

**From:** [Calder, John P. \(CED\)](#)  
**To:** ["jeffndol@yahoo.com"](mailto:jeffndol@yahoo.com)  
**Cc:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Inspection requirements  
**Date:** Friday, May 27, 2016 11:37:10 AM

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Please send your questions directly to the [marijuana@alaska.gov](mailto:marijuana@alaska.gov) email box. This will ensure that your questions will be seen and will give us an accurate record of the number and types of questions we receive.

For this particular question I would urge you to carefully review the FAQ's on our website, as this question is addressed there. Thank you for your understanding.

<https://www.commerce.alaska.gov/web/amco/>

John Calder  
Administrative Officer  
Alcohol & Marijuana Control Office  
(907)-754-3427

**From:** dollynda fleck [mailto:[jeffndol@yahoo.com](mailto:jeffndol@yahoo.com)]  
**Sent:** Friday, May 27, 2016 11:26 AM  
**To:** Calder, John P (CED)  
**Subject:** Fw: Inspection requirements  
**Importance:** High

[Sent from Yahoo Mail on Android](#)

On Thu, May 26, 2016 at 3:29 PM, dollynda fleck  
<[jeffndol@yahoo.com](mailto:jeffndol@yahoo.com)> wrote:

Good afternoon,

When it comes time to do a facility Inspection, does the establishment need to have it's lights, wall fans, and other accessories installed, or just the requirements set forth in the regulations and operating plan, like security cameras, alarms, square footage of licensed premise, commercial locks etc?

I was curious because lights, fans, etc can and most likely Will change at any point, and there are no such requirements indicated in 3AAC 306.

I am assuming the components required in state regulations and our operating plan will be the focus of the inspection, but please shed some light on what that entails.

Thanks so much!  
Have a fantastic day,  
Dollynda Phelps

[Sent from Yahoo Mail on Android](#)

**From:** [Paul Disdier](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Question regarding definition of dance studio  
**Date:** Friday, May 27, 2016 10:44:41 AM

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Hi,

Does a private business licensed as a dance studio in an area zoned industrial fall under Definitions number 35 part ( B) in the regulations?

Thanks  
Paul Disdier

**From:** [dollynda fleck](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Fw: Inspection requirements  
**Date:** Friday, May 27, 2016 11:54:44 AM

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Please see email below. I did read the FAQ's on the state website but the answer found not answer my particular question. I'm interested knowing about accessories such as lights, fans, etc. I understand the facility must be complete as per regulations and operating plan requirements. Please read below.

Thanks!

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[Sent from Yahoo Mail on Android](#)



**From:** [dollynda fleck](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Inspection requirements  
**Date:** Friday, May 27, 2016 12:09:56 PM

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Okay, that raises another question. From the sound of it we will be permitted to take cuttings before inspection? I was under the impression no plants could be introduced until after the inspection, but perhaps this means we can introduce plants as soon as approved? Please clarify a little further, sorry to be a bother...

[Sent from Yahoo Mail on Android](#)

On Fri, May 27, 2016 at 12:04 PM, Marijuana, CED ABC (CED sponsored) <[marijuana@alaska.gov](mailto:marijuana@alaska.gov)> wrote:

The expectation is that you will be ready to go. If you don't have lights or fans installed to grow your plants, your cultivation facility wouldn't be ready. Our Investigators will want to see your tagged plants and verify them in Metrc. You need to be ready in order to get your license.

**From:** dollynda fleck [<mailto:jeffndol@yahoo.com>]  
**Sent:** Friday, May 27, 2016 11:55 AM  
**To:** Marijuana, CED ABC (CED sponsored)  
**Subject:** Fw: Inspection requirements

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**From:** [dollynda fleck](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Inspection requirements  
**Date:** Friday, May 27, 2016 1:17:10 PM

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Great! Thanks so much

[Sent from Yahoo Mail on Android](#)

On Fri, May 27, 2016 at 12:32 PM, Marijuana, CED ABC (CED sponsored) <[marijuana@alaska.gov](mailto:marijuana@alaska.gov)> wrote:

The office will try to provide clarification to all in the form of an update at the June 9<sup>th</sup> MCB meeting. Thank you for your patience in the matter.

**From:** dollynda fleck [<mailto:jeffndol@yahoo.com>]  
**Sent:** Friday, May 27, 2016 12:10 PM  
**To:** Marijuana, CED ABC (CED sponsored)  
**Subject:** RE: Inspection requirements

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[Sent from Yahoo Mail on Android](#)

**From:** [Jonathan Lange](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Recreation and Youth Center Definition  
**Date:** Friday, May 27, 2016 3:48:54 PM  
**Attachments:** [AAP\\_USE16-17.pdf](#)

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Hello,

I am a Planner with the Community Development Department of the City and Borough of Juneau. We have an application for a Marijuana Cultivation Facility, that is proposed to be located at 8415 Airport Boulevard. Close by at 8420 Airport Boulevard is the Juneau Dance Theater. I have read the definition of Recreation and Youth Center in the Marijuana Ordinance, 3AAC 306.990(35). I was wondering if I could get some guidance from you if this would fall under the definition of a Recreation and Youth Center? The Juneau Dance Theater, [juneaudance.org](http://juneaudance.org), provides lessons in dance, arts, and fencing.

Please let me know if you can help in any way, or if you need further information.

Thank you.

Jonathan Lange, CFM  
Planner II, Community Development Dept.  
City & Borough of Juneau, Alaska  
155 S. Seward St. Juneau, AK 99801  
Ph (907)586-0218  
[Jonathan.Lange@juneau.org](mailto:Jonathan.Lange@juneau.org)



# DEVELOPMENT PERMIT APPLICATION

Project Number	CITY and BOROUGH of JUNEAU	Date Received:
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION	Project Description <i>Standard marijuana cultivation facility</i>		
	PROPERTY LOCATION		
	Street Address <i>8415 Airport Blvd Space B</i>	City/Zip <i>Juneau, AK 99801</i>	
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) <i>Valley Centre BL M L415 #16 A</i> ✓		
	Assessor's Parcel Number(s) <i>5B1501020151</i> ✓		
	LANDOWNER/ LESSEE		
	Property Owner's Name <i>Mackinco</i>	Contact Person: <i>Neil</i>	Work Phone: <i>586.1254</i>
	Mailing Address <i>1114 Glacier Ave. Juneau 99801</i>	Home Phone:	Fax Number: <i>463.3433</i>
	E-mail Address <i>nmackinnon@acsalaska.net</i>	Other Contact Phone Number(s): <i>321.0931c</i>	
	LANDOWNER/ LESSEE CONSENT ****Required for Planning Permits, not needed on Building/ Engineering Permits****		
<p>I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:</p> <p>A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission.</p> <p>B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.</p>			
X	<i>[Signature]</i> Landowner/Lessee Signature	<i>4/15/16</i> Date	
X	 Landowner/Lessee Signature	 Date	
<p>NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.</p>			
APPLICANT If the same as OWNER, write "SAME" and sign and date at X below			
Applicant's Name <i>Paul V. Disdier</i>		Contact Person: <i>Paul</i>	
Mailing Address <i>8393 No. Douglas Juneau AK 99801</i>		Home Phone: <i>957.2670</i>	
E-mail Address <i>the fireweed factory@gmail.com</i>		Fax Number: <i>586.6790</i>	
Other Contact Phone Number(s): <i>586.6790</i>			
X	<i>[Signature]</i> Applicant's Signature	 Date of Application	

OFFICE USE ONLY BELOW THIS LINE						
STAFF APPROVALS	✓	Permit Type	***SIGN	Date Received	Application Number(s)	
		Building/Grading Permit				
		City/State Project Review and City Land Action				
		Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)				
		Mining Case (Small, Large, Rural, Extraction, Exploration)				
		Sign Approval (If more than one, fill in all applicable permit #'s)				
		Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)				
	✓	Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)		<i>5/9/16</i>	<i>USE20160017</i>	
		Variance Case (De Minimis and all other Variance case types)				
		Wetlands Permits				
		Zone Change Application				
		Other (Describe)				
	***Public Notice Sign Form filled out and in the file.					
	Comments:					Permit Intake Initials <i>ANE</i>



**ALLOWABLE/CONDITIONAL USE PERMIT APPLICATION**TO BE COMPLETED BY THE APPLICANT

**NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM**

CBJ Conditional Use Permit Application  
Narrative and Site Plan May 2016

*The Fireweed Factory LLC*



# Narrative

## Contents:

Business Structure and Operations

Site Development

Facility overview

Cultivation

Processing

Waste disposal

Safety and Security

Parking

Summary

Site Plan and Drawings

Copy of Lease

Photos

Attachments

## Business Structure and Operations

The Fireweed Factory is a LLC licensed in the State of Alaska. As a manager/owner company some members will oversee its operation. The State marijuana regulations spell out four types of facilities that can be established. The company plans to apply for the State of Alaska standard cultivation permit to grow, process and package cannabis for sale. It will operate under and comply with all the legal requirements of the State and CBJ. We plan to begin with 2 employees, full or part-time and add two more in the future. All marijuana handlers will be licensed per State regulation 3 ACC 306.425.

Use and occupancy will conform to the International Code Council's Chapter 3, Section 312.1 Utility and Misc. Group U - Agricultural Buildings category. Appendix C was added to the agricultural buildings section and CBJ adopted this added code under 19.03 (Serial No. 2009.16b). The scope of this appendix outlined provisions that apply exclusively to agricultural buildings. Such buildings in Group U include, but were not limited to, horticultural structures including detached production greenhouses and crop protection shelters.

The Fireweed Factory will be operated as a vertically integrated company that incorporates the "seed to sale" business model. Our company policies will reflect our values: to grow only premium cannabis that will be held to the highest safety standards, be sensitive to community concerns and to be protective of the environment.

## Site development

A standard cultivation marijuana establishment is allowed under the CBJ Land Use Code as amended by CBJ Ordinance #2015-39. Under CBJ Title 49.25.300, and by standard definition, the cultivation facility is designated as a Commercial Agricultural Operation.

The site is located in an industrial zoned area near the Juneau airport at 8415 Airport Blvd. Space B and is surrounded by other commercial and industrial businesses. Parking areas are located on two sides of the building with a thick strip of trees at the back edge (west). Total square feet of the site is 29,444.

The cultivation facility will be constructed in the back half of the warehouse on the site. The space now serves as storage for the current owner, Mackinco, and the separated front half of the warehouse is occupied by an electrical contractor. There is a fire separation wall between the two spaces.

Unlike greenhouses, no light will be emitted from the building. There are no windows in the warehouse walls and the only small windows are those up high in the garage door. They will be made secure and opaque.

## Hours of operation

As cannabis cultivation parallels other forms of indoor farming and gardening, the schedule for all work performed is 8 am to 6 pm, seven days a week throughout the year, or as needed.

## Facility overview

The existing building is an insulated structure of steel construction with metal siding and roof. TFF is planning to construct a series of non load bearing rooms inside the warehouse necessary for growing, processing and packaging operations. They will be independent of the warehouse structure itself and be self contained. The warehouse currently has only one entry and the door will be replaced with a industrial grade door and upgraded surveillance. Additional security will be added in the form of lighting and video monitoring.

The existing building has adequate three phase 440a power and will supply 120v and 240v power through conduit to multiple outlets throughout the building. All electrical work will be performed by a licenced electrical contractor.

An on site bathroom with a hand washing sink is available to employees. Because we will have only two to four employees, the accessible standards set by ADA Title 1 do not apply to the existing bathroom area. The ADA Advisory 203.9 section suggests that "Although areas used exclusively by employees for work are not required to be fully accessible, consider designing such areas to include non-required turning spaces . . . consider accessible elements whenever possible," and this is what we intend to do if we ever have a qualified individual apply for a job.

See attached building plans.

## Cultivation

### Propagation Section

The warehouse will be divided into specific work spaces and designed to make the complete operation safe, secure and efficient. The interior walls and ceilings will be covered with smooth finished drywall and painted with a coating that is capable of being frequently washed and sanitized.

The cultivation rooms must be kept scrupulously clean to avoid invasion of any contaminants like molds, mildew, fungus, etc. Pest contamination will be controlled by a variety of methods, including regular cleaning of growing equipment and keeping the proper environment at all times (i.e humidity, temperature and light). Personnel will put on clean Tyvek suits, shoe coverings and gloves to prevent bringing in any contaminants. Any pest contaminations will be eliminated with organic pesticides and fungicides only.

Equipment installed will include an air conditioning/heating system, CO2 canister systems, activated charcoal filter systems and fluorescent and LED grow lights. CO2 canisters will have manual shut-off valves on each tank, and will be controlled by an electronic monitoring system that will have an automatic safety shut-off feature. Canisters will be filled by a nearby welding shop.

Walls of the interior of the rooms will be insulated and noise from equipment will not be transferred to the exterior of the building.

The process of growing begins with the “mother plants.” Mother plants are large mature plants that are kept solely for the production of clones (small cuttings). A mother plant is used for long periods of time and is not harvested for sale. The clones are taken from the mother plants and put into aeroponic cloning machines where they sprout roots. After rooting, the clones are then transplanted into small pots containing coco coir (shredded coconut husks) where they will grow under fluorescent lights for the next two weeks. All plants will be fertilized with high quality organic nutrients.

Each 8” clone is given an official Marijuana Inventory Tracking System (MITS) number. When mature plants are harvested, they will be separated into batches of a single strain. Labeling and tracking of each batch is also entered into the State MITS per regulation 3 AAC 306.730.

## Flowering Section

After transplanting into larger pots, the plants will grow for a total of two months in the flowering rooms until they are harvested. These rooms must also be kept extremely clean to avoid any contaminants. Any pest contaminations will be handled with organic pesticides and fungicides only. Large trays are used under the plants.

Equipment includes: an air conditioning/heating system, CO2 canister system, fans and LED lighting fixtures. An activated charcoal filter system will remove any smell from the rooms. Light and CO2 is supplied in a cycle of 12 hours on and 12 hours off and will be controlled electronically. No light or noise will be emitted to the outside.

See attached for plans.

## Processing

### Drying, Trimming, and Packaging

A portion of this warehouse will be separated into an office, drying and trimming room and a packaging room. All personnel will wear clean Tyvek suits and gloves to prevent contamination of the marijuana during these processes.

After harvesting, matured plants will be hung to dry for seven to ten days in a climate controlled environment. Trimming of the flower buds and the topmost smaller leaves will be done by hand to ensure optimum quality. The byproduct of the trimming process (trim) will be sold to other businesses who will manufacture refined items such as extracts and edibles. The flower buds and trim will be put into in a light proof, air-tight container and securely stored at a cool temperature until it is packaged.

Before any cannabis is packaged, it must be tested by a licensed lab for cannabinoid potency and contaminants per 3 AAC 306.645. Only after it meets the testing requirements can it be packaged for sale. Packaging and labeling will be done in compliance with 3 AAC 306.470 and 3 AAC 306.475. Child-resistant plastic opaque bags will be used and heat sealed. Labels with our company name and logo as well as the required MITS and warning labels. Packages will be securely transported to other licensed businesses that manufacture refined items, or to our permitted retail store. Before distribution the State excise taxes must be paid.

Weighing of the marijuana at the different stages will be done on a certified scale.

No manufactured products such as concentrates, edibles or extracts from the plants will be made and we do not intend on applying for those State permits in the future.

## Odor control

Any smell of cannabis to the outside will be eliminated by the activated charcoal filter system. Every room that contains cannabis will each have its own charcoal filter system. Filters will be changed at least once a year.

## Waste disposal

Plant waste will be shredded inside the building and mixed with used growing medium. It will then be bagged and disposed at the Juneau landfill in accordance to regulation 3 AAC 306.730-740. Plant waste will be stored inside and removed frequently as needed.

No waste water will enter the CBJ sewer system. Our growing process will not create any fertilizer runoff. Water from the dehumidifiers will be recycled to water the plants.

## Safety and Security

The health and safety of our cannabis and those that produce it are a primary concern for our business. Employees will be trained in safe product handling and processing as well as security equipment and procedures. All sections of the remodeled warehouse will be restricted to those without a visitor pass, a handler's permit or official documentation. An identification badge will be worn by every licensee, employee or agent while on site.

Cannabis products will be stored in a fire resistant safe on site until delivered to another licensed premise. Deliveries will occur during normal business hours.

The building will have the most advanced security systems available, fulfilling regulations 3 AAC 306.715 and 3 AAC 306.720. Camera systems will be IP based and will capture and transmit images over an IP network. IP video allows the user to view and record footage remotely from a smartphone or tablet.

Cameras will record in HD 1080p and have the ability to record in the infrared spectrum to provide detailed images even in total darkness. The cameras will also record in Wide Dynamic Range (WDR), which creates a clearer more identifiable image and ensures optimal image detail, along with facial recognition software. Surveillance cameras will be outfitted with vandal-proof enclosures. These enclosures help to minimize physical

damage to the camera lens. For outside placement a weather-resistant enclosure will be used to prevent water damage. These cameras will be placed inside and out at all entrances to prevent robbery and catch detailed imagery in case an unauthorized person breaks into the buildings. Cameras will record 24 hours a day and have a battery backup system.

Video Management Software will be used in conjunction with a network video recorder to view, record and manage all cameras from a monitoring station or a remote device such as a smartphone or tablet. Downward facing motion detecting spotlights will be used at the entrance area. Industrial grade security doors and locks will be installed.

The alarm system will include multiple duress alarm access points, multiple panic alarm access points, digital dialer with cellular backup, and equipment failure notification alarm. Real-time monitoring of security systems will be provided by a professional security company. The main security monitoring equipment will be stored in the office.

## Parking

Parking spaces will meet CBJ 49.40.210(b)(1) code. There is a large paved parking lot at the north side of the building and a smaller graveled area at the west side that will be shared with the electrical contractor who rents the front portion of the warehouse. A handicap parking spot will be marked for TFF. The building entrance is at the back (west side) of the warehouse.

