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

Alaska Marijuana Control Board

Operating Plan Supplemental

Form MJ-04: Marijuana Cultivation Facility

What is this form?

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

What additional information is required for cultivation facilities?

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

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

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

Section 1 – Establishment Information

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

Licensee:	Kelsey Jene Martinsen, Sarinee Nuamnui	**License Number:**	10201		
License Type:	Standard Marijuana Cultivation Facility				
Doing Business As:	Happy Cannabis				
Premises Address:	225 South Front Street				
City:	Wrangell	**State:**	ALASKA	**ZIP:**	99929

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Section 2 – Prohibitions

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

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

Section 3 – Cultivation Plan

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

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

The facility will have two propagation rooms, the first is 14.7' x 6.4' x 10', and the second is 14.7' x 11.3' x 10'. The facility will have 15 separate grow rooms. The dimensions of each are 13.9' x 5.8' x 8.5'.
The total square feet for propagation one is 14.7' x 6.4 = 94.1 square feet.
The total square feet for propagation two is 14.7' x 11.3' = 166.1 square feet.
The total square feet for the grow rooms are 13.9' x 5.8' = 80.6 square feet.
80.6 square feet x 15 rooms is 1209 feet squared.
94.1 square feet + 166.1 square feet + 1209 square feet = 1469.2 square feet total.

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

The facility will use Shallow Water Cultivation Hydroponics. The growing medium will be Growstones, (hydroponic substrate made from manufactured glass bottles), and nutrient enriched water. The plant will be started in the Growstones, and the roots of the plants will be suspended in the nutrient rich, oxygenated water.

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

Clonex will be used to propagate clones.
The base nutrient solution is a two part hydroponic solution called Aqua Flakes A, and Aqua Flakes B. (please see attached for nutrient content).
The additives are:
Hydroguard, Silica Blast, Rapid Start.
PH Up.
PH Down.
(Please see attached file, "ingredients_01")

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

Each grow room system will have 80 gallons of tap water mixed with nutrients. The nutrient solution will be recirculated from a insulated box lined with waterproof pond material that is approx 2' x 2' x 1' to a insulated box lined with waterproof pond material that is 2' x 10' x 1'. The first propagation room will have two of these same systems, and one flood and drain table 4' x 4' x 3', and the second propagation room will have 3 of the same 2' x 10' x 1' systems. Weekly, the water will be drained into the sewage system to be treated at the wastewater treatment plant.

BOTANICARE
PLANT ENERGY PRODUCTS

SILICA BLAST

Silica Blast is a beneficial supplement to be used in conjunction with your standard nutrient program. Silicate helps strengthen plant tissue to help plants flourish in adverse environmental conditions such as heat, drought, and frost. For use in container gardens or soilless hydrogardening applications.

Directions:

Container Gardens:
Use between 1/2 - 1 teaspoon per gallon of water (2.5 - 5 ml / 4 liters).

Hydrogardens:
Mid size plants: 1/2 teaspoon per gallon (2.5 ml / 4 liters).
Mature plants: 1 teaspoon per gallon (5 ml / 4 liters).

For best results:
In container gardens, apply at every, or every other watering.
In hydrogardens, apply to reservoir every 5 - 7 days and adjust pH to 6.0

Guaranteed Analysis:
Soluble Potash (K_2O) 0.5%

ALSO CONTAINS NON-PLANT FOOD INGREDIENT:
2.0% Silicon (Si) from Sodium Silicate and Potassium Silicate

Derived from: Potassium Silicate

Information regarding the contents and levels of metals in this product is available on the internet at http://www.aapfco.org/metals.htm

Use only as directed. Keep away from children. Store in cool, dark place. F1330

BOTANICARE 6858 W. Chicago St. #3 Chandler, AZ 85226
877.753.0404 • www.botanicare.com

7 57900 21032 8

100% Satisfaction Guaranteed

1 QUART (960 ml) 32 oz • Net Weight 1.96 lbs (0.88 kg)

BOTANICARE
PLANT ENERGY PRODUCTS

Bacillus root inoculant

HYDROGUARD

Hydroguard is a natural bacterial root inoculant designed to decompose organic matter and may convert it to nutrients that can be absorbed directly by plants roots. The active bacterium in Hydroguard, Bacillus amyloliquefaciens, helps create a natural environment.

Direction for use:
Use with every watering during your entire growth cycle. Shake well before each use and never mix concentrates. Always allow nutrient solution to mix well before adjusting pH.

Amounts in ml/gallon (3.8 l) 1/2 tsp=2.5 ml 1 teaspoon=5 ml 1 tablespoon=15 ml 1 ounce=30 ml

Stage of Growth	Seedlings / Clones	Vegetative			Bloom Transition		Flowering / Fruiting					Ripening	Flush
Number of Weeks	Week 1	Week 1	Week 2	Week 3	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Hydroguard	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	2 ml	0

Visit botanicare.com for recommendations. Application amounts will vary based on plant types and needs.

CONTAINS NON-PLANT FOOD INGREDIENT:
ACTIVE INGREDIENT:
Bacillus amyloliquefaciens* 0.038%
INERT INGREDIENTS 99.962%
TOTAL 100%
*Contains a minimum of 1.00x10^4 cfu's /ml

Guaranteed for 2 years after date on package. Use within 6 months of opening.

