will@catalystcannabisco.com		

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Form MJ-01: Marijuana Establishment Operating Plan

Section 2 – Security

Review the requirements under 3 AAC 306.710 – 3 AAC 306.720 and 3 AAC 306.755, and identify how the proposed premises will meet the listed requirements.

Describe how the proposed premises will comply with each of the following:

Restricted Access Areas (3 AAC 306.710):

Describe how you will prevent unescorted members of the public from entering restricted access areas:

Catalyst Cannabis Co. will ensure its licensed premises will be selected, designed, constructed, and engineered to prevent unauthorized entry into restricted access areas by unescorted members of the public. Uncompromised safety and security for employees, customers, and visitors will be significant components to the long-term viability of our licensed premises. Our building's security landscape will include secure facility entry points utilizing commercial grade, non-residential door locks and deadbolts with internal vestibules and separate service/delivery areas with secure bay, full visual screening of the public and restricted access areas from the exterior of the facility, and a secure storage room. The secure storage room will be for all marijuana, marijuana product, and Catalyst Cannabis Co. company assets and have safes and/or vaults with at minimum a GSA Class 5, TL 15, or TL 30 rating. Additionally, the secure storage room will be a locked area that will prevent degradation, diversion, theft, and loss.

Catalyst Cannabis Co. will have a professionally installed security alarm and video surveillance system that allows for 24 hour continuous operational monitoring and video recording. All facility interiors and exteriors (excluding bathrooms) will be intelligently monitored and our system will allow us to identify any person and their activities in (1) any area where marijuana or marijuana product is cultivated, sold, or stored, (2) all point of sale areas, (3) any room used to pack or unpack a secured container used to transport marijuana or marijuana products, (4) Catalyst Cannabis Co.'s security rooms housing our alarm and surveillance systems, and (5) all entrances and exits to/from the facility from indoor and outdoor locations. Furthermore, our alarm and video surveillance systems will provide real time notifications of security events via text messaging and email to Catalyst Cannabis Co. management and authorized employees. The alarm system will incorporate door contact alarms, motion detection, and glass breaks to provide for perimeter and interior protection.

Describe your processes for admitting visitors into and escorting them through restricted access areas:

Catalyst Cannabis Co. will ensure to maintain a log of all visitors to restricted access areas of the licensed premises for a minimum of 1 year (current license period) on-site and 5 years at an off-site location. Visitors to restricted access areas will be documented according to Marijuana Control Board requirements and Catalyst Cannabis Co. organizational standard operating procedures. A logbook will be securely filed on-site detailing visitor specifications, including their name, date and time of entry into the restricted access area, and a photocopy of their government-issued identification. Access to any and all visitor data will be limited to authorized employees, senior leadership, agents of the Marijuana Control Board, or any other agent of any regulatory agency. Files will be protected by physical, lockable cabinets and digitally encrypted passwords where necessary for virtual files that will only be available on a need-to-know basis to premise personnel and upon immediate request by the Marijuana Control Board.

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Form MJ-01: Marijuana Establishment Operating Plan

Security Alarm Systems and Lock Standards (3 AAC 306.715):

Exterior lighting is required to facilitate surveillance. Describe how the exterior lighting will meet this requirement:

The Catalyst Cannabis Co. licensed premises will have adequate lighting to support and facilitate video surveillance. The exterior lighting landscape will provide dusk to dawn illumination to support exterior video surveillance camera fields, which will include entry and exit points and the employee parking area(s). Catalyst Cannabis Co. will trim back/down all trees, bushes, and other foliage to ensure thorough visibility and eliminate coverage blind spots. All security lighting fixtures will be able to ensure proper illumination levels in order to support viable image retrieval from the video surveillance footage. All Catalyst Cannabis Co. facility security and emergency light fixtures will be tested regularly by our employees and certified by either local regulatory agencies or accredited third party contractor to ensure proper functionality and overall compliance.