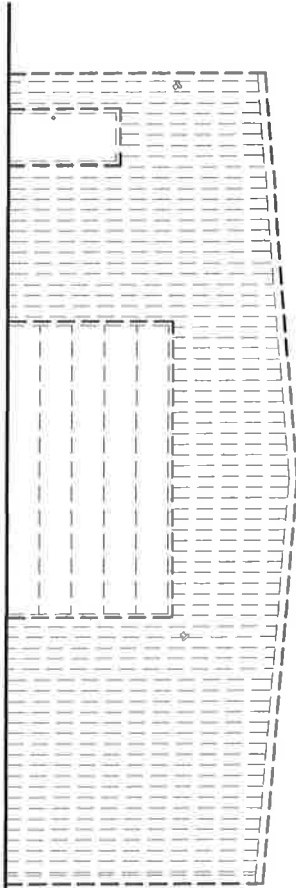
See site plan.

## Summary

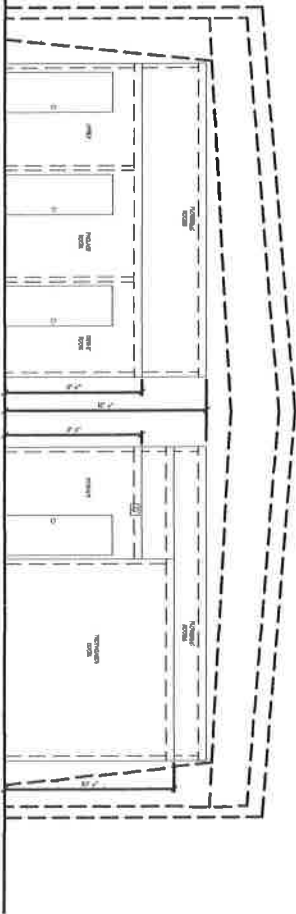
The primary goals of this standard cultivation operation will be to provide the highest quality safe cannabis, grown with environmentally friendly and all natural methods. It is our desire to integrate this new product into the local market in a socially responsible way. We plan to help educate our local community on the benefits of both medical and recreational cannabis and contribute to positive social change in our community.



SOUTH EXTERIOR ELEVATION



SOUTH INTERIOR ELEVATION



SOUTH EXTERIOR & INTERIOR ELEVATION



EMPORIUM LEASE

COMMERCIAL PROPERTY LEASE

THIS LEASE, made March 17, 2016 by and between MACKINCO, An Alaskan Partnership, 1114 Glacier Ave., Juneau, Alaska 99801, Lessor and The Fireweed Factory LLC, 8393 North Douglas Hwy, Juneau, AK 99801

WITNESSETH:

That the Lessor in consideration of the payment of the rent and the performance of all of the covenants herein contained by the Lessee does hereby demise and lease unto the Lessee the following-described property located in the Juneau Recording District:

A portion of the of the Building located at, 8415 Airport Blvd ( space B), Juneau, Alaska, containing approximately 2150 square feet for a term of three (3) years from June 1, 2016 for a term rent of [REDACTED]. The term rent is payable as follows:

[REDACTED] on the first day of the term and the same date each month thereafter throughout year one of the term.

In addition Lessee agrees to pay the sales tax in effect in the City and Borough of Juneau on each payment as it falls due.

**LEASE RENTAL INCREASE.** If the items listed below increase in the aggregate of ten per cent (10%) the Lessor may increase the rent once a year on the first of the year following the date of execution of this lease on a pro-rata basis of space rented to total space owned in the building by Lessor where the building wide increase in rent is equal to the total amount of the increase in said items:

Fire and other hazards insurance  
Real property taxes  
Increases in the consumer Cost-of-Living Index as released by the U.S. Government

**LIABILITIES FOR TAXES.** The responsibilities of the parties for taxes which may become due or owing as a result of this lease are as follows;

1. Taxes upon personal property owned by lessee or being acquired by Lessee, such as for furniture, equipment, and merchandise used or to be utilized by Lessee are to be paid for by Lessee.
2. License taxes, sales taxes, or other taxes attributable to Lessee's occupation of the demised premises are to be paid by the Lessee.
3. Real property taxes and assessments fro public improvements are to be paid for by the Lessor, subject to the paragraph entitled Lease Rental Increase.

**MAINTENANCE OF THE PREMISES.** The parties' responsibilities as the condition of the demised premises during the term of this lease are as follows:

1. The demised premises are accepted by Lessee in their present condition and state of repair.
2. Lessee is responsible for maintaining the interior of the demised premises in its present condition and at Lessee's own expense.
3. Lessor is responsible for maintaining the exterior and foundations of the demised premises in a good state of repair during the term of this lease.

## EMPORIUM LEASE

4. No remodeling or structural alterations of the demised premises may be undertaken without the Lessee first having obtained Lessor's written consent thereto, and all such undertakings shall be performed and completed in a workmanlike manner, with remodeling to include the authority to change and alter interior walls and to install necessary plumbing and wiring for Lessee's purposes. Lessee to bear the costs of any and all alterations. Lessee, subject to the express direction and control of Lessor, shall be responsible for restoring the demised premises to its original condition at the termination of the lease term. Lessor's written consent for remodeling shall not be unreasonably withheld.

5. In connection with any maintenance or repair of the furnace or heating systems, the obligation for the payment of same shall be that of the Lessee, on a pro-rata basis, as the normal wear and tear and that of Lessor as to permanent fixture replacement needs. Lessee's pro-rata share of the maintenance or repair of the furnace or heating systems shall be based upon the percentage of the entire area being heated for Lessee's benefit to the total of all leasable space.

6. Lessee is to make the demised premises available to Lessor or Lessor's agents at reasonable times in order to permit inspection concerning the condition and state of repair of the demised premises.

7. Lessor is not responsible for the repair or replacement and the maintaining of water pipes utilized in connection with Lessee's occupation of the demised premises and Lessee shall save Lessor harmless from any damages that may be sustained as a result of Lessee's neglect in allowing said water pipes to freeze.

8. Lessee is responsible for and shall erect and maintain only those signs which are suitable to Lessor, and in order to advertise Lessee's business operation on the demised premises, and Lessee shall obtain Lessor's approval of any such signs prior to ordering, purchasing or erection any such signs.

9. **UTILITY AND SERVICE CHARGES.** Those expenses which are incurred from day to day in connection with Lessee's occupation of the demised premises shall be apportioned as follows:

1. The obligation of payment and the expense of all utility and local government service charges including, but not limited to, electricity, telephone, and garbage removal, in connection with the demised premises, shall be that of the Lessee.

2. Lessee shall arrange, at Lessee's expense, for adequate garbage collection services so as to preclude any unsightliness as a result of garbage litter on the surrounding area.

**TERMINATION OF THE LEASE.** The conditions governing the termination of this lease and the Lessee's departure from the possession of the demised premises are as follows:

1. Time is declared to be of the essence as to the performance of all conditions and covenants created by the execution of this Lease Indenture with the consequence that any default hereunder gives Lessor the right to take possession of the demised premises and to occupy the demised premises to the exclusion of Lessee, with Lessor thus having the option to thereupon terminate the lease.

2. On termination of this lease, whether by breach or expiration of its term Lessee agrees that Lessee will vacate and depart the demised premises leaving them in as good a condition and state of repair as when possession was taken except as to ordinary wear and tear and damage or destruction by a fire which destroys 20% or more of the demised premises.

3. A default occurs hereunder if Lessee, within ten (10) days of receipt of written notice by Lessor of a failure by Lessee to comply with this agreement.

## EMPORIUM LEASE

4. In the event of destruction by fire or other cause, or in the event of damage sufficient to make the demised premises untenable for period in excess of ninety (90) days, then this lease may be terminated by Lessor or Lessee provided that in the event of an untenable period of less than ninety (90) days the Lessee is relieved of the obligation for the payment of the required monthly lease installments during said untenable period but the lease can only be canceled under such circumstances at the option of the Lessor.

5. In the event that the United States federal government withdraws or substantially alters the enforcement priorities outlined in the memorandum that United States Deputy Attorney General James Cole issued to all U.S. Attorneys on August 29, 2013 (commonly referred to as "the Cole Memo"), such that continued operation of a marijuana establishment in compliance with State of Alaska and/or City & Borough of Juneau laws and regulations would no longer likely shield from federal intervention, whether civil or criminal, then this lease may be terminated by Lessor or Lessee.

6. In the event that the State of Alaska and/or City & Borough of Juneau enacts, amends, or repeals laws or regulations, or conditions permits such that the Lessor or Lessee is no longer able to perform any act or operation intended under this lease, or rendering any service required under this Lease, then the performance of any such act or obligation affected by the change in law, or rendering of any such service affected by the change in law shall be excused for the period of the resulting delay and the period of the performance or rendering shall be extended for a period equivalent to the period of such delay. Should such delay extend six (6) months, then this lease may be terminated by Lessor or Lessee.

7. Within ten (10) days after termination and the Lessee vacating the demised premises, any carpeting or flooring, lighting fixtures, wall paneling, and other permanent fixtures or improvements which may have been installed by Lessee or at Lessee's direction become the property of Lessor without cost or expense to the Lessor except as may otherwise be expressly provided herein.

8. This lease may be terminated at any time by mutual consent of Lessee and Lessor.

**LIEN INDEMNIFICATION.** Lessee is responsible to Lessor for liability incurred as a result of Lessee's acts or neglect, and Lessee shall not allow the demised premises to become subject to any lien, charge, or encumbrances.

**QUIET ENJOYMENT AND LEASE RENEWAL.** During the term of this lease and as to any renewals of said lease:

1. Lessee is entitled to, and shall hold and enjoy, the demised premises without interference from Lessor so long as Lessee promptly pays the monthly lease installments herein required and performs the covenants and abides by the conditions herein contained.

2. All provisions hereof shall inure to the benefit of, extend to, and include, and be binding upon, the heirs, executors, administrators, successors, and assigns of the Lessee and the Lessor.

3. This lease is not renewable by the Lessee, except as may otherwise be expressly provided herein, and any occupation of the demised premises by the Lessee beyond the term of this lease shall only be upon the basis of a month to month tenancy subject to all of the terms and conditions herein contained and not otherwise in conflict.

**LIABILITY FOR FIRE LOSS.** The Lessor is not responsible to Lessee for any loss by Lessee of personal property maintained on the demised premises as a result of fire or related cause and Lessee shall, at Lessee's sole expense, maintain such insurance as Lessee may desire in order to protect against any such loss.

**DAMAGE RESPONSIBILITY.** Lessor shall not be liable for any damage occasioned by the negligence or fault of the Lessee, or for any damage resulting from the act or negligence of co-

## EMPORIUM LEASE

tenants or other occupants of the same building or any owners or occupants of adjacent or contiguous property.

**ABANDONMENT OR VACATION.** If lessee shall abandon or vacate said premises prior to the expiration date of this lease, the same may be relet, by the lessor, at the best rent obtainable and any deficiency in the amount of rent herein mentioned to be paid by the lessee and the rent herein mentioned to be paid by the Lessee and the rent received after such abandonment or vacation shall be paid by the Lessee to the Lessor.

**SAVE HARMLESS.** Lessee will save and indemnify the Lessor harmless from all judgments, liabilities, expenses, costs, and attorneys' fees arising out of any act, omission, or neglect in such respect of the Lessee, lessee's agents or employees, or of any person permitted by Lessee to be upon or about the demised premises, as well as from all judgments, liabilities, expenses, costs and attorney fees incurred or paid by the Lessor in defending against any action at law, suit in equity, or statutory proceedings brought by or at the instance, or in the name of any governmental body, or any public authority in which it shall be attempted to subject the Lessor or the demised premises, or any part thereof to any damages, costs, injunctions, restriction, or regulations, by reason of any claim that there shall have been any such act, omission or neglect of Lessee in any of the respects aforesaid. This save harmless obligation does not apply to loss by fire.

**LIABILITY INSURANCE.** Lessee agree at all times during the term hereof, at Lessee's own expense, to maintain, keep in effect, furnish, and deliver to the Lessor evidence of liability insurance in form and with an insurer satisfactory to the Lessor, insuring both the Lessor and the Lessee against all liability for damages to person or property in or about said demised premises: the amount of said liability insurance shall not be less than \$100,000.00 for injury to one person, \$300,000.00 for injuries arising out of any one accident, and not less than \$50,000.00 for property damage. All such insurance shall name Lessor as a co-insured by policy endorsement.

**OPTION TO RENEW.** Lessee shall be entitled to renew this lease for an additional term of three (3) years upon the same terms and conditions as set forth in this lease, save for the rental terms which, unless the parties otherwise agree, will be established as hereinafter set forth. This option may only be exercised by giving written notice of Lessee's intention to renew not sooner than one hundred eighty (180) days, nor less than ninety (90) days before the expiration of the original term of this lease, which notice must declare the rental rate at which Lessee is willing to renew the lease. Unless Lessor gives Lessee written notice of Lessor's rejection of the renewal rental proposal within thirty (30) days of the date of receipt of Lessee's notice, the renewal rental proposal of Lessee will be deemed accepted by Lessor. If Lessor rejects the renewal rental proposal, Lessee's renewal rights will automatically cease and terminate.

**BANKRUPTCY.** In the event that the lessee becomes voluntarily or involuntarily bankrupt, or if a receiver be appointed by any court for the business of the Lessee, then the term of this lease shall, at the election of the Lessor, immediately terminate.

**CONDEMNATION.** With reference to condemnation and any proceedings in regards thereto, the following shall apply:

1. In the event title to the entire demised premises shall be acquired by anyone by exercise of right of eminent domain, this lease shall cease and terminate upon the vesting of title and Lessee shall make all payments required to be made by Lessee hereunder pro-rata to the date of such vesting of title, but Lessee shall be entitled to a pro-rata refund of any rent paid in advance. Lessee shall be indemnified for the depreciated value of any improvements Lessee has made which have increased the value of the demised premises as reflected in the purchase price under eminent domain proceedings.

2. In the event title to less than the whole of the leased premises but more than twenty (20%) percent of any ground floor area of the building thereon, or more than twenty (20%) percent of the entire demised premises shall be so acquired by eminent domain, or, as a result of exercise of such right of eminent domain, the part of the demised premises remaining shall not be one undivided whole, then Lessor shall immediately give to Lessee written notice of such acquisition and Lessee

EMPORIUM LEASE

shall have the option to terminate this lease effective on a date to be specified in a written notice to be given by Lessee to Lessor, provided, however, that the date so specified in such notice shall be a date not more than sixty (60) days after the receipt by Lessee from Lessor of notice of such acquisition, and in such event Lessee shall make all payments required to be made by Lessee hereunder pro-rata to the date of such termination, but Lessee shall be entitled to a pro-rata refund of any rent paid in advance.

3. In the event Lessee does not exercise Lessee's right of termination, then this lease and all of the covenants, agreements, terms and conditions hereof shall continue in full force and effect as to the portion of the demised premises not taken by exercise of the right of eminent domain. If a portion of the demised premises shall have been so taken by exercise of the right of eminent domain without termination of this lease, as aforesaid, Lessor shall repair and rebuild the portion of the demised premises not so taken in such manner as to render such remaining portion commercially usable for the purpose of Lessee, and lessor shall restore such portion to a unit of substantially like quality and character as existed before such taking. Commencing with the date said portion of the demised premises so taken, the monthly rental shall be reduced in the proportion that the total square footage of the demised premises so taken shall bear to the total square footage the demised premises prior to such taking.

4. Any condemnation award with respect to the demised premises shall be the sole and exclusive property of the Lessor.

**PERSONAL PROPERTY.** All equipment unique to Lessee's business, and located on the demised premises by Lessee are the property of Lessee and shall be removed by Lessee or at Lessee's expense at the termination of this lease.

**WINDOW GLASS.** Lessee shall repair and replace, with like quality, all window or door glass on the demised premises which may become broken or cracked during the lease term or any renewals thereof and shall do so at Lessee's sole expense.

**INSURANCE RECOVERY WAIVER.** Lessor and Lessee, and all parties claiming under them, hereby mutually release and discharge each other from all claims and liabilities arising from or caused by any hazard covered by insurance on the demised premises, or covered by insurance in connection with property on or activities conducted on the demised premises, regardless of the cause of the damage or loss and to the extent of any recovery collectible under such insurance. Lessor and lessee agree to notify fire and extended coverage insurance companies of these conditions and have insurance policies appropriately endorsed in order to preclude insurance coverage invalidity.

IN WITNESS WHEREOF, the Lessor and Lessee have hereunto set their hands and seals effective as of the date next written and in the following manner.

LESSOR, MACKINCO

by  date 3/29/16

LESSEE:

by  date 3/29/16

STATE OF ALASKA

)  
) ss

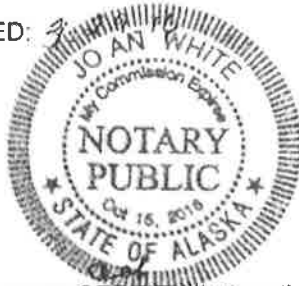
EMPORIUM LEASE

FIRST JUDICIAL DISTRICT )

THIS IS TO <sup>ack</sup>CERTIFY that on the date next below written, and before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, there appeared personally E. Neil Mookkuma, and who has or have executed the above and foregoing instrument, and said person acknowledged to me that he, she or they had signed and sealed the same freely and voluntarily for the uses and purpose therein mentioned.

WITNESS my hand and official seal the date next below written.

DATED: 3-18-16



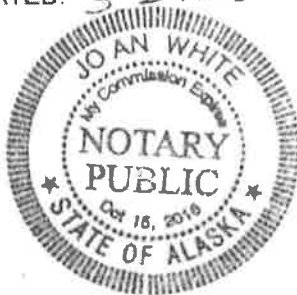
Joan White  
Notary Public for Alaska

My Commission Expires: 10-15-2016

THIS IS TO CERTIFY that on the date next below written, and before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, there appeared personally Gaut V. Bissell, and who has or have executed the above and foregoing instrument, and said person acknowledged to me that he, she or they had signed and sealed the same freely and voluntarily for the uses and purpose therein mentioned.