Information regarding the contents and levels of metals in this product is available on the internet at http://www.aapfco.org/metals.htm

Use only as directed. Keep away from children and pets. Not for human consumption. Store in cool, dark place. F1330

BOTANICARE 6858 W. Chicago St. #3 Chandler, AZ 85226
877.753.0404 • www.botanicare.com

7 57900 73085 7

100% Satisfaction Guaranteed

1 QUART (960 ml) 32 oz • Net Weight 1.87 lbs (0.84 kg)

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1 - 0.5 - 1
GUARANTEED ANALYSIS:

Total Nitrogen (N).....1.0%
0.7% Ammoniacal Nitrogen
0.3% Nitrate Nitrogen
Available Phosphate (P_2O_5).....0.5%
Soluble Potash (K_2O).....1.0%
Molybdenum (Mo).....0.001%

Derived from:
Ammonium Molybdate, Ammonium Nitrate, Monopotassium Phosphate, Potassium Nitrate.

WARNING: This product contains molybdenum (Mo). Crops high in molybdenum can be toxic to ruminant animals. Use only according to manufacturer's directions.

Information regarding the contents and levels of metals in this product is available on the internet at http://www.aapfco.org/metals.htm F-1109

AQUA FLAKES A
BASIC NUTRIENT - RECIRCULATING
GUARANTEED ANALYSIS
N - P - K 0.3 - 0 - 0.3
Total Nitrogen (N) 0.3%
0.02% Ammoniacal Nitrogen
0.28% Nitrate Nitrogen
Soluble Potash (K2O) 0.3%

DERIVED FROM:
Calcium Nitrate, Ammonium Nitrate, Nitric Acid, Potassium Hydroxide

CONTENTS:

☑ 1 Liters	33.8 Fl.oz.	1.1 kg	2.4 lbs
☐ 5 Liters	1.3 Gal	5.5 kg	12.1 lbs
☐ 10 Liters	2.6 Gal	11 kg	24.2 lbs
☐ 20 Liters	5.2 Gal	22 kg	48.5 lbs

AQUA FLAKES A
NUTRIENTES BASICOS
ANALISIS CERTIFICADOS
N - P - K 0.3 - 0 - 0.3
Total de Nitrógeno (N) 0.3%
0.02% Nitrógeno amoniacal
0.28% Nitrato de Nitrógeno
Potasa Soluble (K2O) 0.3%

DERIVADO DE:
Nitrato de Calcio, Nitrato de Amonio, Acido Nítrico, Hidróxido de Potasio

AQUA FLAKES A
BASISVOEDING
GEGARANDEERDE ANALYSE
N - P - K 0.3 - 0 - 0.3
Totaal stikstof (N) 0.3%
0.02% Ammoniumstikstof
0.28% Nitraatstikstof
Oplosbare potas (K2O) 0.3%

AFGELEID VAN:
Calciumnitraat, Ammoniumnitraat, Salpeterzuur, Kaliumhydroxide

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Describe the marijuana cultivation facility's waste disposal arrangements:

After the plant is cultivated the roots stalks, stems and leaves that will not be sold will be ground and stored in 35 gallon containers. When full the software will record weight of product and initialize notice to board. Three days after the notice is initiated we will submerge the product in used fryer oil. The software will then generate a transport manifest, and the licensee, employee, or agent of the facility will transport waste to the local bailer facility.

Section 4 – Odor Control

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

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

The propagation rooms, drying/curing room, and grow rooms will be equipped with carbon filters that draws air from the room with an Inline Duct Fan that will create negative pressure. The negative air pressure in the room will not allow smells to escape. The facility has made sure to use filters that are rated above the suggested filters for the size of the rooms. The interior walls and ceilings will be lined with a vapor barrier, and painted with latex paint to keep smells from permeating through.

Propagation Room #1 will be equipped with a 8" x 24" carbon filter and a 8" Inch Inline Duct Fan. The suggested CFM (Cubic Feet per Minute) for that area is 464. The actual CFM rating of the filter is 750.
Propagation Room #2 will be equipped with an 8" x 39" carbon filter and a with an 8" Inch inline duct fan. The suggested CFM for that area is 704. The actual CFM rating of filter is 950.
The grow rooms and drying/curing will each be equipped with an 8" x 24" carbon filter and an 8 Inch inline duct fan. The suggested CFM for those rooms area are 419. The actual CFM rating of the filter is 750.
The strains grown will be started a week a part to stagger the grow. This allows for only three to six plants out of 45 to be maturing at a time. This is optimal to reduce smell opposed to having all 45 plants flowering at one time.

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Section 5 – Testing Procedure and Protocols

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

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

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

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

After a specific strain of cannabis is dried cured, and batched together, the licensee who will be designated sample taker, will take a random homogeneous sample. The weight will be recorded in the software system and designated testing. The software will print out document the licensee will sign stating samples have been randomly taken. A copy of document will go to the testing facility, a copy will remain at our facility. The software will print out all labels, and manifests in compliance with 3 AAC 306.750. The licensee will follow manifest to deliver samples.
The licensee, staff, or agent of licensee will then divide cannabis into 5 lb wholesale food grade mylar zip lock bags. The bags will be bar coded as awaiting testing. In the bags we will include Boveda humidity packs. After labeling we will segregate the cannabis into separate locked storage container designated for cannabis that is awaiting testing. After testing is complete we will store records.

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Section 6 – Security

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

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

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

Restricted Access Area (3 AAC 306.430):

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

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

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

All rooms where cannabis is grown, transported, harvested cured and stored are closed to the public. There are no windows in which the public may observe cannabis being cultivated. The smells of the cannabis are filtered thoroughly.

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

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

Signature of licensee

Printed name

Subscribed and sworn to before me this 27th day of October, 2016.

NOTARY PUBLIC
ALEISHA MOLLEN
STATE OF ALASKA
MY COMMISSION EXPIRES July 22, 2018

Notary Public in and for the State of Alaska.

My commission expires: 7-22-18

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(Additional Space as Needed):