An alarm system is required for all license types. Describe the security alarm system for the proposed premises:

The alarm system must be activated on all exterior doors and windows when the licensed premises is closed for business. Describe how the security alarm system meets this requirement:

All Catalyst Cannabis Co. employees will be trained on organizational standard operating procedures regarding all security logistics to include alarm system administration (arming/disarming), alarm system device management (cameras, DVR, sensors), and troubleshooting techniques to ensure all security equipment is 100% operational at all times, including after business hours. Our alarm system and all associated sensors and detectors will be continuously monitored our local Anchorage security provider, Valkyrie Security and Asset protection. Additionally, Catalyst Cannabis Co. intends to use a monitoring service provided by Valkyrie for 24 hour 7 days a week security alarm monitoring. Our licensed premises alarm systems will communicate with our security provider by GSM radio to the monitoring station(s), all of which will be UL approved. IP reporting and grounded telephone lines will be utilized to their fullest capabilities to back up the GSM radio to ensure that communication to our monitoring station(s) will be real time while removing default delays during programming. Furthermore, Catalyst Cannabis Co.'s alarm system, access control devices, and video surveillance infrastructure will be supported with an auxiliary battery system that provides full operational viability during a total AC power loss incident for up to 48 hours.

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Alaska Marijuana Control Board

Form MJ-01: Marijuana Establishment Operating Plan

Describe your policies and procedures for preventing diversion of marijuana or marijuana product:

Describe your policies and procedures for preventing loitering:

Describe your policies and procedures regarding the use of any additional security device, such as a motion detector, pressure switch, and duress, panic, or hold-up alarm to enhance security of the proposed premises:

All Catalyst Cannabis Co. employees will be trained on our organizational standard operating procedures regarding security logistics and administration to include auxiliary security devices such as motion detectors, pressure switches, and duress/panic alarms. Spatial motion detectors, pressure sensors, and sound sensors will be strategically positioned throughout our licensed premises as allowable and where needed. Where appropriate and allowable on our licensed premises, we will install duress/panic buttons to enable Catalyst Cannabis Co. employees to immediately notify the security monitoring center and the Anchorage Police Department if necessary. The duress/panic alarms will be programmed to provide a local audible sounder and a notification to our alarm monitoring station that an emergency crisis situation is occurring. All duress/panic buttons will be strategically positioned based on ingress and egress points, shipping and receiving areas, and the cash exchange zones. Our highly integrative and intelligent security landscape will include smoke, heat, and carbon monoxide sensors that will always be active, regardless of the systems state of armed or disarmed. If a sensor activates the system, a local audible pulse is sounded and communication to the system monitoring station will identify the specific zone(s) impacted and type of alarm signaled. The Catalyst Cannabis Co. security infrastructure panels will be programmed to communicate an AC power loss condition as well. The licensed premises will have a 48-hour battery backup for all security landscape components..

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Form MJ-01: Marijuana Establishment Operating Plan

Section 8 – Control Plan for Persons Under the Age of 21

Describe how the marijuana establishment will prevent persons under the age of 21 from gaining access to any portion of the licensed premises and marijuana items:

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

Will Schneider

Printed name

Subscribed and sworn to before me this 11th day of October, 2016.

TANA G. KLUNDER NOTARY PUBLIC STATE OF ALASKA

Notary Public in and for the State of Alaska.

My commission expires: Mar. 10, 2019

Catalyst Cannabis Company Form MJ-015, Form MJ-01 Revisions

Restricted Access Areas (3 AAC 306.710):
Describe how you will prevent unescorted members of the public from entering restricted access areas:

Catalyst Cannabis Co. will ensure its licensed premises will be selected, designed, constructed, and engineered to prevent unauthorized entry into restricted access areas by unescorted members of the public. Uncompromised safety and security for employees, customers, and visitors will be significant components to the long-term viability of our licensed premises. Our building's security landscape will include secure facility entry points utilizing commercial grade, non-residential door locks and deadbolts with internal vestibules and separate service/delivery areas with secure bay, full visual screening of the public and restricted access areas from the exterior of the facility, and a secure storage room. The secure storage room will be for all marijuana, marijuana product, and Catalyst Cannabis Co. company assets and have safes and/or vaults with at minimum a GSA Class 5, TL 15, or TL 30 rating. Additionally, the secure storage room will be a locked area that will prevent degradation, diversion, theft, and loss.

Catalyst Cannabis Co. will have a professionally installed security alarm and video surveillance system that allows for 24 hour continuous operational monitoring and video recording. All facility interiors and exteriors (excluding bathrooms) will be intelligently monitored and our system will allow us to identify any person and their activities in (1) any area where marijuana or marijuana product is cultivated, sold, or stored, (2) all point of sale areas, (3) any room used to pack or unpack a secured container used to transport marijuana or marijuana products, (4) Catalyst Cannabis Co.'s security rooms housing our alarm and surveillance systems, and (5) all entrances and exits to/from the facility from indoor and outdoor locations. Furthermore, our alarm and video surveillance systems will provide real time notifications of security events via text messaging and email to Catalyst Cannabis Co. management and authorized employees. The alarm system will incorporate door contact alarms, motion detection, and glass breaks to provide for perimeter and interior protection.