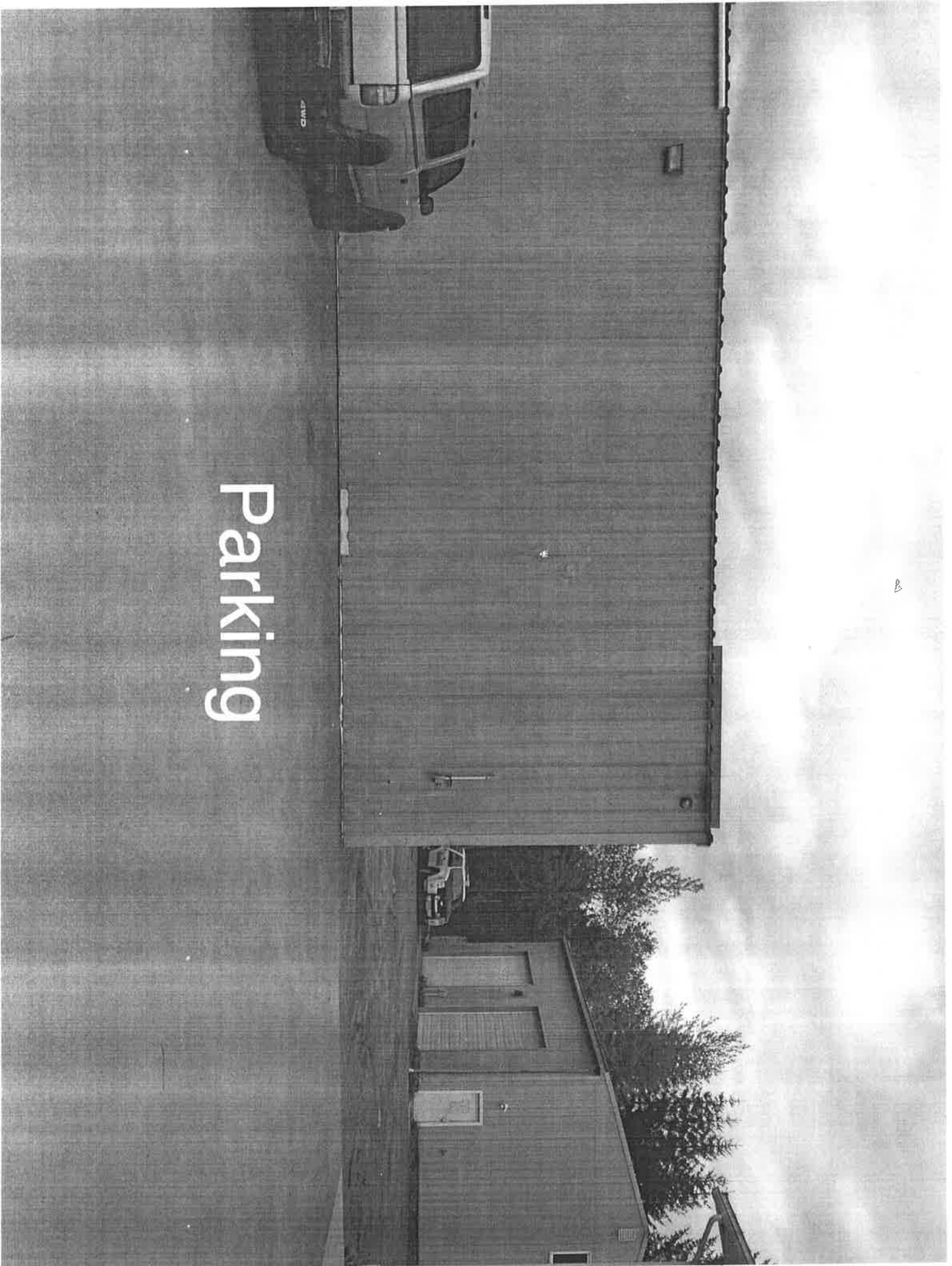
WITNESS my hand and official seal the date next below written.

DATED: 3-29-16



Joan White  
Notary Public for Alaska

My Commission Expires: 10-15-2016



Parking



# Front of Building



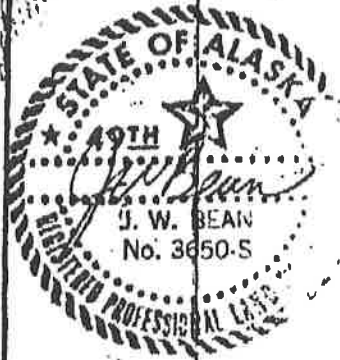


Entrance to  
Cultivation Area



AIRPORT BOULEVARD

N 89° 39' E - 160.00'



Lot 13

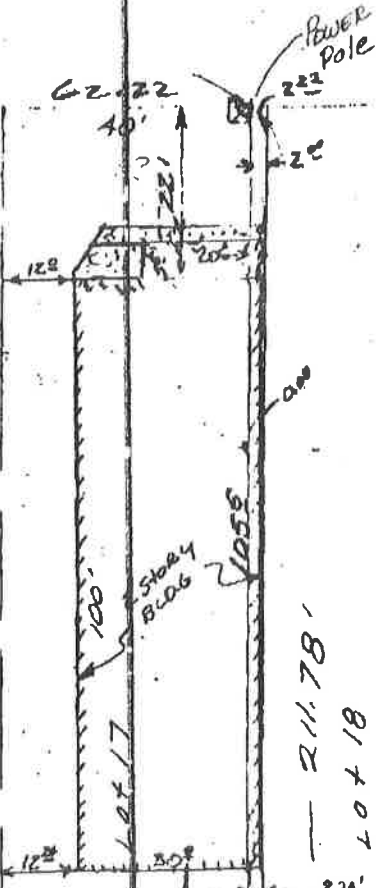
N 0° 21' W - 209.97'

Lot 14

Lot 15

N 0° 21' W - 211.11'

Lot 16



BL 189 P 103

222

934.17 REM  
Highway  
Bearing  
Monument

BL 111  
M.C. 0.5-114  
M.C. 2.5-115

Re-Bar  
wrap  
(Typical)

40

40.01

20' 20'

40

222

N 89° 12' W - 160.81'

BASIS OF BEARING

I hereby certify that this is a true and correct plat;  
that all walks, roads, easements and improvements thereon  
are as shown and that all overlaps and encroachments are as  
shown to the best of my knowledge.

SEA	SCALE 1"=30'	J.W. BEAN	AS-Built Survey of: Lots 17, 16, 18, Block 11 Valley Center Sub. within U.S.S. 1195
DATE 4-10-96	SHEET 1 OF 1		
12-31	23		

U



**From:** [Amanda](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Personal Use Regulations  
**Date:** Tuesday, May 31, 2016 7:26:10 PM

---

Evening, I have a question with regards to the personal use and growing of marijuana. I can't find anywhere if 1. The location the marijuana is grown has to be occupied. And 2. If there's any restriction on the criminal history of the person growing/using marijuana. Also is there somewhere I can get a copy of the regulations for personal use? All I've been able to find online are the licensing regulations.

I appreciate your time!

Amanda

Sent from my iPhone

**From:** [Amanda](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Personal Use Regulations  
**Date:** Tuesday, May 31, 2016 7:26:10 PM

---

Evening, I have a question with regards to the personal use and growing of marijuana. I can't find anywhere if 1. The location the marijuana is grown has to be occupied. And 2. If there's any restriction on the criminal history of the person growing/using marijuana. Also is there somewhere I can get a copy of the regulations for personal use? All I've been able to find online are the licensing regulations.

I appreciate your time!

Amanda

Sent from my iPhone

**From:** [Jonathan Lange](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Cc:** [Calder, John P \(CED\)](#)  
**Subject:** RE: Recreation and Youth Center Definition  
**Date:** Wednesday, June 01, 2016 12:37:18 PM

---

Cynthia,  
Thank you for your response and the information.  
Have a good rest of your day.

Jonathan Lange, CFM  
Planner II, Community Development Dept.  
City & Borough of Juneau, Alaska  
155 S. Seward St. Juneau, AK 99801  
Ph (907)586-0218  
[Jonathan.Lange@juneau.org](mailto:Jonathan.Lange@juneau.org)



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**From:** Marijuana, CED ABC (CED sponsored) [mailto:marijuana@alaska.gov]  
**Sent:** Wednesday, June 01, 2016 11:38 AM  
**To:** Jonathan Lange  
**Cc:** Calder, John P (CED)  
**Subject:** RE: Recreation and Youth Center Definition

Hi Jonathan,

This is a question that has come up before. As the board's staff, we do not know how the board will interpret this definition. If the local government (CBJ in this case) determines that this is a Recreation or Youth Center by your reading of the definition, and protests the issuance of the license based on that interpretation, the board will be governed by 3 AAC 306.060 in that it must deny the issuance of the license unless it finds CBJ's protest to be arbitrary, capricious or unreasonable. The main takeaway for CBJ would be for you to apply your interpretation of the definition consistently.

Also, I want to make you aware of our special email for local government questions. Using this email will enable us to prioritize your questions and try and get answers to you more quickly. It is [amco.localgovernmentonly@alaska.gov](mailto:amco.localgovernmentonly@alaska.gov).

Cynthia Franklin, Director  
Alcohol & Marijuana Control Office  
907-269-0351

---

**From:** Jonathan Lange [mailto:[Jonathan.Lange@juneau.org](mailto:Jonathan.Lange@juneau.org)]  
**Sent:** Friday, May 27, 2016 3:49 PM

**To:** Marijuana, CED ABC (CED sponsored)  
**Subject:** Recreation and Youth Center Definition

Hello,

I am a Planner with the Community Development Department of the City and Borough of Juneau. We have an application for a Marijuana Cultivation Facility, that is proposed to be located at 8415 Airport Boulevard. Close by at 8420 Airport Boulevard is the Juneau Dance Theater. I have read the definition of Recreation and Youth Center in the Marijuana Ordinance, 3AAC 306.990(35). I was wondering if I could get some guidance from you if this would fall under the definition of a Recreation and Youth Center? The Juneau Dance Theater, [juneaudance.org](http://juneaudance.org), provides lessons in dance, arts, and fencing.

Please let me know if you can help in any way, or if you need further information.

Thank you.

Jonathan Lange, CFM  
Planner II, Community Development Dept.  
City & Borough of Juneau, Alaska  
155 S. Seward St. Juneau, AK 99801  
Ph (907)586-0218  
[Jonathan.Lange@juneau.org](mailto:Jonathan.Lange@juneau.org)



**From:** [Florence](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Handlers  
**Date:** Wednesday, June 01, 2016 1:15:17 PM

---

Do you have to be an Alaskan resident to get a Handlers Permit. We did not get a PFD last year!

Thank you.

Florence Moore

fdmoore38@gmail.com



**From:** [Florence](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Re: Handlers  
**Date:** Wednesday, June 01, 2016 2:04:08 PM

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Thank You, Thank You!:-)

**From:** [duane](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** possible solution for transporting samples for laboratory testing thru the usps  
**Date:** Thursday, June 02, 2016 10:41:58 AM

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Hello

After talking with Steve Johnson ( the investigator in Juneau ) he directed me to send this idea to another department of AMCO.

I live in Wrangell AK.

The problem is how to transport from a Island or other remote location to a testing facility.

The local Post Master has already stated any letter or package that her office receives that is suspect of having any marijuana will be seized and sent to enforcement. so no testing will be made.

Law enforcement can and do mail drugs for testing.

If the governor directs the state troopers, one possible method, the samples would be packaged and logged with the software then taken to the nearest state troopers office, a FEE PAID and the troopers would put their own shipping label and mail it to the testing facility.

YES I think this is a very abstract thought, and I very much wish a reliable shipping or testing method is put together soon.

Duane King  
P.O. Box 1043  
Wrangell AK. 99929

907-660-7550

Email: [duanemking2@yahoo.com](mailto:duanemking2@yahoo.com)

**From:** [Mid](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** shared fees question  
**Date:** Monday, June 06, 2016 11:40:58 AM

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Good Morning,

per **3 AAC 306.100. Fees; refund.**

Are fees being collected by the state for licenses, refundable, non-refundable, and the annual licensing fee, being shared with local government entities?

If so, how? Is it just a 50/50 split?

and specifically in Fairbanks...will city government and borough government split the fees, and how?

thank you in advance,  
Mid

**From:** [Larry Clark](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Transportation And Metrc  
**Date:** Tuesday, June 07, 2016 6:56:49 PM

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To: Cynthia Franklin, AMCO Staff and all members of the MCB;

I had a few questions regarding transport services with ancillary companies such as ours. Metrc is used to enter the shipments from one licensed cannabis entity to another and a manifest is created for tracking. In Metrc the new transfer screen has certain fields that must be filled in to create the manifest, such as OCC LIC. No., Drivers name and License number, to name a few.

My question is this; Is it possible for an ancillary company to be listed as the Driver? When a transport from the Fairbanks market to Anchorage market is being planned it is not unusual to have a switch in drivers occur. With many other transportation companies this is common occurrence to alleviate driver fatigue and for safety reasons.

We as an ancillary company to the new cannabis industry are a licensed armored car and security firm planning on providing these transports from one licensed cannabis business to another licensed cannabis business, to provide the safest transport possible we would like to be able to be listed in Metrc as such so that an individual driver isn't listed but a company entity is. We would have driver and transport officer information for each transport on file with our office and readily available to AMCO staff when requested. The vehicle portion of Metrc would not need to be changed for these switches. We would only be changing drivers and officers from one transport to another and not products. The original transport vehicle would remain the same and only staff would change.

This also brings up other questions regarding breakdowns and route changes in transit. If a transport breaks down and a second vehicle is required how much time will be available from the listed ETA in Metrc to make the vehicle change? Will we be able to contact AMCO to advise of the change or will the original Shipper have to notify AMCO of the change and how much time will be available to make that change notification? Also, is there a plan in place in the event that a route needs to be changed in transit? Due to road conditions, weather related incidents or traffic and accidents.

I appreciate any input and guidance you may have on these questions. We want to provide a safe and secure transportation alternative to this industry and the general public.

Sincerely,  
Larry Clark  
President/CEO  
Valkyrie Security and Asset Protection Inc.  
1150 S. Colony Way, Ste#3  
PMB #307  
Palmer, AK 99645  
907-841-2255

MVCBA-Board Member

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**From:** [Shandara Swatling](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Huslia Tribal Office ltr.  
**Date:** Wednesday, June 08, 2016 9:19:00 AM  
**Attachments:** [Huslia Tribal Office ltr..pdf](#)

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This letter is from the Huslia Tribal Council. Please see attached document.

Shandara Swatling  
Tribal Administrator

Huslia Tribal Council  
P.O. Box 70  
Huslia, Alaska 99746  
Phone: 907-829-2294  
[shandara.swatling@tananachiefs.org](mailto:shandara.swatling@tananachiefs.org)

Detlekts'e neetyet kk'onhoodeneeyh: We are all working together

# Huslia Tribal Office

P.O. Box 70

Huslia, Alaska 99746

Ph. 907-829-2294

Fax 907-829-2214



June 7, 2016

To the Alaska Marijuana Control Board:

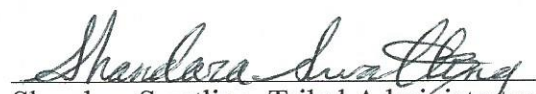
This letter is in support of the Alaska Marijuana Control Board amending the state regulations on marijuana licenses to allow Alaska Native Corporations (ANCSA corporations or ANC's) and Alaska Native tribes the ability to participate in the licensed recreational marijuana industry, through either loan programs or equity interest in a licensed business.

As the federally recognized tribe for the village of Huslia we continuously deal with the increasing weight of responsibility that comes with creating community sustainability and self-sufficiency. We understand that the majority of funding that comes into our local economy originates from government, either state or federal. This model of government dependence is quickly becoming unsustainable as both federal and state governments plan significant cutbacks in the years and decades ahead.

At present we are not considering participating in any potential licenses, but we feel the OPTION to participate is very necessary. This decision should be a board, council and community decision - and not a regulatory ban on participation.

We hope that you can consider our opinion and vote to amend the current regulations.

Sincerely,

  
Shandara Swatling, Tribal Administrator

**From:** [Edwin Bifelt](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#); [Marijuana Licensing \(CED sponsored\)](#)  
**Subject:** Marijuana regulations amendment: ANSA corps/Tribes  
**Date:** Wednesday, June 08, 2016 4:11:40 PM  
**Attachments:** [Edwin Bifelt letter of support 060816.pdf](#)

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Good Afternoon,

Attached you will find a letter to the Alaska Marijuana Control Board, requesting an amendment to state regulations to allow ANCSA corps/tribes the ability to invest in commercial marijuana licenses.

If you need any further info please contact me anytime.

Best Regards,

**Edwin Bifelt**  
Owner/Principal Consultant

**Zane Hills Capital, LLC**  
phone: 907-829-2248

[www.zanehillscapital.com](http://www.zanehillscapital.com)  
[www.twitter.com/zanehillscap](https://www.twitter.com/zanehillscap)  
[www.facebook.com/ZaneHillsCapital](https://www.facebook.com/ZaneHillsCapital)

~Alaska Native owned/Rural Alaska based service business~





## ZANE HILLS CAPITAL

PO Box 49 Huslia, AK 99746

Home: 907-829-2248

Cell: 907-687-2296

[edwin@zanehillscapital.com](mailto:edwin@zanehillscapital.com)

[www.zanehillscapital.com](http://www.zanehillscapital.com)

June 8, 2016

To the Alaska Marijuana Control Board:

This letter is in support of the Alaska Marijuana Control Board amending the state regulations on marijuana licenses to allow Alaska Native Corporations (ANCSA corporations or ANC's) and Alaska Native tribes the ability to participate in the licensed recreational marijuana industry, through either loan programs to shareholders/tribal members or equity interest in licensed facilities.

As the regulations are currently written and interpreted these types of entities cannot participate in the industry due to the following,

"All partners, members, officers and shareholders must be included in your online application. None of the individuals listed as affiliates on the license application can be under 21 years of age. If you WILL NOT list all of your shareholders, you will not comply with the regulations and the application will be found incomplete per 3 AAC 306.080(a)(1)." - AMCO email response on 5/3/2016

ANCSA corporations and tribes are critical partners in furthering the interests and economic sustainability of the estimated 260+ rural communities in Alaska. These fiduciaries for Alaska Native shareholders/members are ideal partners for implementing a solid Rural Alaska cultivation industry - something desperately needed at a time when the average unemployment in the majority of rural villages hovers above 50% and most homes live off low-income assistance.

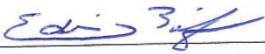
I understand the burden you as a board and staff face in implementing regulations. But Alaska is a unique state, and ANCSA corps/Tribes have long been woven into the operational structure of Alaska and play critical roles in improving rural Alaska's local economies. Including them in this emerging industry will allow access to capital for rural Alaska, where start-up costs for marijuana licenses will be higher than urban Alaska.

Since I first learned of the ballot measure to legalize recreational marijuana, I envisioned a vibrant cultivation industry in Alaska villages - finally an industry that can bring an eco-friendly manufacturing/agriculture/export economy to our villages. Cannabis cultivation is definitely viable in rural Alaska. A decision on participating in a commercial marijuana license would not be taken lightly by ANCSA corps/Tribes many of which regularly assess and perform due diligence on commercial investments. That decision would be well thought out. But they first need that opportunity to choose.

As an Alaska Native born and raised in Huslia, Alaska, a UAF M.B.A graduate, and a former employee of both tribes and corporations I feel I understand business, Alaska economics, these stakeholders and the challenges facing rural Alaska. I know better than most the economic challenges of my home. The time we have to diversify away from government assistance - food stamps, energy assistance, PCE, etc. - is numbered in days, months and years - not decades. That window is closing and we have no logical path toward creating private industry.

I hope that you can consider my message and make a vote to include rural Alaska in the commercial cannabis industry. If you have any questions please contact me anytime.

Sincerely,

A handwritten signature in blue ink, appearing to read "Edwin Bifelt", is positioned above a horizontal line.

**Edwin Bifelt**  
**Owner/Principal Consultant**  
**Zane Hills Capital, LLC**

**From:** [Jeremiah Emmerson](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Executive Session During MCB Meeting  
**Date:** Thursday, June 09, 2016 10:57:55 AM  
**Attachments:** [logo2.png](#)

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Greetings. I understand you guys have a hard job, however, I find it very inappropriate to conduct public announced meetings and hold executive sessions where nothing is on record and there is no accountability.

Today, June 9th, many of us called in just to get a dead line, then we hear from other industry members there was an executive session, where even they were unable to listen in.

This is unacceptable, please forward my regards to the MCB Board.

Yours Truly,

--

**Jeremiah Emmerson**  
Executive Director & Chairman



**From:** [Diana Morlan](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Speaker on the Marijuana laws in the State of Alaska?  
**Date:** Thursday, June 09, 2016 12:47:02 PM

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Hi,

I am on the Board of the Alaska's chapter of Construction Finance Mangers Association (CFMA). CFMA is a National organization with local chapters to support the finance mangers in the construction industry. We offer monthly luncheons September –April each year, offering educational speakers.

We are seeing if there is someone that could speak during one of the luncheon's this fall 2016 or beginning of 2017? I was at the Alaska Government Finance Officers conference, where Cynthia Franklin spoke. I think the information would be very appreciated, heard by the Construction Industry.

Please let me know and I can send more details on date and times.

Thank You very much for considering this,

Diana Morlan | Assistant Vice President  
Cash Management Services Section



1751 Gambell, Suite 205 | Anchorage, AK | 99510  
Office: 907-777-4688 | Fax: 907-777-4680  
[www.FNBAlaska.com](http://www.FNBAlaska.com)

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**From:** [Christina Stauffer](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** When Will Marijuana be Available  
**Date:** Friday, June 10, 2016 1:05:05 PM

---

Could you please tell me when it will be possible for me to legally purchase marijuana products?

Thank you.

Christina Stauffer  
mountainlady@alaskan.com

**From:** [Cheryl Bowie](#)  
**To:** [CHERYLBOWIE@GMAIL.COM](mailto:CHERYLBOWIE@GMAIL.COM)  
**Subject:** Opting Out of Cannabis Regulation  
**Date:** Tuesday, June 14, 2016 10:39:17 AM

---

## "Opting-Out" of Cannabis Regulation

I believe allowing your states' communities to opt-out of a passed law allowing protected marijuana activity in your state is because of the components required for the Marijuana program outside of the Cole Memorandum recommendations is to ensure public health and public safety in addition to protecting people in states where marijuana activity is allowed.

The opted-out communities gain none of these protections and are still the subject of arrests and charges which is a clear breach of what is talked about in the Cole Memorandum.

Furthermore, not including a transportation provision in your states marijuana program also leaves consumers at risk for not being protected by the rules implemented or not by your states marijuana program when they have to travel home with their products.

Opting-out ensures the uneven application of your states marijuana program putting the state at risk for being in violation of the marijuana program requirements and at risk for liabilities incurred by how they create and apply their own rules.

Sincerely,

Cheryl Bowie  
Bowie Consulting  
9079036513

**From:** [Cheryl Bowie](#)  
**To:** [CHERYLBOWIE@GMAIL.COM](mailto:CHERYLBOWIE@GMAIL.COM)  
**Subject:** Butane Processing for Cannabis  
**Date:** Tuesday, June 14, 2016 10:44:57 AM

---

Both California and Colorado do not allow processing cannabis with butane due to the high level of explosions.

You can still process cannabis with other products but both states pulled butane and it was I believe approved for use in Alaska.

We do not have the resources available to deal with the medical outcomes here as burns from blast injuries are normally sent out of Alaska.

Please help deal with this disconnect. I have no idea why Alaska's MCB has allowed it they must have known it was pulled off the market in both California and Colorado.

California actually made it illegal and it accounts for 10% of their burns now.

Sincerely,

Cheryl Bowie  
Bowie Consulting  
9079036513

**From:** [Marijuana Licensing \(CED sponsored\)](#)  
**To:** [cory wray](#); [Marijuana Licensing \(CED sponsored\)](#)  
**Cc:** [Marijuana\\_CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Outside investments  
**Date:** Tuesday, June 14, 2016 12:08:57 PM

---

Please send any emails you wish the board to read to [marijuana@alaska.gov](mailto:marijuana@alaska.gov)

AMCO Staff

-----Original Message-----

From: cory wray [<mailto:cory.wray@hotmail.com>]  
Sent: Sunday, June 12, 2016 8:51 AM  
To: Marijuana Licensing (CED sponsored)  
Subject: RE: Outside investments

Dear distinguished board member,

As you know, at the next meeting Mr. Schulte and Mr. Emmett are going to offer language that allows outside investment into Alaska's marijuana industry. As a marijuana supporter, I oppose outside investment into Alaska's marijuana industry, at this time.

As of June 8, 2016, the record shows there are somewhere between 400-500 marijuana businesses that have already applied, and these folks do not have outside investment. I think the marijuana industry can be supported by these Alaskan businesses that have already applied. We should at least find out. Secondly, why are we giving somebody in King County, Washington or Los Angeles County, California or Multnomah County, Oregon preference over folks in the Matanuska-Susitna Borough? I'm sure there are folks in the valley who want to invest in the valley, but there is a moratorium right now. If the valley vote in October goes against the local marijuana industry, then these people may want to invest in other parts of the state. I just don't see the need to allow out-of-state investment at this point.

Others may say that "Oregon has allowed out-of-state investment..." Well, Alaska is not Oregon. Oregon has a state income tax, should we have one in Alaska, too? Oregon began with medical marijuana. Many of these operations were along the Portland-Vancouver, WA boarder. Same thing down south on the California-Oregon board. A lot of marijuana is grown in Southern Oregon and Northern California. These operations often operate across state lines. It was hard to regulate the out-of-state influence in Oregon because it already existed due to the proximity to other states. Alaska, obviously, is different. Just because Oregon does something doesn't mean Alaska should follow suit.

If outside investors want into Alaska's marijuana industry, they can purchase property. They can purchase equipment and lease it back to an operation. They can license IP and processes. It's possible to access outside money with the ways the rules are written now. Please do not change the rules and regulations to allow out-of-state investment at this time. Not only is it unfair to the already 300+ people who have applied, but give the people who have applied a chance to supply the market's needs. At this point, entrepreneurs need consistency in the rules and regulations. I would even suggest not altering them for at least 12-months to give entrepreneurs some consistency.

To summarize and re-iterate, Alaska does not need out-of-state investment into the marijuana industry at this time.

Thank you for your time.

Sincerely,

Cory Wray  
Alaska Cannabis Institute  
907-331-0506





**From:** [Cheryl Bowie](#)  
**To:** [Cheryl B](#)  
**Subject:** Co2 or carbon dioxide for cannabis  
**Date:** Tuesday, June 14, 2016 12:27:25 PM

---

This is a much safer form of processing cannabis and it won't put the entire concentrate business or processing get shut down.

<http://dixieelixirs.com/do-you-know-if-your-edibles-are-safe/?age-verified=03a99337ff>

**From:** [Christopher Wilhelm](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** grower questions  
**Date:** Thursday, June 16, 2016 10:50:05 AM

---

Hello,

I'm interested in applying for a limited grow license. Is there a general information page I can use to answer some questions regarding meeting state requirements for licensing? I own a legal piece of property in Ketchikan, and have been in contact with the zoning office here and there is no problem.

How long will it take to get the license approved once it is applied for?

Is the license tied to the property or the licensee? I would like to sell my farm after a year if it is not what I want, and sell the license with it. Can I transfer it to a new licensee or will it have to be applied for anew?

Do you have any suggestions to help me get started?

Sincerely,

Christopher Wilhelm  
PO Box 9463  
Ketchikan, AK 99901

**From:** [Robin Robinson](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** hemp  
**Date:** Thursday, June 16, 2016 4:02:51 PM

---

just a couple questions regarding the new marijuana laws and Hemp.

I need to know where Alaska stands on Hemp products. Specifically, hemp processed into crystals and used in lotions, and other skin application products.

Is there something in writing that states this position? How does the State of Alaska view the 2014 Farm law, in regards to less than three tenths of a percent THC in hemp is okay to use in products.

Does the use of any of the above qualify as having to get a Marijuana license?

Thank you for your time.

Robin Robinson

**From:** [grailquester@gmail.com](mailto:grailquester@gmail.com) on behalf of [Glenn Harper](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Cruise ships and the law...  
**Date:** Monday, June 20, 2016 6:51:32 AM

---

I'm excited about the possibilities for the new legal cannabis trade and tourism. I'm considering making moves to be working in the cannabis industry in Ketchikan for next spring.

My question is what, if anything, does the law say about taking legally purchased cannabis back to cruise ships? I know maritime law is it's own domain, but I was wondering if the control board has formulated any policies regarding this?

--

Regards,  
Glenn Harper  
830-379-1720

**From:** [Jason Brandeis](#)  
**To:** [Marijuana Licensing \(CED sponsored\)](#); [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Ownership Change Question  
**Date:** Monday, June 20, 2016 10:28:41 AM

---

Dear AMCO Staff:

I represent a client who has applied for a marijuana cultivation facility license. I have a question about reporting an ownership change during the time between license approval and issuance. Specifically, should an applicant whose application has been approved with delegation by the MCB, but who has not yet received local government approval, and has therefore not yet completed a site inspection or received a license, report an ownership change pursuant to 3 AAC 306.040, or are other steps required?

Thank you for your time and consideration.

Jason Brandeis

---

**Jason M. Brandeis, Of Counsel**  
**Birch Horton Bittner & Cherot**  
1127 West 7th Ave | Anchorage AK 99501  
Tel. 907.276.1550  
[jbrandeis@bhb.com](mailto:jbrandeis@bhb.com) | [www.birchhorton.com](http://www.birchhorton.com)  
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**From:** [Laurel Andrews](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** media question re: public notice for completed applications  
**Date:** Monday, June 20, 2016 11:53:05 AM

---

Hello,

I'm looking at the list of completed marijuana license applications, and the 'public notice' PDF doesn't look like its activated for those that have been completed. Are those public notices available elsewhere?

<https://www.commerce.alaska.gov/web/Portals/9/pub/MCB/OtherResources/MJinitiatedapplist1.pdf>

Thank you,

Laurel

--

Laurel Andrews  
[Alaska Dispatch News](#) Reporter

Direct: (907) 257-4382

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**From:** [Sara Williams](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Onsite Endorsement Public Comment  
**Date:** Monday, June 20, 2016 1:14:12 PM

---

Greetings!

Our only public comment for the onsite endorsement is as follows:

Section 306.365 (11) (g): "A person may not remove from the licensed premises marijuana or marijuana product that has been purchased on the licensed premises for consumption under this section."

Add...

"unless that product is securely contained in child resistant exit packaging as required for the retail store under 306.345 (3)."

Thank you!! See you all in July!!

Sara Williams  
CEO  
[www.midnightgreenery.com](http://www.midnightgreenery.com)  
Like us on Facebook: [www.facebook.com/midnightgreenery](http://www.facebook.com/midnightgreenery)

Sent from my iPhone  
Sara Williams  
CEO  
[www.midnightgreenery.com](http://www.midnightgreenery.com)  
Like us on Facebook: [www.facebook.com/midnightgreenery](http://www.facebook.com/midnightgreenery)



**From:** [Kim Kole](#)  
**To:** [Marijuana Licensing \(CED sponsored\)](#); [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Public Comment Onsite Consumption  
**Date:** Monday, June 20, 2016 3:28:38 PM

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Thank you again for taking Alaskans' perspectives into consideration while creating our regulations. It is greatly appreciated! Please consider the following items when reviewing the 3 proposed drafts for onsite consumption in July.

Kim Kole

Key:

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores. → AMCO Staff**

**3 AAC 306.360. Onsite consumption endorsement. → Schulte**

**3 AAC 306.360. Onsite consumption endorsement. → Mlynarik**

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (e) A local government may recommend that the board approve an application for a new onsite consumption endorsement. The board will impose a condition a local government recommends unless the board finds the recommended condition is arbitrary, capricious, and unreasonable. If the board imposes a condition a local government recommends, the local government shall assume responsibility for monitoring compliance with the condition unless the board provides otherwise.

- Is the first sentence supposed to have something about a condition imposed by the local government in it? It seems disjointed and doesn't quite make sense.

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (f) A retail marijuana store that is issued an onsite consumption endorsement under this chapter is authorized to sell marijuana and marijuana product to consumers only for immediate consumption on the licensed premises and in an area separated from the remainder of the premises by a secure door and containing a separate HVAC system. The holder of a marijuana retail store onsite consumption endorsement may (5) sell food or beverages not containing marijuana only for onsite consumption;

- There is no health and safety issue if a person opens a soda or a bag of potato chips in the consumption area and then brings it outside the store. This doesn't make sense and should be removed. Please remove the word "only."

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (g) The

retail marijuana store holding an onsite consumption endorsement under this chapter shall (1) destroy all unconsumed marijuana found in the onsite consumption area in accordance with their operating plan and 3 AAC 306.740;

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (i) A person may not remove from the onsite consumption premises marijuana or marijuana product that has been sold for consumption on the premises.

**3 AAC 306.360. Onsite consumption endorsement.** (c) 2) Products not entirely consumed onsite may be taken away from the premises in packaging per AAC 306.345

**3 AAC 306.XXX. Acts prohibited at marijuana consumption area.** (d) Marijuana purchased in the consumption area cannot be removed from the consumption area except by an employee of the retail store and in no case will the marijuana leave the retail store premises.

**3 AAC 306.XXX. Disposal of unused marijuana or marijuana product.** (a) Any marijuana or marijuana product that is purchased by a consumer, in the marijuana consumption area, but is not consumed by the consumer shall be disposed of as required by 3 AAC 306.740.

- The red/ blue and green items are in direct opposition to each other.
- If we force people to relinquish their leftover product, they will be more likely to consume it before leaving because they feel they have purchased it so they should use it all. This will only encourage over-consumption, which no one wants. Therefore, people should be able to take unconsumed product with them as long as it is in the appropriate packaging.
- Cannabis differs from alcohol in that you can't close or repackage a drink very well for transport, and it can easily be consumed in transit. This is why one cannot take an unused drink from a bar. Cannabis is unlike alcohol in that it can be easily repackaged for later use without spillage or easy consumption. In fact, it must be packaged in a child resistant exit bag when leaving the facility.

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (h) The holder of a marijuana retail store onsite consumption endorsement, its employee or agent may not (4) allow a person to bring marijuana or marijuana product into the premises for use or consumption;

- Can we require signage at the entrance to the onsite area to state that cannabis purchased in the retail store may not be consumed onsite? "Only cannabis purchased in the onsite consumption area may be consumed on premises. Product purchased in the retail store and personal product may not be consumed onsite." or something to that affect.

**3 AAC 306.365. Onsite consumption endorsement for retail marijuana stores.** (f) The holder of a marijuana retail store onsite consumption endorsement may (1) sell marijuana bud or flower in quantities not to exceed one gram in a single transaction; (2) sell edible marijuana products in quantities not to exceed 10 mg to in a single transaction; (3) sell marijuana

concentrates intended for inhalation in quantities not exceeding to exceed .25 grams in a single transaction;

**3 AAC 306.360. Onsite consumption endorsement.** (d) Marijuana products served for onsite consumption: 2) May have a total, cumulative THC content no greater than 150mg per consumer

**3 AAC 306.XXX. Acts prohibited at marijuana consumption area.** (a) An employee in a marijuana consumption area may not sell, give, distribute, deliver, or offer to sell, give, distribute, or deliver, marijuana or any marijuana product (3) in a quantity exceeding .5 grams of useable marijuana, .125 grams of marijuana concentrate for inhalation, or marijuana edible products containing more than .01 grams of THC.