Describe your recordkeeping of visitors who are escorted into restricted access areas:

Catalyst Cannabis Co. will ensure to maintain a log of all visitors to restricted access areas of the licensed premises for a minimum of 1 year (current license period) on-site and 5 years at an off-site location. Visitors to restricted access areas will be documented according to Marijuana Control Board requirements and Catalyst Cannabis Co. organizational standard operating procedures. A logbook will be securely filed on-site detailing visitor specifications, including their name, date and time of entry into the restricted access area, and a photocopy of their government-issued identification. Access to any and all visitor data will be limited to authorized employees, senior leadership, agents of the Marijuana Control Board, or any other agent of any regulatory agency. Files will be protected by physical, lockable cabinets and digitally encrypted passwords where necessary for virtual files that will only be available on a need-to-know basis to premise personnel and upon immediate request by the Marijuana Control Board.

Exterior lighting is required to facilitate surveillance. Describe how the exterior lighting will meet this requirement:

The Catalyst Cannabis Co. licensed premises will have adequate lighting to support and facilitate video surveillance. The exterior lighting landscape will provide dusk to dawn illumination to support exterior video surveillance camera fields, which will include entry and exit points and the employee parking area(s). Catalyst Cannabis Co. will trim back/down all trees, bushes, and other foliage to ensure thorough visibility and eliminate coverage blind spots. All security lighting fixtures will be able to ensure proper illumination levels in order to support viable image retrieval from the video surveillance footage. All Catalyst Cannabis Co. facility security and emergency light fixtures will be tested regularly by our employees and certified by either local regulatory agencies or accredited third party contractor to ensure proper functionality and overall compliance.

The alarm system must be activated on all exterior doors and windows when the licensed premises is closed for business.
Describe how the security alarm system meets this requirement:

All Catalyst Cannabis Co. employees will be trained on organizational standard operating procedures regarding all security logistics to include alarm system administration (arming/disarming), alarm system device management (cameras, DVR, sensors), and troubleshooting techniques to ensure all security equipment is 100% operational at all times, including after business hours. Our alarm system and all associated sensors and detectors will be continuously monitored our local Anchorage security provider, Valkyrie Security and Asset protection. Additionally, Catalyst Cannabis Co. intends to use a monitoring service provided by Valkyrie for 24 hour 7 days a week security alarm monitoring. Our licensed premises alarm systems will communicate with our security provider by GSM radio to the monitoring station(s), all of which will be UL approved. IP reporting and grounded telephone lines will be utilized to their fullest capabilities to back up the GSM radio to ensure that communication to our monitoring station(s) will be real time while removing default delays during programming. Furthermore, Catalyst Cannabis Co.'s alarm system, access control devices, and video surveillance infrastructure will be supported with an auxiliary battery system that provides full operational viability during a total AC power loss incident for up to 48 hours.

Describe your policies and procedures regarding the use of any additional security device, such as a motion detector, pressure
switch, and duress, panic, or hold-up alarm to enhance security of the proposed premises:

All Catalyst Cannabis Co. employees will be trained on our organizational standard operating procedures regarding security logistics and administration to include auxiliary security devices such as motion detectors, pressure switches, and duress/panic alarms. Spatial motion detectors, pressure sensors, and sound sensors will be strategically positioned throughout our licensed premises as allowable and where needed. Where appropriate and allowable on our licensed premises, we will install duress/panic buttons to enable Catalyst Cannabis Co. employees to immediately notify the security monitoring center and the Anchorage Police Department if necessary. The duress/panic alarms will be programmed to provide a local audible sounder and a notification to our alarm monitoring station that an emergency crisis situation is occurring. All duress/panic buttons will be strategically positioned based on ingress and egress points, shipping and receiving areas, and the cash exchange zones. Our highly integrative and intelligent security landscape will include smoke, heat, and carbon monoxide sensors that will always be active, regardless of the systems state of armed or disarmed. If a sensor activates the system, a local audible pulse is sounded and communication to the system monitoring station will identify the specific zone(s) impacted and type of alarm signaled. The Catalyst Cannabis Co. security infrastructure panels will be programmed to communicate an AC power loss condition as well. The licensed premises will have a 48-hour battery backup for all security landscape components..