- These are all in direct opposition with each other.
- The blue item should have “marijuana bud or flower” as opposed to usable marijuana.
- The blue item has limits that are so low, people will not feel the effects. This will completely defeat the purpose of having onsite consumption so that tourists will be more likely to not use these spaces and consume in public. Consequently, this will also cause this license endorsement to fail, losing license holders a great deal of money, dissuading them from entering into this type of facility. It would be construed as “unreasonably impracticable” as prohibited by Ballot Measure 2.
  - I feel that serving a customer up to 1 gram of flower, .25 g of concentrate, or 20 mg of edibles onsite would be an appropriate place to start. This is going to be a difficult item to determine because this amount won't be felt by medical patients who might not be able to consume in their homes, yet tourists won't need nearly as much to feel the effects. The best way to approach this would be to allow people to take their unconsumed product home with them in an appropriate, child resistant package so that they don't over consume onsite. If they've bought it there, they will feel the need to finish it there if they are forced to leave it behind.

**3 AAC 306.360. Onsite consumption endorsement.** (a) A licensed retail marijuana store seeking an endorsement to allow onsite consumption must meet the following additional criteria: 1) Designate a separate consumption area not co-located with a non-consumption retail sales area.

- This should be worded differently. Co-located would be contradictory to the requirement that it must be in the same premise as a retail store. Maybe just state that it must be in an area within the retail premise, separated by a door.

**3 AAC 306.360. Onsite consumption endorsement.** (a) A licensed retail marijuana store seeking an endorsement to allow onsite consumption must meet the following additional criteria:

- Since one cannot consume cannabis within 20 feet of a cultivation facility, the board could make an exception for an establishment that wants to have a cultivation, retail, and onsite consumption all in the same building. It would be acceptable to include the stipulation (as

already exists) that people who are working may not consume during or before their shift. This should appease the insurance problems that we would have encountered previously that caused the board to change the cultivation requirement to have consumption at least 20 feet away. This will allow that particular license holder to be able to provide all services to their community, which may be extremely important in smaller communities that may only have one or two establishments.

**3 AAC 306.XXX. Access restricted in a marijuana consumption area.** (b) Each entry to a marijuana consumption area must be posted with a sign that says “No one under 21 years of age allowed.” The sign must be not less than 12 inches long and 12 inches wide, with letters at least one half inch in height in high contrast to the background of the sign.

- This seems redundant. No one under the age of 21 should be allowed into the retail facility, and therefore will not have access to the entrance door to the consumption site. It would make more sense to have a sign reminding consumers that they cannot consume cannabis purchased in the retail store or from home in the consumption area. If you put too many signs up, people won’t bother to read them.

**3 AAC 306.XXX. Access restricted in a marijuana consumption area.** (c ) An area of a marijuana consumption area where marijuana or any marijuana product is stocked for sale, or dispensed for sale, is a restricted access area. The retail marijuana store must post signs, require identification, and escort visitors in compliance with 3 AAC 306.710.

- The onsite consumption area is part of the retail facility open to customers. Therefore, it should not be considered a restricted access area, and the customers should not be considered visitors who must be in a 5 to 1 ratio of employees. There is no equivalent restriction of alcohol patrons to employees in a bar or restaurant, and it is considered to be “unreasonably impracticable” for a licensee to have that so people on the payroll at all times, since there is no way of knowing how many customers will frequent that part of the facility on any given day at any given time.

**From:** [Sue](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Format on last page MJ 03  
**Date:** Monday, June 20, 2016 5:30:43 PM

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We are working on MJ 03. The last page where additional information is to be placed, does not seem to format correctly. Would you please check this.

Much thanks.

Sue Nowland  
Alaska Fireweed

**From:** [raymond tijerina](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Marijuana license holders  
**Date:** Tuesday, June 21, 2016 8:24:10 AM

---

Hello,

I was on your website and I was looking for the public list of all the companies that hold a marijuana license in the state of Alaska. Could you please guide me in the right direction?

Thank you,

Raymond

[Can2Biz](#) | The partner site.



**From:** [Marijuana Licensing \(CED sponsored\)](#)  
**To:** [Jason Brandeis](#); [Marijuana Licensing \(CED sponsored\)](#); [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Ownership Change Question  
**Date:** Tuesday, June 21, 2016 8:24:26 AM

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Researching. Thanks for your patience.

AMCO Staff

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**From:** Jason Brandeis [mailto:jbrandeis@BHB.com]  
**Sent:** Monday, June 20, 2016 10:27 AM  
**To:** Marijuana Licensing (CED sponsored); Marijuana, CED ABC (CED sponsored)  
**Subject:** Ownership Change Question

Dear AMCO Staff:

I represent a client who has applied for a marijuana cultivation facility license. I have a question about reporting an ownership change during the time between license approval and issuance. Specifically, should an applicant whose application has been approved with delegation by the MCB, but who has not yet received local government approval, and has therefore not yet completed a site inspection or received a license, report an ownership change pursuant to 3 AAC 306.040, or are other steps required?

Thank you for your time and consideration.

Jason Brandeis

---

**Jason M. Brandeis, Of Counsel**  
**Birch Horton Bittner & Cherot**  
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**From:** [Marijuana Licensing \(CED sponsored\)](#)  
**To:** Amy; [Marijuana Licensing \(CED sponsored\)](#)  
**Cc:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** RE: Marijuana waste/incinerator WA state  
**Date:** Tuesday, June 21, 2016 1:47:30 PM

---

If this email was meant for the MCB to see. It needs to be sent to [marijuana@alaska.gov](mailto:marijuana@alaska.gov)  
Thanks

AMCO Staff

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**From:** Amy [mailto:[amytuma@hotmail.com](mailto:amytuma@hotmail.com)]  
**Sent:** Tuesday, June 21, 2016 1:02 PM  
**To:** Marijuana Licensing (CED sponsored)  
**Subject:** Marijuana waste/incinerator WA state

314-55-097

Marijuana waste disposal—Liquids and solids.

WASHINGTON STATE

excerpt....

(b) Noncompostable mixed waste: Marijuana waste to be disposed in a landfill or another disposal method (for example, incinerator) may be mixed with the following types of waste materials:

- (i) Paper waste;
- (ii) Cardboard waste;
- (iii) Plastic waste;
- (iv) Soil; or
- (v) Other wastes as approved by the WSLCB.

(6) Marijuana wastes rendered unusable following the method described in subsection (4) of this section can be disposed.

(a) Disposal of the marijuana waste rendered unusable may be delivered to a permitted solid waste facility for final disposition. Examples of acceptable permitted solid waste facilities include:

- (i) Compostable mixed waste: Compost, anaerobic digester, or other facility with approval of the jurisdictional health department.
- (ii) Noncompostable mixed waste: Landfill, incinerator, or other facility with approval of the jurisdictional health department.

Colorado too has very similar standards.

Also the AMCO board should realize on the side of the parks hwy, just outside of Houston



is a crematory. If any facility would have burning standards it would be the people burning the deceased on the side of the Highway.

Hope this helps Mr. Springer's, and other board members concerns over whether incineration was an industry standard.

Thanks

Amy Tuma

**From:** [AKGL](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Remote Testing with QuantaCann2  
**Date:** Tuesday, June 21, 2016 4:14:06 PM  
**Attachments:** [QuantaCann2 User Guide.pdf](#)  
[Accuracy of NIR for Analysis of Cannabis.pdf](#)  
[NIR in Agriculture ed.pdf](#)

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Dear AMOC,

At the last Marijuana Control Board (MCB) meeting on 6/9, I gave a brief introduction to the QuantaCann2 (QC2) cannabis testing system as an alternative method appropriate for use in remote communities. Further to that introduction, I would like to submit the following documents to support use of the QC2 for cannabis potency analysis, especially in off-road communities such as Juneau or Ketchikan. These documents include an introduction to the QC2 system, the standard operating procedure, history of the Near Infrared (NIR) Spectroscopy method, its validation for cannabis testing, and a discussion of the usefulness of testing for CBN.

Two issues I can identify that will have to be addressed in order to bring this system to remote communities:

1. Allow a mobile testing rider to the Marijuana Testing Facility License;
2. Loosen the requirement to report CBN concentration.

1. Testing has been a concern for applicants from remote communities since the very beginning. I have gotten many calls from applicants in Juneau, Ketchikan and Kodiak inquiring about how they could get their products tested. I looked for different ways to solve this problem and found the QC2 to be particularly well suited because of its portability, robustness and ease of calibration. It can be deployed with minimal support equipment - no Hydrogen gas is required, as would be needed for a Gas Chromatograph - and it only requires a laptop and Internet connection to operate. Further, the near-infrared analysis technique used by this system has few mechanical connections making it rugged and easy to calibrate. Whereas detectors commonly used by chromatography techniques are much more susceptible to rough handling and more difficult to calibrate. (More information on the QC2 and NIR Spectroscopy can be found in the documents attached.)

2. This topic is addressed more fully in the document, "Accuracy of NIR for Analysis of Cannabis". To summarize, accuracy of the QC2 is well supported by comparison to HPLC test results; it can measure CBDA to 0.7%, CBD to 0.4%, THCA to 1.3% and  $\Delta^9$ -THC to 0.6% RMSE (Root Mean Square Error) of the HPLC derived value. However, the QC2 does not currently have analytical models for CBN because that is such a minor constituent with few, if any, verifiable effects. Data collected from over 6,500 samples tested at Steep Hill Labs show that over 99% of all cannabis samples have CBN concentrations less than 0.25%. CBN is clearly a minor cannabinoid that occurs in very low concentrations so it is questionable whether the benefit of knowing its concentration is worth the added complexity and expense of analysis by chromatographic methods.

Please let me know if you would like me to provide any clarifications or discussion of these topics and I would be happy to do so.

For more detailed information and discussion, please find attached the following documents:

**QuantaCann2 User Guide** - General Introduction to the QC2 system and operating procedure

**Accuracy of NIR for Analysis of Cannabis** - Validation of the QC2 results with HPLC, and discussion of CBN

**NIR\_in\_Agriculture\_ed** - Summary of NIR development and industry use

Regards,  
Brian

-----  
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# Steep Hill™

## Near Infrared (NIR) Spectroscopy for Potency Analysis of Cannabis

### NIR and the Quality of Goods

Regulatory guidelines exist for testing the quality of food products, oils, and medicines. Quality and labeling of goods is regulated to assure that consumers purchasing those goods are getting what is on the label, or that the goods aren't spoiled. This quality assurance can be approached using conventional wet methods or by more modern rapid testing or "process analytical" testing methods. While conventional wet methods, including chromatography, are very versatile at testing major, minor and trace constituents, process methods can offer rapid, solvent-less measurement with good accuracy on major constituents.

Near infrared spectroscopy has, over the last two decades, become a preferred method in cases where materials are heterogeneous and require multiple samples, or in cases where blending requires a more rapid assessment to control blend content on the fly. Industries that use near infrared extensively for quality monitoring include finished product testing of oil and gas, grains, cheese and meat, and pharmaceuticals. The most prominent advantages of near infrared over chromatography include non-destructive and solvent-less testing, rapid turnaround time, much lower capital and maintenance costs, and a notably lower level of training required by the operator. For the testing of bulk components, NIR can be very useful on heterogeneous materials where several different samples can be used to determine bulk contents as in the case of protein, fat and water in grains.

### Why NIR and Cannabis Potency?

Near infrared and cannabis seem to be a natural fit since the method has been very successful in assessing bulk contents of other agricultural products where it is currently used extensively. Since cannabis flowers are another agricultural product, NIR is a natural choice for application development of a cannabis potency analyzer. Cannabis is typically 5-30% cannabinoids (mainly THC and CBD) and 5-25% water. Cannabinoid content can vary by over 5% (e.g. 13-18%) on a single plant, and even more if grown indoor. This means that wet analytical methods, which are generally more accurate on a single sample, lose their accuracy advantage on a cost-per-analysis basis since more frequent testing is advised for batches likely to have such variability. Multiple NIR measurements are much more economical to estimate or correct for heterogeneity. Additionally, the NIR analysis uses no polluting solvents to dissolve samples and has a speed advantage of at least 5-10 times over wet methods at similar accuracy on heterogeneous materials.

## The Making of an NIR-based Cannabis Analyzer

The use of an NIR-based analyzer system is notably simpler compared with wet methods like chromatography. Developing an NIR calibration does require knowledge and experience in the multivariate modeling with these analyzers. Model development is achieved by collecting NIR spectral measurements on a wide array of samples and wet method analysis for comparison on those same samples. Once an adequate number of samples is collected, a data processing of these “training” samples allows the creation of a mathematical model that relates the NIR spectral signatures with the concentrations determined by wet methods (HPLC). For example, spectra are collected on cannabis samples of various cannabis strains and Cannabinoid concentrations. Next a model is computed that relates the spectrum to the constituent concentrations. Finally, the model is validated using the regression solution and new samples not used in calibration to predict potency. NIR potency vs the wet method is then assessed to validate the model. Future samples can be measured on the NIR and cannabinoids for those new samples can be predicted. While the synopsis above sounds relatively simple, success depends on gathering enough of the appropriate data and understanding the use of the mathematical methods used in model building. The discipline of “Chemometrics,” also called “Process Analytical Technology,” is focused on the developing of these models. A good understanding of the mathematical method, physics of the spectrometer measurement, chemistry of the samples, and preferably experience in practice is desired. But once the model is built, a person with a high school education can be trained to operate the analyzer.

## The Steep Hill Solution: QuantaCann2™

The QuantaCann2™ cannabis analyzer uses chemometric modeling of NIR spectroscopy and “training” data using wet chemistry (HPLC) to estimate the content of cured cannabis flowers in percent by weight content of four cannabinoids: THCA,  $\Delta^9$ -THC, CBDA, and CBD. These are, by far, the most prevalent cannabinoids found in commercial cannabis. (The next highest in content would be CBGA and CBG.) Once an instrument is “calibrated” using the training data, many additional samples (samples not used in the training data calibration) are subsequently run by both NIR using the QuantaCann2™, and also by HPLC. The four plots that follow show a comparison of the NIR predicted value on the Y-axis, plotted against the HPLC-measured data for the same sample on the X-axis. Ideally, a straight line with slope = 1 is obtained. Statistical scatter is, as expected for all measured data, observed and is evident on the plots by deviations between the actual points and the line of slope 1. The absolute percent errors are all about 1%. That means, if the QuantaCann2™ predicted value obtained for THCA is 18%, then HPLC analysis of the same sample would likely yield a value in the range 17-19%. In fact, this approaches the precision of HPLC for repeated measurements of the same plant sample.

## How Accurate is NIR for CBDA, CBD, THCA & $\Delta^9$ -THC?

The NIR analyzer can measure CBDA to 0.7% accuracy, CBD to 0.4% accuracy, THCA to 1.3% accuracy and  $\Delta^9$ -THC to 0.6% accuracy (RMSE). Specific prediction comparisons versus HPLC reference data are presented in the following Figures 1-4:

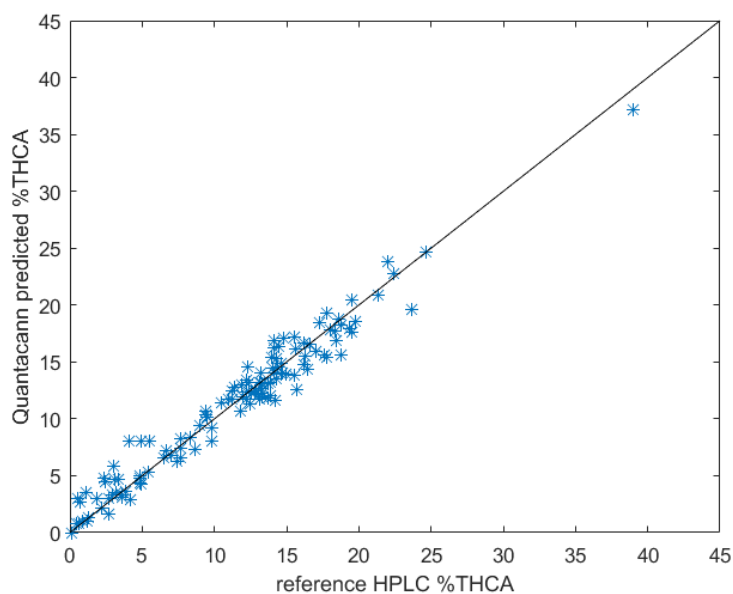


Figure 1: THCA comparison. NIR prediction (Y) vs HPLC measurement (X). The solid line indicates a perfect match. Data shown are for samples not included in the training calibration. The value near 40% is a flower sample enhanced with added THCA using concentrate oil and kief.

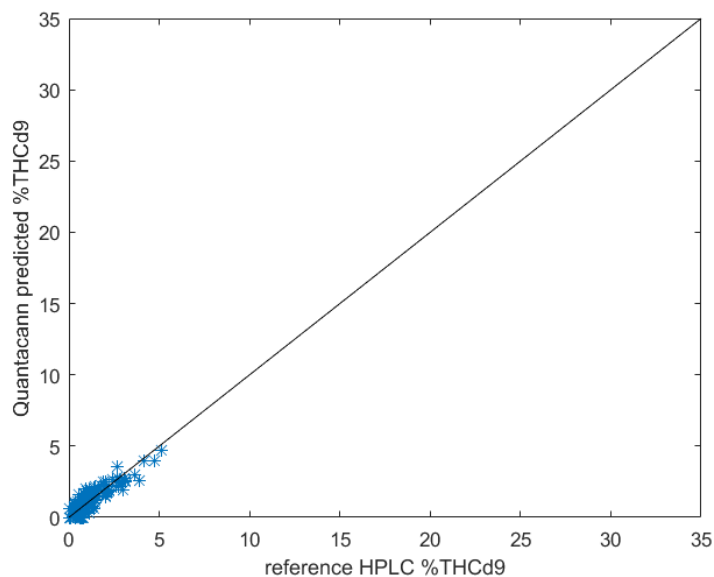


Figure 2:  $\Delta 9$ -THC comparison. NIR prediction (Y) vs HPLC measurement (X). The solid line indicates a perfect match. Data shown are for samples not included in the training calibration. Cannabis plants produce mostly acid cannabinoids, so the range of THC neutral in flowers is much smaller (0-5%) than for THCA.

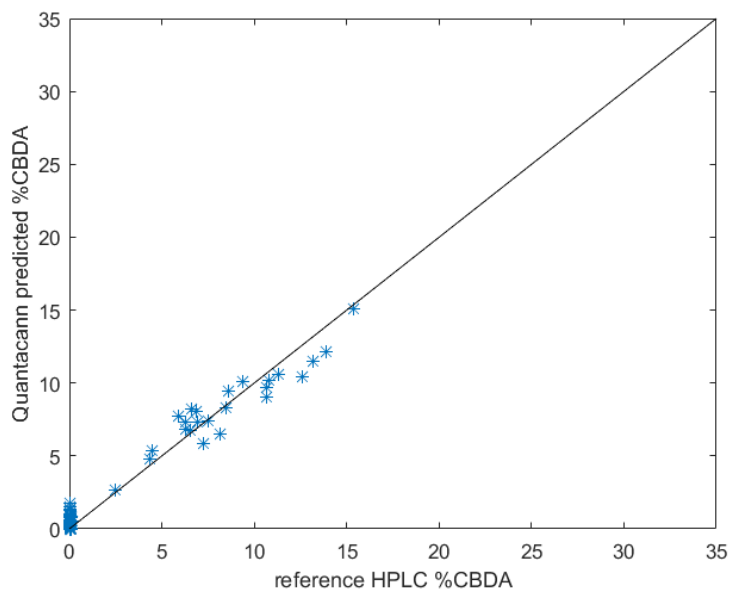


Figure 3: CBDA comparison. NIR prediction (Y) vs HPLC measurement (X). The solid line indicates a perfect match. Data shown are for samples not included in the training calibration. Most flowers that produce significant THCA do not produce much CBDA. Flowers that produce large amounts of CBDA are more rare, so there are fewer samples with high CBDA, but lots with very low CBDA.

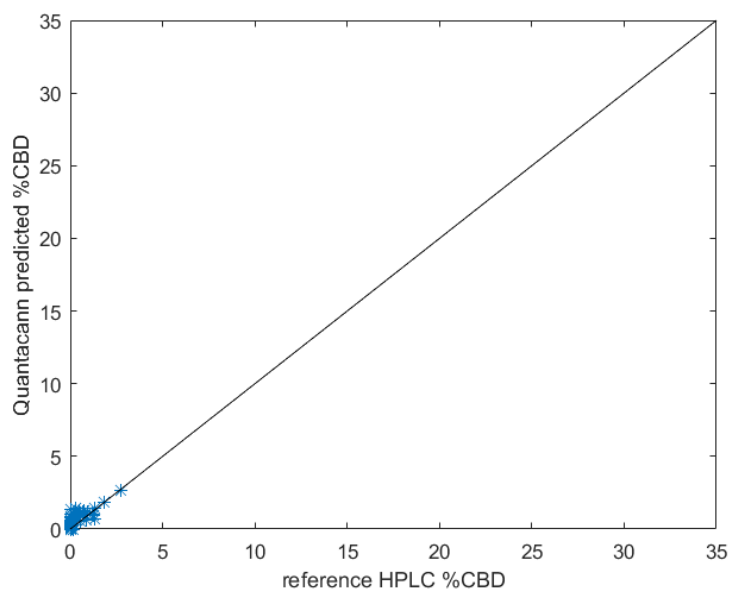


Figure 4: CBD comparison. NIR prediction (Y) vs HPLC measurement (X). The solid line indicates a perfect match. Data shown are for samples not included in the training calibration. Cannabis plants produce mostly acid cannabinoids, so the range of CBD neutral in flowers is much smaller than for CBDA. Many samples have almost none.

## Why (Not) Analyze for CBN?

Near IR is not competitive with wet methods in analysis of minor residual components such as pesticides, and low concentrations of cannabinoids. The NIR is not capable of measuring CBN accurately because it exists in very low, insignificant concentrations in cannabis flowers. Wet method data collected at Steep Hill shows that >99% of all cannabis samples have less than 0.25% CBN and the average quantified value is 0.07%. Below is a histogram of CBN contents of 6,500 flowers tested at Steep Hill in California, Washington, and Colorado.

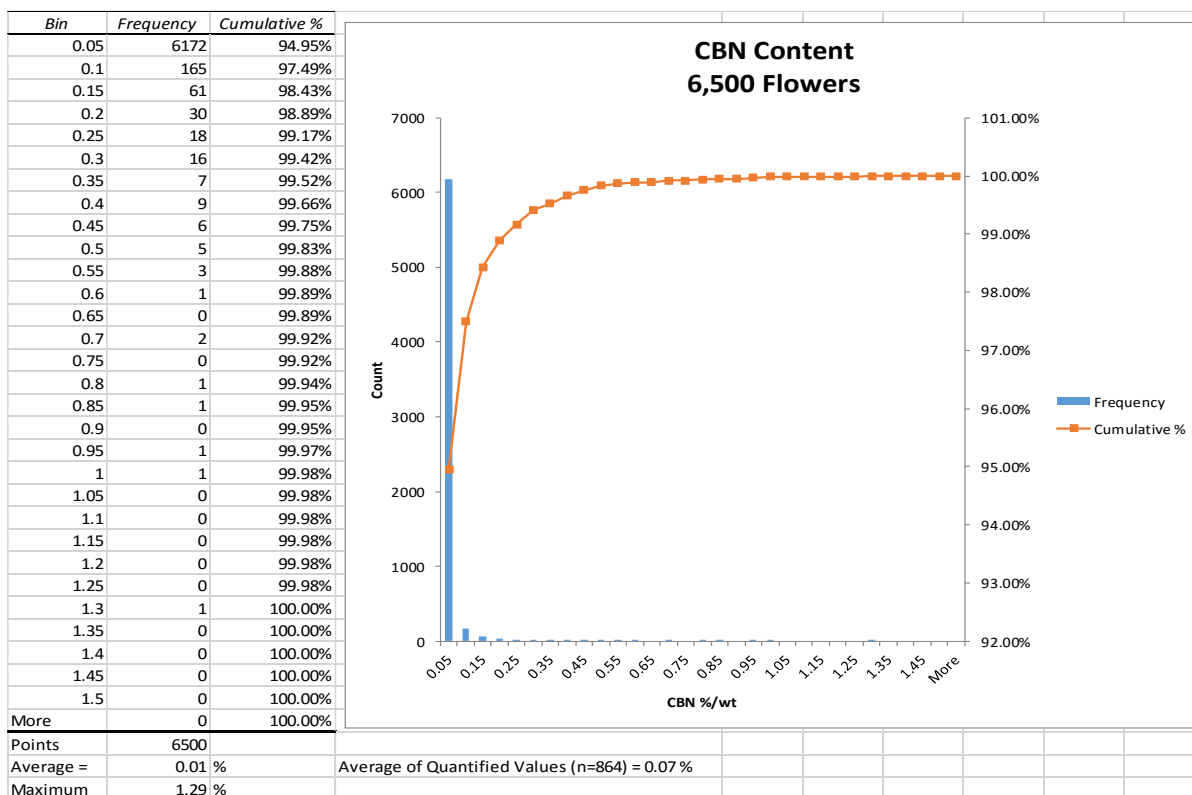


Figure 5. Histogram of CBN concentrations of 6,500 flower samples. Data is from flower sample tests performed by Steep Hill in its California, Washington, and Colorado laboratories using HPLC-UV-PDA methodology. Over 85% of flower samples contained too little to report (only trace amounts), and >99% of all samples tested have less than 0.25% CBN.

So the question arises: Why test for CBN? When Steep Hill first started testing cannabis commercially in 2008, CBN was one of only four cannabinoid standards available and was included with CBD,  $\Delta^9$ -THC and  $\Delta^8$ -THC (the latter of which is not found in plants) in the test protocols and results. There was some thought that the amount of CBN present could be a measure of how old the flowers were. However, this has not proven to be the case. Amounts of CBN in cured flowers are always exceedingly small and depend on many details of growing, curing, and storage. Regulations requiring CBN determinations in cannabis likely will leave wet methods and the complexity and cost of a wet lab as the only choice for cannabis potency analysis. The cost, efficiency and environmental benefits of a rapid analyzer should be weighed against the desire to determine such low levels of CBN and the associated need for wet analysis of every sample.



## Moisture Reduction Helps Prevent Mold Growth

Steep Hill is firmly committed to helping ensure the safety of the legal cannabis supply chain. While the QuantaCann2™ cannot measure extremely low levels of microbiological and chemical compounds (i.e., parts-per-billion levels of pesticides, mycotoxins, etc.), it does aid in reducing mold occurrences in flowers by helping to identify (and thereby control) moisture content. In fact, Steep Hill's QuantaCann2™ measures moisture content more accurately than most laboratory moisture testing processes. The most commonly used lab moisture testing method measures simple weight loss after heating by: weighing sample, then heating sample to evaporate water (which also unintentionally drives off other volatiles), weighing sample again, and then attributing the mass difference to moisture. However, since cannabis flowers contain many volatiles (such as terpenes and flavonoids in addition to water) at low percent levels, measuring mass loss after heating necessarily overestimates the true water content, often by a factor of 2 (volatile terpenes can easily measure 5-10% by weight in freshly cured cannabis flowers). Instead, Steep Hill uses a proprietary method using mass spectrometry detection of water (with no chance of interference from terpenes or other volatiles) to calibrate the QuantaCann2™ for the detection of moisture content. Flowers that contain excessive amounts of moisture (>~8% moisture content by weight) are much more likely to develop mold infestations than are properly dried and cured flowers (<~7.5% moisture content). Accurate moisture measurements provide the opportunity to accurately gauge the efficacy of the curing process for each sample and allows the producer to correct an excessive presence of moisture in their flowers before it leads to mold infestation.

## Scientific Personnel

Steep Hill's QuantaCann2™ development has been conducted by two highly experienced PhD Analytical Chemists.

Dr. Donald Land is Professor of Chemistry at the University of California, Davis where he builds and uses spectrometers of many types and is also a founder of Halent Laboratories, a cannabis testing firm that merged with Steep Hill in 2013. Dr. Land has pioneered the development of wet lab cannabis testing methods for over 6 years, first at Halent and more recently at Steep Hill. Dr. Land is also a professor of forensic chemistry with special expertise in infrared spectroscopy and mass spectrometry. Development of a cannabis analyzer requires high quality reference data in modeling and Dr. Land's experience in cannabis lab analytics enables the collection of the highest quality reference data.

Dr. Thomas Blank is an analytical chemist with 20 years of spectroscopic applications development experience including NIR/chemometrics modeling in the oil industry where he was a post-doctoral fellow at Exxon Research and Engineering. Dr. Blank has deployed and tested more than 50 refinery models for gasoline and diesel blending using mid/NIR analyzers while at Exxon. Dr. Blank also has 12 years in medical device testing of NIR and Raman spectroscopic instruments and air quality testing analyzers based on Near and Mid IR spectroscopy.

## Links

NIR in the Oil and gas industry:

<http://www.asdi.com/getmedia/111f2a9e-45e5-4bc4-849a-cbb281df6a14/Near-Infrared-Spectroscopy-finding-use-in-energy-industry-Oil-Gas-Product-News1.pdf.aspx>

<https://www.osapublishing.org/as/abstract.cfm?uri=as-55-2-197>

<http://www.ogj.com/articles/print/volume-91/issue-18/in-this-issue/refining/near-infrared-offers-benefits-and-challenges-in-gasoline-analysis.html>

<http://www.ogj.com/articles/print/volume-92/issue-26/in-this-issue/general-interest/experience-leads-to-accurate-design-of-nir-gasoline-analysis-systems.html>

NIR observed degradation of grains:

<http://naldc.nal.usda.gov/download/56644/PDF>

<http://naldc.nal.usda.gov/download/12144/PDF>

<http://pubag.nal.usda.gov/pubag/downloadPDF.xhtml?id=23127&content=PDF>

Use of NIR in Agriculture, book:

<https://dl.sciencesocieties.org/publications/books/articles/agronomymonogra/nearinfraredspe/frontmatter>

NIR in nutrition content of meals:

<http://pubag.nal.usda.gov/pubag/downloadPDF.xhtml?id=17538&content=PDF>

NIR and applications, general overview:

[http://www.jsac.or.jp/analsci/data/pdf/28/06/a28\\_0545.pdf](http://www.jsac.or.jp/analsci/data/pdf/28/06/a28_0545.pdf)

<http://www.spectroscopynow.com/details/education/sepspec1881education/an-introduction-to-near-infrared-spectroscopy.html?tzcheck=1,1,1,1,1&tzcheck=1>

## Analysis, Publishing & Copyright

This analysis has been jointly conducted by Dr. Donald Land and Dr. Thomas Blank and the report is being published on June 7, 2016.

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# Near-Infrared Spectroscopy in Agriculture

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Number 44 in the series

**AGRONOMY**

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## DEDICATION

*Near-Infrared Spectroscopy in Agriculture* is dedicated to Phil Williams and Karl Norris. Collectively, they made this technology usable, especially in agricultural applications. Individually, each has his own list of contributions and achievements.

Karl Norris was the first to demonstrate that NIR spectral data could be measured on samples such as ground grains. His real contribution was the incorporation of computers to interpret data that could predict composition. This contribution, while it appears intuitive in our time, was innovative 40 years ago, long before desktop computers existed. The coupling of computers with spectrophotometers for statistical interpretation of spectra has facilitated the subdiscipline now known as chemometrics. In addition to working with small grains, Norris worked with other agricultural products. He collaborated with coworkers at the Instrumentation Research Laboratory at the USDA, Beltsville, MD to predict moisture in soybean and fat content in milk. This work involved both design of instruments operating in the NIR region and development of software to process the data. Because of this work, as well as the applied collaboration with Williams, many people consider Karl Norris the unofficial father of modern NIR spectroscopy.

Phil Williams was the applied equivalent of Norris. He was first ever to apply NIR technology to large-scale, real-world testing of a commercial commodity. In his search for a method rapid enough to test railway carloads of wheat at the time of unloading, Williams acquired one of the first NIR instruments ever built. His commitment to analytical precision, supported by the engineers of what was then the Neotec Corporation, resulted in replacement of the traditional Kjeldahl method by an automated NIR system for the protein segregation program. Within only four years, all testing—about 600,000 samples per year—was carried out at terminal elevators. Williams' subsequent work has been aimed at resolving problems associated with application of NIR technology to grain handling, with particular emphasis on electronic grading. In the field of plant breeding, Williams has concentrated on development of calibration models for the prediction of functionality, as well as composition. Over the past 32 years his research on evaluation of new instruments has been of significant benefit to several instrument manufacturing companies.

Though Williams and Norris have both retired from their original positions, they remain active in the field of NIR spectroscopy. They continue to help jumpstart new analytical laboratories, mentor young spectroscopists, and field questions to almost anyone searching for an answer. As a result of their substantial contributions, they have both received prestigious awards. Today, Williams and Norris are household names, often mentioned together because of their synergistic effect in spawning, then documenting, a growing technology.





## FOREWORD

Near-infrared (NIR) spectroscopy is a remarkably versatile and robust analytical methodology. Its nondestructive nature, fast analysis time, and relative ease of use has led to the development of many applications in a broad array of agricultural fields. The evolution and widespread application of NIR spectroscopy in the past several decades is one of the great success stories in analytical technology development. From the humble beginnings of fixed-filter instruments and simple calibrations to the scanning monochromators and advanced chemometrics of today, the technology has undergone an astonishing transformation. Key to this achievement was the rapid development of the microprocessor and the advanced analytical software it made possible. Today, NIR spectroscopy is widely used to detect and quantify an almost unending list of analytes in a host of agricultural and food products.

This volume provides monographic coverage of the use of NIR spectroscopy in agriculture. It begins with a section on fundamental principles of NIR spectroscopy, including chapters on instrumentation and sample preparation. This is followed by a comprehensive section on advanced chemometrics for qualitative and quantitative NIR analysis. The remaining three sections describe NIR applications for analysis of food crops, processed foods, and other agricultural products and byproducts. The chapters are authored by a who's who list of the leading experts in the design, calibration, and application of NIR spectroscopy. The book is truly international in scope with contributing authors from around the world.

Our thanks to the feasibility committee, editors, authors, reviewers, and staff that worked diligently to make this outstanding volume available. They have created an exceptional reference, that will serve as a leading source and definitive authority on NIR spectroscopy in agriculture for many years to come.

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## PREFACE

Near-infrared (NIR) spectroscopy is fast becoming a preferred method of routine analysis, especially in agriculture. Its growing popularity is due to its accuracy and efficiency of process. As an empirical procedure, NIR spectroscopy differs from standard spectroscopy; it does not require a full understanding of the physical relationships between spectral data and chemical functional groups. Instead, NIR spectroscopy is based on mathematical relationships between spectra and reference data. Once a mathematical relationship is established, the NIR spectrophotometer collects spectra and predicts analysis, thereby expediting rapid, large-scale processing of samples. The repeatability and accuracy of predicted data are monitored through an array of blind validation protocols.

Because of its empirical approach and indirect analysis, NIR spectroscopy sometimes attracts criticism. In many ways, it is a technology comparable to cryptanalysis during World War II—it “had an aura of sorcery, but the basis was highly scientific.”<sup>1</sup> Criticism of NIR spectroscopy as a bench-top analytical tool is most common among theoretical researchers, who strain to understand the same principles they readily accept in remote sensing. Among practitioners, however, criticism is rare. In fact, practitioners have come to appreciate the inherent advantages of NIR spectroscopy, such as nondestructive sampling, reduced dependence on chemical reagents, and simultaneous quantification of constituents.

*Near-Infrared Spectroscopy in Agriculture* highlights the practical use of NIR technology during its first forty years in international agriculture. The book was requested by a feasibility committee of the Agronomy Society of America, who commissioned the work and cosponsored it with the Crop Science Society of America and the Soil Science Society of America.

*Near-Infrared Spectroscopy in Agriculture* is organized into five sections. The first two sections present the fundamentals of spectroscopy and chemometrics. These two sections were simplified as much as possible at the request of the editors because this book targets a broad scientific audience rather than a narrow group of spectroscopists and statisticians. The last three sections are applied and give this book a clear niche among other NIR publications. These applied sections detail the use of NIR analysis in crop production, food processing, and non-food agriculture. Chapters in the applied sections are generally comprehensive, and they include standardized tables of applications for ease of reference.