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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:	Broken Dirt, LLC	**License Number:**	10284		
License Type:	Standard Marijuana Cultivation Facility				
Doing Business As:	Catalyst Cannabis Company				
Premises Address:	5001 Eagle St, suite B				
City:	Anchorage	**State:**	ALASKA	**ZIP:**	99503

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Operating Plan Supplemental
Form MJ-04: Marijuana Cultivation Facility

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:

The Catalyst Cannabis Co. cultivation facility will be located at 5001 Eagle Street, Suite B, in Anchorage, Alaska. The overall square footage of the leased warehouse space is approximately 4,500 square feet, with our intended space under cultivation approximately 1,875 square feet to begin, with the ability to expand to up to 2,280 square feet of cultivation space. Our cultivation space will be broken up into seven separate rooms available for cultivation, though it is likely that not all of them will be under cultivation initially: Flower Room A (107), Flower Room B (109), Flower Room C (110), Flower Room 205, Flower Room 206, a Vegetative Room (108) and a Clone Room (105). Flower Room A, 107 will be approximately 504 square feet (18 feet by 28 feet). Flower Room B, 109 will be approximately 504 square feet (18 feet by 28 feet). Vegetative Room, 108 will be approximately 405 square feet (15 feet by 27 feet) and have 18 High Pressure Sodium Double Ended light fixtures. Flower Room 205 will be approximately 208 square feet (13 feet by 16 feet). Flower Room 206 will be approximately 195 square feet (13 feet by 15 feet) . The Clone Room, 105 will be approximately 85 square feet (12 by 7 feet). The remaining 2,300 square feet that will not be under cultivation will contain a space to dry, cure, and trim/manicure marijuana, workspace to mix nutrients and reservoirs, finished marijuana storage area, administrative office space, a security room, and unisex bathrooms. The working environment and conditions in our cultivation facility will be modeled from traditional horticultural designs while incorporating contemporary healthcare aspects to promote thorough sanitization and cleanliness. All interior architecture and engineering will begin and end with the marijuana cultivator in mind, from the physical workflow logistics of commercial production gardening to storage and plant labor features that safeguard employees and encourage compliance. Cabinets and shelving will be utilized for all natural and synthetic nutrients, integrated pest management applications, and organic compost teas, all OSHA compliant and in accordance with fire codes. Additionally, the Catalyst Cannabis Co. cultivation facility will have multiple emergency eye wash stations, first aid kits complete with field guide, and portable fire extinguishers conspicuously located throughout the building.

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Operating Plan Supplemental
Form MJ-04: Marijuana Cultivation Facility

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

Catalyst Cannabis Co. will be utilizing several growing media including, coconut coir, sphagnum moss and/or other organic based soils. Catalyst Cannabis Co. will amend the media with perlite to improve the overall porosity. Perlite provides space for microorganisms to colonize and spread throughout the root zone, promoting vigor.

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

We will ensure to establish and implement organizational standard operating procedures to promote good cultivation and handling practices to include all aspects of the fertilizers, biological chemicals, gases, and delivery systems used in cultivating marijuana. Our employees will be expected to understand, articulate, and execute the basic concepts of marijuana cultivation to include chemical attributes, agricultural and horticulture skill sets, cannabinoid properties, and the legal and regulatory compliance practices of cultivating marijuana. Good Agricultural Practices will be taught in concert with our overall organizational protocols as GAP implementation in the cultivation facility will lead to proactive integrated pest management, which will have our employees rotating biological chemical applications for full effectiveness and will overall contribute to creating a garden culture of consistent application, quality control, and institutional compliance. Catalyst Cannabis Co. marijuana cultivation fertilizers and biological chemicals will be applied by hand or with agricultural instruments. Our employees will utilize a range of different products from different manufacturers as each nutrient solution compound will provide a varying form of macronutrients, micronutrients, and soil chelates. Our cultivation and production plan will include varieties that are flowered on different timelines based on plant flower stage duration (8, 9, and 10 week varietals). A combination of dry organic soil amendments and liquid fertilizers specifically formulated for marijuana production will be used as part of our fertilizer program.Other marijuana cultivation fertilizers and biological chemicals that we intend to have on the licensed premises include products thathave been approved for use on marijuana in Colorado, Washington, and Oregon. Catalyst Cannabis Co. will take an environmentally conscious approach to our cultivation practices, as the aforementioned fertilizers and biological chemicals are the cornerstones of our hybridized organic-synthetic feeding regime that incorporates the use of beneficial bacteria, NOP and OMRI certified organic molasses based carbohydrate products, and compost teas while never using plant growth regulator chemicals. All nutrient mixes will be quality assured and measured using pH and PPM measurement tools to allow for plants to uptake at maximum efficiency levels. The only gas that Catalyst Cannabis Co. intends on using in our cultivation facility is carbon dioxide CO2, as a plant growth enhancer. We will engage the services of Anchorage CO2 provider Air Liquide who will professional install, provide, and service our cultivation facility of all of our CO2 needs. Our CO2 supply will be stored in a secured 750 lb. tank located within our cultivation facility and then be piped using durable plastic tubing throughout the facility to the applicable rooms requiring CO2 for marijuana plant growth. Each cultivation facility room will have aCO2 regulating device installed in order to regulate and monitor CO2 levels at all times. Establishing best practices for the cultivation and handling of marijuana entails the entire plant life cycle spectrum, including all aspects of macro cultivation and agricultural practices for marijuana plants in the vegetative and flowering phases. All employees will be trained on the overall vegetative and flowering processes, prevalent cannabinoid compounds for particular varietals, flowering times and differences between diverse varietals, environmental considerations, watering frequency and timing, and integrated pest management practices.

The Catalyst Cannabis Co. employee training process will involve physical plant inspections during all growth phases. Plant inspection training will correlate with all anticipated cultivation facility programs involving fertilizers, biological chemicals, gases, delivery systems, and environments to include ideal airflow models, water and nutrient exchange processes, light intensity scaling, CO2 PPM presence, and overall temperature and humidity factors. Employees will be taught how to keep accurate records to learn from successes and failures; track factors that potentially caused changes in the final marijuana flower, and document the appearance and/or spread of disease and/or pests. Catalyst Cannabis Co. cultivation protocols will train employees to keep and maintain detailed logs on the overall daily cultivation environment to include irrigation frequencies, nutrients utilized, and the pH and PPM of effluent water runoff. Employee cultivation education will focus heavily on the watering, feeding, nutrient compounding, fertilization pH presence, and biological chemical science of healthy plant management. Marijuana responds positively to ample light water and CO2 and too much water, CO2, and nutrient feeding can be detrimental to the health of the plant and potentially lead to fungal diseases. Most nutrient product lines require a buffer in the form of acids that are either base or alkaline and different growth mediums require unique pH ranges for optimal growth. Furthermore, our employees will be trained on horticultural practices involving beneficial bacteria and fungus that metabolize minerals and salts into useable plant nutrients. A healthy root zone displays a wide variety of beneficial bacterial and fungal growth and this micro-herd has the ability to break down extracellular material into a useable plant metabolite while also acting as a natural pesticide. Employees will have a good understanding that marijuana is considered to be a heavy feeding plant, requiring more nutrients than most agricultural crops. To this end, Catalyst Cannabis Co. will be implementing a drain to waste system. By allowing excess effluent water to be discharged to waste keeps nutrients from precipitating chemical fixation in the plant root zone. When certain fertilizers, biological chemicals, and gases become fixated in the soil, the mobility of other nutrients and fertilizers are impacted, which could cause nutritional deficiencies that can lead to fungal and/or pest problems. All Catalyst Cannabis Co. cultivation facility employees will be trained on flushing techniques, the process of watering a plant with only H20 in order to "flush" any remaining undesirable chemicals or compounds used during the cultivation process. We will ensure that our employees flush plants for 14 days or at a minimum when the effluent from the plants has a PPM reading equal or less than the fresh water reservoir as proper flushing is imperative to cultivating clean, high quality marijuana.