The editors would like to express their appreciation to all authors, reviewers, and editors of these chapters, as well as the editors of ASA, CSSA, and SSSA for their commitment and hard work in producing this book. We thank the Managing Editor, Lisa Al-Amoodi. We would also like to thank certain colleagues who helped us in the early stages of this work. Specifically, we are grateful to Ian Murray and Chris Scotter, who helped us identify international authors with various specializations in NIR application. We owe a special word of gratitude to authors Roberto Giangiacomo, Tiziana Cattaneo, Stephen Delwiche, Trish Townsend, and Michael Hammersley; these authors submitted their chapters early in the process and pro-

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<sup>1</sup> Stevenson, W. 1976. A man called intrepid. Harcourt, Brace, Jovanovich, New York.

vided their colleagues with excellent examples of content and composition. Finally, we are grateful to Jerry Nelson, who offered a steady stream of reliable advice through the entire publication process.

We hope this work will benefit all those interested in efficient analysis of agricultural products.

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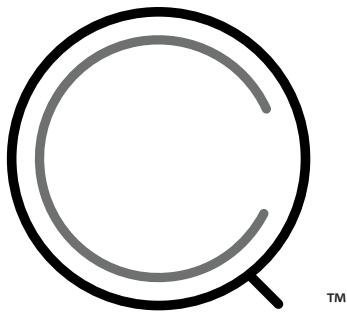
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<b>Ana Garrido-Varo</b>	ETSIAM, University of Cordoba, Apdo. 3048, 14080 Cordoba, Spain
<b>Roberto Giangiacomo</b>	Istituto Sperimentale Lattiero Caseario, Via Lombardo, 11, 26900 Lodi, Italy

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<b>Michael Hammersley</b>	2/19d Dyers Pass Road, Cashmere, Christchurch 2, New Zealand
<b>Kjell Ivar Hildrum</b>	MATFORSK, Osloveien 1, N-1432 Ås, Norway
<b>Sumio Kawano</b>	National Food Research Institute, 2-1-12 Kannondai, Tsukuba 305-8642, Japan
<b>Sandra Kays</b>	USDA-ARS, Quality Assessment Research Unit, Richard B. Russell Agric. Research Center, P.O. Box 5677, Athens, GA 30604-5677, USA
<b>Richard Kramer</b>	Applied Chemometrics, 77 Beach Street, Sharon, MA 02067, USA
<b>Diane Malley</b>	PDK Projects, Inc., 365 Wildwood Park, Winnipeg, MB R3T 0E7, Canada
<b>Howard Mark</b>	Mark Electronics, 21 Terrace Avenue, Suffern, NY 10901, USA
<b>Paul Martin</b>	#2-12 McGillivray Place, Winnipeg, MB R3T 1N4, Canada
<b>Sam Millar</b>	Campden and Chorleywood Food Research Association, Chipping Campden, Gloucestershire, GL55 6LD, UK
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<b>Ian Murray</b>	SAC, Ferguson Bldg., Craibstone Estate, Bucksburn, Aberdeen AB21 9YA, Scotland
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<b>James Reeves</b>	USDA-ARS, Animal & Natural Resources Institute, BARC-East, Bldg. 306, Rm. 101, Beltsville, MD 20705, USA
<b>Laurence Schimleck</b>	D.B. Warnell School of Forest Resources, The University of Georgia, 4-330, Athens, GA, 30602-2152, USA
<b>Hartwig Schulz</b>	Federal Centre for Breeding Research on Cultivated Plants, Institute of Plant Analysis, 22/23, D-06484 Quedlinburg, Germany

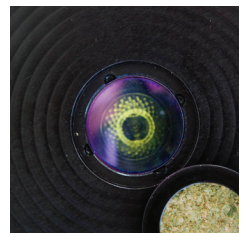
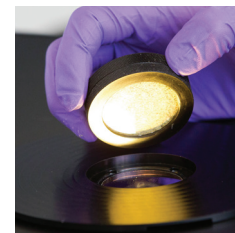
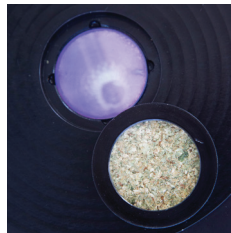
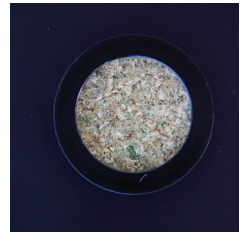


<b>Chris Scotter</b>	Campden and Chorleywood Food Research Association, Chipping Campden, Gloucestershire, GL55 6LD, UK
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<b>Jerry Stuth</b>	Dep. of RLEM, Animal Industries Bldg., Texas A&M University, College Station, TX 77843-2126, USA
<b>Trisha Townsend</b>	74 Greendale Avenue, Avonhead, Christchurch 8004, New Zealand
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<b>Mark Westerhaus</b>	Infrasoft International, 109 Sellers Lane, Port Matilda, PA 16870, USA
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<b>Jerome Workman</b>	Argose Inc., 230 Second Avenue, Waltham, MA 02451, USA
<b>Charles M. Zapf</b>	McCormick & Company, Inc., Technical Center, 202 Wight Avenue, Hunt Valley, MD 21031-1066, USA



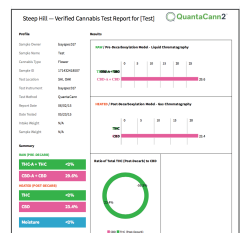
QuantaCann2

## USER GUIDE



Sample Name	Batch	Moisture	THC	THC-A	THC-O	THC-V	THC-D	THC-E	THC-F	THC-G	THC-H	THC-I	THC-J	THC-K	THC-L	THC-M	THC-N	THC-O	THC-P	THC-Q	THC-R	THC-S	THC-T	THC-U	THC-V	THC-W	THC-X	THC-Y	THC-Z
Sample 1	Batch 1	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 2	Batch 2	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 3	Batch 3	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 4	Batch 4	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 5	Batch 5	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 6	Batch 6	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 7	Batch 7	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 8	Batch 8	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 9	Batch 9	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 10	Batch 10	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Sample Name	Batch	Moisture	THC	THC-A	THC-O	THC-V	THC-D	THC-E	THC-F	THC-G	THC-H	THC-I	THC-J	THC-K	THC-L	THC-M	THC-N	THC-O	THC-P	THC-Q	THC-R	THC-S	THC-T	THC-U	THC-V	THC-W	THC-X	THC-Y	THC-Z
Sample 1	Batch 1	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 2	Batch 2	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 3	Batch 3	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 4	Batch 4	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 5	Batch 5	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 6	Batch 6	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 7	Batch 7	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 8	Batch 8	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 9	Batch 9	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sample 10	Batch 10	10.0%	24.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



QuantaCann2™ leverages Steep Hill's comprehensive library of HPLC and GC test results to empower you with instant cannabis potency and moisture data.

steephill.com  
qc@steephill.com  
510.562.7400

## Key Specifications:

- Provides raw THC, THCA, CBD & CBDA values, as well as estimated values for "total THC" & "total CBD" based on a predictive model with decarboxylation calculation
  - Produces test results in under 60 seconds
  - Utilizes Near-Infrared Spectroscopy (NIRS)
  - Provides both Pre- & Post-Decarboxylate predictive results
  - Accuracy within 0.6% for  $\Delta$ 9THC, 1.3% for THCA, 0.4% for CBD, and 0.7% for CBDA.
  - Unit dimensions: 11.37" x 16.45" x 5.22"
  - Chemical-free analysis which is non-destructive to sample
  - Web-based User Interface (Desktop and Mobile)
  - Run scans and post results to social media and online services in under 5 minutes
- 

## Using QuantaCann2:

The QuantaCann2 is accessed using any internet web browser. The application tracks all samples scanned locally on the unit, creating a searchable database, as well as providing analytics on how individually tested samples compare to those tested across the network of QuantaCann2 units around the world. After testing a sample, results may be viewed immediately and exported - or shared directly from the QuantaCann2 Application - via email, Facebook, and/or other social media networks.

QuantaCann2 operates most efficiently between 60-95 degrees Fahrenheit. An environment with 15% - 85% relative humidity is best due to the tendency of samples to absorb moisture. To preserve the integrity of the instrument's optics and electrical components, the unit should be isolated from excessive vibration and used indoors unless the outdoors site has been approved by Steep Hill.

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## Powering QuantaCann2:

Make sure the QuantaCann2 unit is plugged in to both the power outlet and the internet, then reach behind the unit and find the power switch at the back right side. Moving this switch to the "ON" position will power up the QuantaCann2 optical sensor. You will see the light come on momentarily through the optical glass on top of the unit if power on was successful. Finally, push the round power button on the front of the instrument to power up the controller.

It is recommended to keep the QuantaCann2 running at all times; only power down when necessary. To power down, simply flip the switch at the back right side of the machine to the 'O' position.

## Launching the QuantaCann2 Web Interface:

Obtain the QuantaCann2 login URL, and your username and password, from Steep Hill. This information will be provided with your QuantaCann2 unit. Log in to your account using any web browser (Google Chrome is recommended).

## Preparing a Sample:

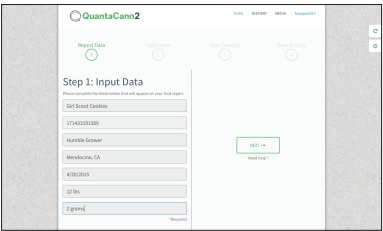


First grind raw plant material (dried flower) using the Steep Hill provided grinder. Collect several small amounts from various spots in the batch to combine in a single sample cup for a better statistical representation of the batch.



Fill the Sample Cup with fresh-ground flower. Compress it closed with the quartz window facing down and twist to lock the sample cover.

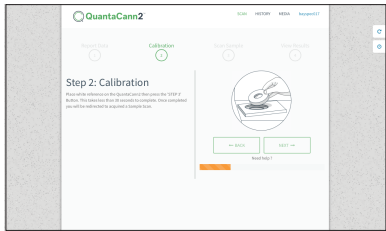
## Scanning a Sample:



Click on the link labelled SCAN in the header to go to the Scan Page.

Use the form to describe the sample. Only "Sample Name" is required; the remaining fields are optional.

Once you have input the data you want to track, click NEXT.

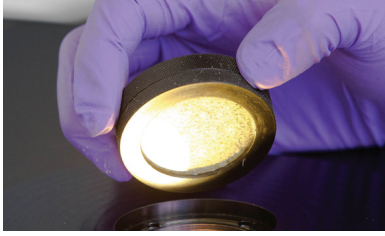


Now you should be on the Calibration Page. Place the White Reference (provided with your system) on the optical scanning area with the white side facing down.

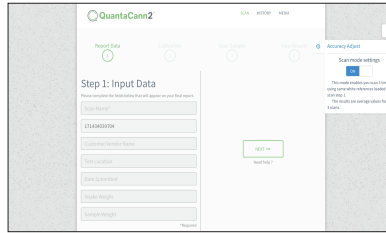
Once the White Reference is placed, click the NEXT button and the system will start the calibration scan.

The calibration scan will continue for roughly 30 seconds. Once it has completed, you may place a sample onto the optical scanning area. Please note that it is normal for the scanning light to stay illuminated when you are switching the White Reference for the Sample Cup to be scanned. Remove the White Reference, being certain to place it neatly into the protective cover.

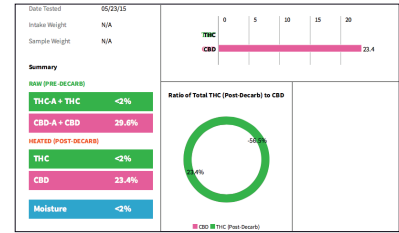
## Scanning a Sample (cont'd):



Place the Sample Cup, quartz side facing down, into the optical scanning area. Then hit the NEXT button to start the sample scan. The scan should be over in a matter of 15-20 seconds.



For increased statistical accuracy, the QuantaCann2 can conduct up to 3 tests of a single sample before producing a final analytical report. In order to do this, simply rotate the sample 90-120 degrees between each of the three consecutive scans.



After scanning you will be brought to the sample results page where you can print or digitally share your results.

## Additional Information & Resources:

### Sharing Your Results:

On the Media Page, click the network you wish to share on, login with your credentials, then click SEND to publish.

### Troubleshooting:

If from time to time the QuantaCann2 stops communicating with the server, you may need to power it down and turn it back on as previously described in this manual.

Make sure the internet connection is working. You can tell whether the cloud based web server is connected to your instrument in the user interface. If it is not connected, and a reboot doesn't fix the problem, double check that the internet connection is strong and uninterrupted.

If you cannot resolve the problem, please do not hesitate to contact Steep Hill.

### Installation:

QuantaCann2 must be installed in an area that is clean and free of excessive vibration, humidity, or temperature variations. In environments where power conditions are unstable, it is highly recommended that an uninterruptible power supply (UPS) with voltage regulation and surge suppression be used to condition the AC input.

Ensure that the QuantaCann2 unit is placed on a stable level surface.

Along the case of the instrument, there are air vents. Ensure that the instrument is placed at least 6 inches away between these vents and any obstructive surfaces.

Setup requires a hard-wired CAT5 ethernet port with internet access. The instrument will only require an IP address if it is connected to a router or switch with a DHCP server.

### Maintenance and Cleaning:

QuantaCann2 sample cups must be cleaned often, only with the supplied brush and lens-grade cleaning material. First, remove any debris from the sample cup using a brush, then dampen the cloth with isopropyl alcohol before gently rubbing until clean. The optical windows on the instrument should not need regular cleaning and have a thin, anti-reflective coating that is easily scratched or rubbed off. If cleaning of this window is necessary, the best would be to direct a stream of clean air (or "Dust-Off" or equivalent vapor stream) to try and blow away any dust or debris. Small amounts of dust or debris are not important. If more extensive cleaning is required, first remove the window by rotating the window housing by about 45-90 degrees to disengage the magnets that secure the housing to the unit. Carefully lift the window housing off of the instrument base. Use isopropanol or ethanol and gently rinse the window without wiping it and then blow off any residual liquid with an air stream. As a last resort, very gently dab with an isopropanol-soaked lens

paper only. Do not clean with paper towels or any other tissue products. Use of non-lens-grade materials will damage the anti-reflection coating.

### Cleaning the Grinder:

The sample grinder must be thoroughly cleaned with the provided brush between tests. Accumulated sample material from previous scans can degrade the accuracy of results over time. Sample resin build up will require the thorough cleaning and rinsing of the grinder with isopropyl alcohol. Steep Hill recommends you soak the interior of the grinder with isopropyl alcohol overnight after each day of testing for optimal results.

### Lease Details:

QuantaCann2 units may only be leased. We encourage clients to offer testing for sale to consumers, growers, and collectives in their areas, providing valuable and cost-effective testing to local communities while offsetting the cost of the unit.

### Contact Us:

We hope this user guide is helpful. If you have any further questions, please do not hesitate to contact us directly via email or phone:

qc@steephill.com  
510.562.7400

**From:** [AKGL](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Add an SOP?  
**Date:** Tuesday, June 21, 2016 5:02:54 PM

---

Could you please tell me what the procedure is to add an SOP for my Testing license?

Thanks,  
Brian

-----  
Brian Coyle  
CEO  
AK Green Labs LLC  
[akgreenlabs@gmail.com](mailto:akgreenlabs@gmail.com)  
907 770-9997

**From:** [Will Schneider](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Fwd: Automatic reply: Onsite Consumption comments  
**Date:** Tuesday, June 21, 2016 6:02:35 PM

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Hello, I tried to submit comments about onsite consumption today, June 21 to John Calder at 4:29pm. I received this reply. I will forward the sent email directly following this email.

Thanks,

Will Schneider

----- Forwarded message -----

**From:** **Calder, John P (CED)** <[john.calder@alaska.gov](mailto:john.calder@alaska.gov)>

**Date:** Tue, Jun 21, 2016 at 4:29 PM

**Subject:** Automatic reply: Onsite Consumption comments

**To:** Will Schneider <[will@catalystcannabisco.com](mailto:will@catalystcannabisco.com)>

I will be out of the office from 6/18 - 6/27. If you need immediate assistance please call the main line at 269-0350. Thank you.

--

**Will Schneider**

FOUNDER

**ANCHORAGE, ALASKA**

**907-205-1181**

[CatalystCannabisCo.com](http://CatalystCannabisCo.com)



**From:** [Will Schneider](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Fwd: Onsite Consumption comments  
**Date:** Tuesday, June 21, 2016 6:02:58 PM

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----- Forwarded message -----

**From:** **Will Schneider** <[will@catalystcannabisco.com](mailto:will@catalystcannabisco.com)>  
**Date:** Tue, Jun 21, 2016 at 4:29 PM  
**Subject:** Onsite Consumption comments  
**To:** "Calder, John P (CED)" <[john.calder@alaska.gov](mailto:john.calder@alaska.gov)>

I have several comments about the proposed onsite consumption regulations. If the intent of the regulation is to provide an area where people can safely consume cannabis, then I think there are a few sections that can be omitted.

Under 3 AAC 306.365 (b)(2)(5)-I am not sure on why it would matter on where the marijuana came from. It might not be beneficial to the retail outlet but allowing outside marijuana would allow visitors and residents a safe place to consume marijuana.

Under 3 AAC 306.365 (d) - why does the marijuana need to be consumed onsite? Is this promoting overconsumption. What happens when a customer buys .25 grams of concentrates and doesn't want to throw it away so they decide to "finish" off their purchase. Why can't they purchase in the consumption area to consume offsite, just like they can in the retail area? It would seem that people would be potentially committing the same infractions or breaking of laws regardless if they purchased on the consumption side or retail side of the store.

Under 3 AAC 306.365 (f)(4)(5)- again not sure of the purpose. Maybe bad business, but I think it should be left up to retail stores to determine this policy.