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

Catalyst Cannabis Co. will be drawing its water for marijuana cultivation from the Anchorage municipal water utility source and system. To remove excess chlorides that may be present in the water, we will install a Hydro-Logic Tall Boy sediment filtration system. This filtration system will remove up to 90% of sediment larger than 5 microns. The removal of excess chlorides from the water will ensure a vibrant population of beneficial microorganisms in the plant's root system making for more efficient nutrient uptake and cleaner effluent runoff. We intend on implementing a drain to waste system that assists in flushing excess nutrients and to offset that impact Catalyst Cannabis Co. will collect effluent runoff for treatment and reuse where possible. Our filtered water will be held in intermediate bulk containers made of plastic composites that are white or opaque in color. Water will be transferred to either nutrient solution containers or into an industrial grade 44-gallon Brute waste receptacle with rolling casters for movement. Catalyst Cannabis Co. intends utilizing trays and tables that have been specifically designed for marijuana cultivation that directs all excess effluent water runoff to a dedicated waste drain for collection. With regard to fertilizers and biological chemical disposal, all unused nutrients and approved cultivation liquids will be diluted with the appropriate amount of water before being discharged into a water supply. All fertilizers and biological chemicals approved for use on marijuana and most 25 B exempt products will also be diluted with appropriate amounts of water before being discharged into a water supply. All Catalyst Cannabis Co. employees will be educated and trained to high levels of horticulture sciences comprehension and good cultivation processes that provide safe access to high quality marijuana. Our cultivation facility will be utilizing, in one capacity or another, drip irrigation and micro irrigation equipment, hydroponic modalities, nutrient film techniques, and aero fogging nutrient delivery systems, but focusing on the hand cultivation and watering for all of our plants.

We will keep onsite records of water quality testing and records will be available for inspection upon Marijuana Control Board or federal, state, or local regulatory agency request such as the Anchorage Water and Wastewater Utility agency.

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Operating Plan Supplemental
Form MJ-04: Marijuana Cultivation Facility

Describe the marijuana cultivation facility's waste disposal arrangements:

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:

Catalyst Cannabis Co. is committed to being an upstanding and responsible business neighbor and Anchorage community member. To that end, we take odor control seriously and have a comprehensive plan to ensure that any marijuana at our facility does not emit an odor that is detectable by the public from outside the facility. To accomplish this, we will utilize carbon filtered exhaust system in order to reduce outside odor. These units will run often, providing odor mitigation and clean air circulation for employee safety. In the trim and dry room, we plan to operate filters and fans as necessary, recirculating the air to reduce the smell and improve air quality. Our ventilation system has been thoughtfully designed, from scrubbing air with activated carbon filters that clean 99.5% of odor from the air, to our exhaust process, through UL listed ventilation fans. By utilizing carbon filters, industrial exhaust fans, a closed loop hydronic air conditioner, and cultivation best practices, the aim of Catalyst Cannabis Co. is to prevent internal smells from becoming external nuisances.

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Operating Plan Supplemental

Form MJ-04: Marijuana Cultivation Facility

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:

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

Will Schneider

Printed name

Subscribed and sworn to before me this 11th day of October, 2016.

TANA G. KLUNDER NOTARY PUBLIC STATE OF ALASKA

Notary Public in and for the State of Alaska.

My commission expires: Mar. 10, 2019

Catalyst Cannabis Company Form MJ-015, MJ-04 Revisions

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:

The Catalyst Cannabis Co. cultivation facility will be located at 5001 Eagle Street, Suite B, in Anchorage, Alaska. The overall square footage of the leased warehouse space is approximately 4,500 square feet, with our intended space under cultivation approximately 1,875 square feet to begin, with the ability to expand to up to 2,280 square feet of cultivation space. Our cultivation space will be broken up into seven separate rooms available for cultivation, though it is likely that not all of them will be under cultivation initially: Flower Room A (107), Flower Room B (109), Flower Room C (110), Flower Room 205, Flower Room 206, a Vegetative Room (108) and a Clone Room (105). Flower Room A, 107 will be approximately 504 square feet (18 feet by 28 feet). Flower Room B, 109 will be approximately 504 square feet (18 feet by 28 feet). Vegetative Room, 108 will be approximately 405 square feet (15 feet by 27 feet) and have 18 High Pressure Sodium Double Ended light fixtures. Flower Room 205 will be approximately 208 square feet (13 feet by 16 feet). Flower Room 206 will be approximately 195 square feet (13 feet by 15 feet) . The Clone Room, 105 will be approximately 85 square feet (12 by 7 feet). The remaining 2,300 square feet that will not be under cultivation will contain a space to dry, cure, and trim/manicure marijuana, workspace to mix nutrients and reservoirs, finished marijuana storage area, administrative office space, a security room, and unisex bathrooms. The working environment and conditions in our cultivation facility will be modeled from traditional horticultural designs while incorporating contemporary healthcare aspects to promote thorough sanitization and cleanliness. All interior architecture and engineering will begin and end with the marijuana cultivator in mind, from the physical workflow logistics of commercial production gardening to storage and plant labor features that safeguard employees and encourage compliance. Cabinets and shelving will be utilized for all natural and synthetic nutrients, integrated pest management applications, and organic compost teas, all OSHA compliant and in accordance with fire codes. Additionally, the Catalyst Cannabis Co. cultivation facility will have multiple emergency eye wash stations, first aid kits complete with field guide, and portable fire extinguishers conspicuously located throughout the building.

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

Catalyst Cannabis Co. will be utilizing several media including, coconut coir, sphagnum moss and/or organic based soils. Catalyst Cannabis Co. will amend the media with perlite to improve the overall porosity. Perlite provides space for microorganisms to colonize and spread throughout the root zone, promoting vigor.

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

We will ensure to establish and implement organizational standard operating procedures to promote good cultivation and handling practices to include all aspects of the fertilizers, biological chemicals, gases, and delivery systems used in cultivating marijuana. Our employees will be expected to understand, articulate, and execute the basic concepts of marijuana cultivation to include chemical attributes, agricultural and horticulture skill sets, cannabinoid properties, and the legal and regulatory compliance practices of cultivating marijuana. Good Agricultural Practices will be taught in concert with our overall organizational protocols as GAP implementation in the cultivation facility will lead to proactive integrated pest management, which will have our employees rotating biological chemical applications for full effectiveness and will overall contribute to creating a garden culture of consistent application, quality control, and institutional compliance. Catalyst Cannabis Co. marijuana cultivation fertilizers and biological chemicals will be applied by hand or with agricultural instruments. Our employees will utilize a range of different products from different manufacturers as each nutrient solution compound will provide a varying form of macronutrients, micronutrients, and soil chelates. Our cultivation and production plan will include varieties that are flowered on different timelines based on plant flower stage duration (8, 9, and 10 week varietals). A combination of dry organic soil amendments and liquid fertilizers specifically formulated for marijuana production will be used as part of our fertilizer program.Other marijuana cultivation fertilizers and biological chemicals that we intend to have on the licensed premises include products thathave been approved for use on marijuana in Colorado, Washington, and Oregon. Catalyst Cannabis Co. will take an environmentally conscious approach to our cultivation practices, as the aforementioned fertilizers and biological chemicals are the cornerstones of our hybridized organic-synthetic feeding regime that incorporates the use of beneficial bacteria, NOP and OMRI certified organic molasses based carbohydrate products, and compost teas while never using plant growth regulator chemicals. All nutrient mixes will be quality assured and measured using pH and PPM measurement tools to allow for plants to uptake at maximum efficiency levels. The only gas that Catalyst Cannabis Co. intends on using in our cultivation facility is carbon dioxide CO2, as a plant growth enhancer. We will engage the services of Anchorage CO2 provider Air Liquide who will professional install, provide, and service our cultivation facility of all of our CO2 needs. Our CO2 supply will be stored in a secured 750 lb. tank located within our cultivation facility and then be piped using durable plastic tubing throughout the facility to the applicable rooms requiring CO2 for marijuana plant growth. Each cultivation facility room will have aCO2 regulating device installed in order to regulate and monitor CO2 levels at all times. Establishing best practices for the cultivation and handling of marijuana entails the entire plant life cycle spectrum, including all aspects of macro cultivation and agricultural practices for marijuana plants in the vegetative and flowering phases. All employees will be trained on the overall vegetative and flowering processes, prevalent cannabinoid compounds for particular varietals, flowering times and differences between diverse varietals, environmental considerations, watering frequency and timing, and integrated pest management practices.

The Catalyst Cannabis Co. employee training process will involve physical plant inspections during all growth phases. Plant inspection training will correlate with all anticipated cultivation facility programs involving fertilizers, biological chemicals, gases, delivery systems, and environments to include ideal airflow models, water and nutrient exchange processes, light intensity scaling, CO2 PPM presence, and overall temperature and humidity factors. Employees will be taught how to keep accurate records to