Under 3 AAC 306.365 (f)(7-10)- Promotions, giveaways and marketing should be allowed. Over consumption can and should be banned but responsible use in conjunction with marketing or promotional plans should be allowed.

3 AAC 306.365 (g) - People should be allowed to take the marijuana off premises regardless if it was purchased on the onsite consumption side or on the retail

In closing, marijuana should be allowed to be taken offsite, promotions should be allowed, and people should be allowed to bring in marijuana

Thanks  
Will Schneider

--

**Will Schneider**  
FOUNDER

**ANCHORAGE, ALASKA**  
**[907-205-1181](tel:907-205-1181)**

[CatalystCannabisCo.com](http://CatalystCannabisCo.com)





--

**Will Schneider**

FOUNDER

**ANCHORAGE, ALASKA**

**907-205-1181**

[CatalystCannabisCo.com](http://CatalystCannabisCo.com)



**From:** [Amy](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Marijuana waste/incinerator WA state  
**Date:** Tuesday, June 21, 2016 8:03:44 PM

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From: marijuana.licensing@alaska.gov  
To: amytuma@hotmail.com; marijuana.licensing@alaska.gov  
CC: marijuana@alaska.gov  
Subject: RE: Marijuana waste/incinerator WA state  
Date: Tue, 21 Jun 2016 21:47:29 +0000

If this email was meant for the MCB to see. It needs to be sent to  
[marijuana@alaska.gov](mailto:marijuana@alaska.gov)

Thanks

AMCO Staff

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**From:** Amy [mailto:amytuma@hotmail.com]  
**Sent:** Tuesday, June 21, 2016 1:02 PM  
**To:** Marijuana Licensing (CED sponsored)  
**Subject:** Marijuana waste/incinerator WA state

314-55-097

Marijuana waste disposal—Liquids and solids.

WASHINGTON STATE

excerpt....

(b) Noncompostable mixed waste: Marijuana waste to be disposed in a landfill or another disposal method (for example, incinerator) may be mixed with the following types of waste materials:

- (i) Paper waste;
- (ii) Cardboard waste;
- (iii) Plastic waste;
- (iv) Soil; or
- (v) Other wastes as approved by the WSLCB.

(6) Marijuana wastes rendered unusable following the method described in subsection (4) of this section can be disposed.

(a) Disposal of the marijuana waste rendered unusable may be delivered to a permitted solid waste facility for final disposition. Examples of acceptable permitted solid waste facilities include:

- (i) Compostable mixed waste: Compost, anaerobic digester, or other facility with approval

of the jurisdictional health department.

(ii) Noncompostable mixed waste: Landfill, incinerator, or other facility with approval of the jurisdictional health department.

Colorado too has very similar standards.

Also the AMCO board should realize on the side of the parks hwy, just outside of Houston is a crematory. If any facility would have burning standards it would be the people burning the deceased on the side of the Highway.

Hope this helps Mr. Springer's, and other board members concerns over whether incineration was an industry standard.

Thanks

Amy Tuma

**From:** [Ryan Geller](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Affiliate status change lic# 10011  
**Date:** Tuesday, June 21, 2016 9:04:32 PM

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Hi,

I am the owner of Green Rush Gardens LLC. My girlfriend Janna Karvonen is listed as an affiliate on our application and I am interested in reorganizing the LLC to make Janna a part owner. I was told it would be preferable to make this change when the application process was complete. The board and our local government recently approved our app and I am hoping to make this change soon as long as it does not disrupt the licensing process. If you could explain how and when to proceed in making this change I would appreciate it.

Thanks,  
Ryan Geller

Sent from my iPhone

**From:** [Lily Bosshart](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Food Safety Permit  
**Date:** Wednesday, June 22, 2016 12:39:46 PM

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I am putting together my Retail Marijuana License application and need more information about how to obtain my Food Safety Permit. My store will operate within Anchorage.

Thank you so much!  
Lily Bosshart

**From:** [AK Green Labs](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Re: Add an SOP?  
**Date:** Wednesday, June 22, 2016 7:32:53 PM

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Thanks for the heads up. I'll use that address in the future.

- Brian

On Wednesday, June 22, 2016, Marijuana, CED ABC (CED sponsored) <[marijuana@alaska.gov](mailto:marijuana@alaska.gov)> wrote:

Brian,

Since you have a license in process, please direct your questions to [marijuana.licensing@alaska.gov](mailto:marijuana.licensing@alaska.gov). The examiners use that mailbox to work on active applications. I forwarded this to them for you, but please use the licensing email to communicate about your license in process. Thanks,

Cynthia Franklin, Director

Alcohol & Marijuana Control Office

907-269-0351

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**From:** AKGL [mailto:[akgreenlabs@gmail.com](mailto:akgreenlabs@gmail.com)]  
**Sent:** Tuesday, June 21, 2016 5:03 PM  
**To:** Marijuana, CED ABC (CED sponsored)  
**Subject:** Add an SOP?

Could you please tell me what the procedure is to add an SOP for my Testing license?

Thanks,

Brian

-----

Brian Coyle

CEO

AK Green Labs LLC

[akgreenlabs@gmail.com](mailto:akgreenlabs@gmail.com)

907 770-9997

--

AK Green Labs  
2509 Fairbanks Street Ste. A  
Anchorage Alaska 99503  
907-770-9997

**From:** [Johnston, Naomi A \(CED\)](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#); [Franklin, Cynthia A \(CED\)](#)  
**Subject:** RE: media question re: public notice for completed applications  
**Date:** Thursday, June 23, 2016 7:42:58 AM

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Glitch, it's been fixed now.

---

**From:** Marijuana, CED ABC (CED sponsored)  
**Sent:** Wednesday, June 22, 2016 5:41 PM  
**To:** Johnston, Naomi A (CED)  
**Subject:** FW: media question re: public notice for completed applications

Can you answer this to me, and I will contact Laurel with the answer? Thanks.

Cynthia Franklin, Director  
Alcohol & Marijuana Control Office  
907-269-0351

**From:** Laurel Andrews [<mailto:laurel@alaskadispatch.com>]  
**Sent:** Monday, June 20, 2016 11:52 AM  
**To:** Marijuana, CED ABC (CED sponsored)  
**Subject:** media question re: public notice for completed applications

Hello,

I'm looking at the list of completed marijuana license applications, and the 'public notice' PDF doesn't look like its activated for those that have been completed. Are those public notices available elsewhere?

<https://www.commerce.alaska.gov/web/Portals/9/pub/MCB/OtherResources/MJinitiatedapplist1.pdf>

Thank you,

Laurel

--

Laurel Andrews  
[Alaska Dispatch News](#) Reporter  
Direct: (907) 257-4382  
Like the ADN on Facebook [www.facebook.com/akdispatch](http://www.facebook.com/akdispatch)  
Follow the ADN at [twitter.com/adndotcom](https://twitter.com/adndotcom)  
Bookmark the [adn.com](http://adn.com) homepage.  
Email your news to [newstips@alaskadispatch.com](mailto:newstips@alaskadispatch.com)

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**From:** [Sue](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** Retail layout questions  
**Date:** Thursday, June 23, 2016 9:40:08 AM  
**Attachments:** [Letter of Marijuana board.docx](#)

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Please see the attached documents for review please:

Thank you for your consideration.

Susan Nowland  
Alaska Fireweed

**From:** [Green Elephant](#)  
**To:** [Marijuana, CED ABC \(CED sponsored\)](#)  
**Subject:** FAQ link is 404  
**Date:** Thursday, June 23, 2016 2:13:56 PM

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<https://www.commerce.alaska.gov/web/amco/MarijuanaLicenseApplication.aspx>

<https://www.commerce.alaska.gov/web/amco/MarijuanaInitiativeFAQs.aspx>

test



[Street Address, City, ST ZIP Code]  
[Telephone]  
[Email]

June 14, 201

To the Marijuana Board Member's,

First I would like to thank you all for your hard work and positive energy that everyone has put into this ground breaking and new business for Alaskans.

I would like to ask for your time and input on a current layout we are considering for our retail store. I have attached two photos from LUCID, a store in Lacey, Washington. This shows a wall mounted jewelry type display case with locking glass as well as locking drawers. The drawers would hold the estimated daily product to be sold. Would this wall system be considered a restricted area.

Their work flow is as followed: A customer who is 21 has the ID check and enters the store. They move around freely in the store looking at product behind the locked wall mounted glass display cases. These cases are at eye level which provides good ergonomics for the customer as well as the employees. Only product that is prepackaged would be in these display cases. The customer selects the product. The employee then opens the locked drawer below the display case, and the employee takes the product over to the checkout counter. The customer pays, the product is sealed and the customer leaves the store. My questions, would the locked wall display be considered a restricted area, as only staff would have access to this to remove product, and then take the product over to the checkout counter which would also be a restricted area.

I would like to make a comment regarding the draft consumption regulations. 306.25 as currently stated, this would only encourage over consuming of product.

Warm regards,  
test















June 16<sup>th</sup>, 2016

Alcohol and Marijuana Control Board  
Atwood Building  
550 W. 7<sup>th</sup> Ave  
Suite 1600  
Anchorage, AK 99501

Dear Mr. Shulte:

Wings Airways Inc. is a large Juneau floatplane operation providing tours in the booming tourism industry. As a majority of our guests arrive via cruise line we are extremely supportive of any verbiage forbidding our guests from transporting any marijuana they would purchase locally aboard our airline. Juneau is establishing this policy and we hope it becomes a statewide practice. We strongly encourage retail marijuana outlets to be required to have notification to customers they may not take marijuana on either an airline, air taxi, or back onto the cruise ship. Statewide education is essential as we move forward in this new market, and this would be a simple opportunity to assist in the process.

Thank you for your time and attention to this issue.

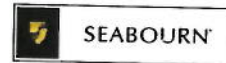
Holly Johnson

President  
Wings Airways Inc.

2 Marine Way, Suite 175  
Juneau, AK 99801  
[Holly@wingsairways.com](mailto:Holly@wingsairways.com)  
907-586-6275

RECEIVED  
JUN 22 2016

BY: \_\_\_\_\_



June 15, 2016

Alcohol & Marijuana Control Office  
The Atwood Building,  
550 West 7th Ave., Suite 1600,  
Anchorage, AK 99501

RECEIVED  
JUN 17 2016  
BY: \_\_\_\_\_

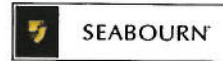
Dear Mr. Schulte,

Holland America Line and Princess Cruises have been sailing to Alaska since the 1960's—longer than any other cruise line. Land tours were launched in the early 1970's, and our operations have expanded to include dozens of dome rail cars, a fleet of several hundred motorcoaches, and several Princess Wilderness Lodges and Westmark Hotels & Inns located throughout Alaska. Recently, Holland America Group unveiled our newest development, Denali Square, a new dining, entertainment, and mixed-use development and hotel located just outside of Denali National Park. Denali Square represents a multi-million dollar investment in the Denali region, and a renewed commitment to our guests and Alaska. Holland America Line and Princess Cruises remain the leaders in the Alaska cruise market, and this year the cruise industry is estimated to top the 1 million mark for guests visiting the state.

Since the vote to legalize marijuana in Alaska passed in November of 2014, Holland America Group has closely followed the creation of the cannabis industry and the evolving regulations, both statewide and in local communities.

With 1 million cruise passengers traveling to the state, we are concerned that our guests could have difficulty navigating the legality surrounding this new industry. While marijuana is legal in Alaska, it remains illegal to possess or consume in the waters of the United States. Holland America Line and Princess Cruises prohibit illegal drugs of any kind, without exception, onboard our ships and we are committed to upholding that standard. Marijuana is legal to purchase in Alaska, yet many visitors may find that there is no legal means to consume their purchases during their stay. To help guide this influx of visitors we feel the State should implement certain rules that apply to all marijuana establishments and their patrons.

Specifically, Holland America Group is in favor of a statewide requirement of signage in marijuana businesses and establishments to educate marijuana users on the legality of transportation or shipment of marijuana and marijuana products by U.S. mail, air travel, or in the waters of the United States.



In spring of 2016, the City and Borough of Juneau put forward an ordinance that included similar language regarding the display of documents in licensed premises pertaining to unlawful consumption and transportation. Section 49.65.115 2 states:

*(2) A sign containing the following warnings:*

*(A) "Consumption of marijuana in public is prohibited by law. AS 17.38.040; CBJ 42.20.230.";*

*(B) "The transportation or shipment of marijuana and marijuana products outside of the City and Borough of Juneau by U.S. mail, air travel or in the waters of the United States is prohibited by federal law. AS 17.38.010(d)."*

*(c) The warning signs required by subsection (b) of this section must be at least 11 inches by 14 inches in size, and the lettering must be at least one-half inch high and in contrasting colors. The warning signs must be displayed in conspicuous location inside the licensed premises near the main entrance.*

Holland America Group is supportive of a similar statewide regulation, and we believe signage outlining prohibited transportation of marijuana and marijuana products, which applies uniformly throughout Alaska, is an important component to public education, safety, and general welfare. We believe the signage could even be more specific and state: **"...in the waters of the United States, including travel on cruise ships or the Alaska Marine Highway System."**

RECEIVED  
JUN 17 2016

Sincerely,

BY: \_\_\_\_\_

Ralph Samuels  
VP, Government and Community Relations - Alaska  
Holland America Group - Serving Princess Cruises, Holland America Line,  
Seabourn, and P&O Australia

cc: Cynthia A. Franklin, Director - Alcohol Beverage & Marijuana Control Boards, Marijuana Control Board Members: Mark Springer, Loren Jones, Peter Mlynarik, and Brandon Emmet





June 15, 2016

Alcohol and Marijuana Control Board  
Atwood Building  
550 West 7<sup>th</sup> Ave, suite 1600  
Anchorage, AK 99501

Dear Chairman Shulte,

PenAir has been in business in Alaska for over 60 years and is one of the largest Alaska based airlines. We have watched with interest the legalization and the process for regulating the sale and transport of marijuana.

Since we are regulated by the Federal government, we feel that it would be prudent for State regulators to inform the public that while marijuana might be legal to purchase, it is not legal to transport on PenAir.

We would be supportive of a statewide regulation requiring signage in all marijuana retail outlets stating that the transport of marijuana and marijuana products by airline or U.S. Mail is prohibited under federal law. It is our understanding that there is a precedent for this language in the City and Borough of Juneau.

Thank you for your time and attention to this matter.

Sincerely,

Danny Seybert  
CEO, PenAir  
6100 Boeing Ave  
Anchorage, AK 99502

RECEIVED  
JUN 21 2016

BY: \_\_\_\_\_

cc: Marijuana Control Board, Cynthia A. Franklin, Director - Alcohol Beverage & Marijuana Control Boards, Marijuana Control Board Members: Mark Springer, Loren Jones, Peter Mlynarik, and Brandon Emmet

**From:** [Marijuana Licensing \(CED sponsored\)](#)  
**To:** [Oates, Sarah D \(CED\)](#)  
**Subject:** FW: marijuana cultivation facilities # 10288  
**Date:** Thursday, June 30, 2016 2:19:41 PM

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-Jane

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**From:** Marijuana Licensing (CED sponsored)  
**Sent:** Friday, June 03, 2016 3:34 PM  
**To:** Samaniego, Joe P (CED); Johnston, Naomi A (CED)  
**Cc:** Marijuana Licensing (CED sponsored)  
**Subject:** FW: marijuana cultivation facilities # 10288

Unperfected objection. Does not appear that she let the applicant know of the objection, although she does not specifically state this is an objection.

AMCO Staff

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**From:** Marci White [<mailto:alaskawhitehouse@yahoo.com>]  
**Sent:** Friday, June 03, 2016 10:16 AM  
**To:** Marijuana Licensing (CED sponsored)  
**Cc:** Marci White  
**Subject:** marijuana cultivation facilities

Hello,

I am writing today regarding marijuana cultivation and sales in Alaska, and the Fairbanks North Star Borough. One license for a cultivation facility has been applied for in our neighborhood, license #10288, dba Foxy Enterprises in the Fox area. My husband and I attended the FNSB Planning Commission meeting regarding this facility, and I have a few thoughts regarding what was said at that meeting.

- 1.)When the applicant was asked if the facility could be seen from the road, he said that it could not be seen from the road. It most certainly can be seen from the road . Perhaps the Planning Commissioners should check these things out for themselves.
- 2.)Several supporters for the facility were asked if the local bars (Silver Gulch and Howling Dog) were a problem for them or a nuisance to them, and they said that they had no problem with them. To my knowledge, those people live back off of the road, as we do. I talked to several neighbors who live along the Steese, and their opinion is different, as they hear cars racing up and down the highway, and loud music, etc., from those places. So just like those who support a marijuana grow operation and local bars, there are also people who do not appreciate these things in their neighborhood. Having said that, restaurants and bars are not federally illegal.

- 3.) It is my understanding that Foxy Enterprises will be erecting a 6' fence and installing security cameras. Comparing that with the local bars, the local bars do not have those security measures. This marijuana facility must be anticipating problems, or the crimes associated with growing and distributing this still federally illegal drug.
- 4.) We mentioned to the Planning Commission that a neighbor child gets off of the bus at the corner of this grow facility. The child's parents are not happy with this new facility, but, like many people in this area, do not want to say anything. We spoke to 3 of our immediate neighbors, and many more who live in the area and drive by there daily, and not one of them is for this thing, but as is true with so many things today, people do not want to get involved for many and various reasons. While at the meeting, 2 people called in to voice their support for the facility. Those people do not even live in the area.
- 5.) All of the people that were there in support of the facility said that they had known the owners for years, one I remember said 35 years. But one of the Kroshus plans is to get the business going and then to sell it. Are those people going to like who takes over the business and how they run it?!
- 6.) Lastly, although this area is zoned GU-1, it is mostly residential. I think that the Planning Commission needs to re-think allowing marijuana grow facilities in mostly residential areas. Perhaps the borough should establish certain areas for the cultivation of marijuana, especially at this time while it is still a federally illegal proposition.

Thank you for your time and consideration on my / our thoughts,  
Marci White, for Bob and Marci White  
2353 Steese Hwy  
Fairbanks, Ak 99712