learn from successes and failures; track factors that potentially caused changes in the final marijuana flower, and document the appearance and/or spread of disease and/or pests. Catalyst Cannabis Co. cultivation protocols will train employees to keep and maintain detailed logs on the overall daily cultivation environment to include irrigation frequencies, nutrients utilized, and the pH and PPM of effluent water runoff. Employee cultivation education will focus heavily on the watering, feeding, nutrient compounding, fertilization pH presence, and biological chemical science of healthy plant management. Marijuana responds positively to ample light water and CO2 and too much water, CO2, and nutrient feeding can be detrimental to the health of the plant and potentially lead to fungal diseases. Most nutrient product lines require a buffer in the form of acids that are either base or alkaline and different growth mediums require unique pH ranges for optimal growth. Furthermore, our employees will be trained on horticultural practices involving beneficial bacteria and fungus that metabolize minerals and salts into useable plant nutrients. A healthy root zone displays a wide variety of beneficial bacterial and fungal growth and this micro-herd has the ability to break down extracellular material into a useable plant metabolite while also acting as a natural pesticide. Employees will have a good understanding that marijuana is considered to be a heavy feeding plant, requiring more nutrients than most agricultural crops. To this end, Catalyst Cannabis Co. will be implementing a drain to waste system. By allowing excess effluent water to be discharged to waste keeps nutrients from precipitating chemical fixation in the plant root zone. When certain fertilizers, biological chemicals, and gases become fixated in the soil, the mobility of other nutrients and fertilizers are impacted, which could cause nutritional deficiencies that can lead to fungal and/or pest problems. All Catalyst Cannabis Co. cultivation facility employees will be trained on flushing techniques, the process of watering a plant with only H20 in order to “flush” any remaining undesirable chemicals or compounds used during the cultivation process. We will ensure that our employees flush plants for 14 days or at a minimum when the effluent from the plants has a PPM reading equal or less than the fresh water reservoir as proper flushing is imperative to cultivating clean, high quality marijuana.

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

Catalyst Cannabis Co. will be drawing its water for marijuana cultivation from the Anchorage municipal water utility source and system. To remove excess chlorides that may be present in the water, we will install a Hydro-Logic Tall Boy sediment filtration system. This filtration system will remove up to 90% of sediment larger than 5 microns. The removal of excess chlorides from the water will ensure a vibrant population of beneficial microorganisms in the plant's root system making for more efficient nutrient uptake and cleaner effluent runoff. We intend on implementing a drain to waste system that assists in flushing excess nutrients and to offset that impact Catalyst Cannabis Co. will collect effluent runoff for treatment and reuse where possible. Our filtered water will be held in intermediate bulk containers made of plastic composites that are white or opaque in color. Water will be transferred to either nutrient solution containers or into an industrial grade 44-gallon Brute waste receptacle with rolling casters for movement. Catalyst Cannabis Co. intends utilizing trays and tables that have been specifically designed for marijuana cultivation that directs all excess effluent water runoff to a dedicated waste drain for collection. With regard to fertilizers and biological chemical disposal, all unused nutrients and approved cultivation liquids will be diluted with the appropriate amount of water before being discharged into a water supply. All fertilizers and biological chemicals approved for use on marijuana and most 25 B exempt products will also be diluted with appropriate amounts of water before being discharged into a water supply. All Catalyst Cannabis Co. employees will be educated and trained to high levels of horticulture sciences comprehension and good cultivation processes that provide safe access to high quality marijuana. Our cultivation facility will be utilizing in one capacity or another drip irrigation and micro irrigation equipment, hydroponic modalities, nutrient film techniques, and aero fogging nutrient delivery systems, but focusing on the hand cultivation and watering for all of our plants.

We will keep onsite records of water quality testing and records will be available for inspection upon Marijuana Control Board or federal, state, or local regulatory agency request such as the Anchorage Water and Wastewater Utility agency.

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:

Catalyst Cannabis Co. is committed to being an upstanding and responsible business neighbor and Anchorage community member. To that end, we take odor control seriously and have a comprehensive plan to ensure that any marijuana at our facility does not emit an odor that is detectable by the public from outside the facility. To accomplish this, each flower room will a utilize carbon filtered exhaust system in order to reduce outside odor. . In the trim and dry room, we plan to operate the same Can filters and fans as the flower rooms recirculating the air to reduce the smell and improve air quality. Our ventilation system has been thoughtfully designed, from scrubbing air with activated carbon filters that clean 99.5% of odor from the air to our exhaust process through UL listed ventilation fans. By utilizing carbon filters, industrial exhaust fans, a closed loop hrydronic airconditioner, and cultivation best practices, the aim of Catalyst Cannabis Co. is to prevent internal smells from becoming external nuisances.