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Alaska Marijuana Control Board

Operating Plan Supplemental
Form MJ-04: Marijuana Cultivation Facility

What is this form?

This operating plan supplemental form is required for all applicants seeking a marijuana cultivation facility license and must accompany **Form MJ-01: Marijuana Establishment Operating Plan**, 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 the statutes and regulations.

If your business has a formal operating plan, you may include a copy of that operating plan with your application, but all fields of this form must still be completed per 3 AAC 306.020 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
- Waste disposal
- Odor control
- Testing procedure and protocols
- Packaging and labeling

This form must be completed and submitted to AMCO's main office before any new or transfer application for a standard marijuana cultivation facility or limited marijuana cultivation facility license will be considered complete.

Section 1 – Establishment Information

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

Licensee:	Tundra Farm 1 Inc.	**MJ License #:**	18704		
License Type:	Standard Marijuana Cultivation Facility				
Doing Business As:	TUNDRA FARMS				
Premises Address:	1210 E 70th Ave #2				
City:	Anchorage	**State:**	Alaska	**ZIP:**	99518

Received by AMCO 1.26.19

Section 2 – Overview of Operations

2.1. Provide an overview of your proposed facility's operations. Include information regarding the flow of marijuana from seed or clone to harvest and transfer from your premises:

All marijuana cultivated at Tundra Farms will be tracked from seed or clone to sale or destruction in METRC, the marijuana inventory tracking system. All plants that reach eight inches will be tagged and assigned a tracking number. Marijuana will be harvested and grouped into batches up to five (5) pounds of individual strains and will be assigned a METRC harvest batch number. A random sample will be collected from each batch and sent to a licensed testing facility. The remainder of the batch will be segregated until the testing results are received. A transport manifest generated from METRC will be sent with each transfer of marijuana to another licensed facility. Marijuana will be sealed in not more than five (5) pound containers inside a locked storage compartment within the vehicle for wholesale transactions and up to one ounce containers for re-sale by retailers without re-packaging. Package labels will include: (1) the name and license number of the cultivation facility; (2) the date the marijuana was harvested; (3) the harvest batch number assigned to the marijuana; (4) the date the marijuana was packaged; (5) the net weight and the quantity of usable marijuana packaged in a standard of measure compatible with the inventory tracking system; and (6) a complete list of all pesticides, fungicides, and herbicides used in the cultivation of the marijuana.

Section 3 – Prohibitions

Review the requirements under 3 AAC 306.405 and 3 AAC 306.410.

3.1. I certify that the marijuana cultivation facility will not: Initials

a. **sell, distribute, or transfer any marijuana or marijuana product to a consumer, with or without compensation;** DA

b. **allow any person, including a licensee, employee, or agent, to consume marijuana or marijuana product on the licensed premises or within 20 feet of the exterior of any building or outdoor cultivation facility; or** DA

c. **treat or otherwise adulterate marijuana with any organic or nonorganic chemical or compound to alter the color, appearance, weight, or odor of the marijuana.** DA

Section 4 – Cultivation Plan

Review the requirements under 3 AAC 306.420 and 3 AAC 306.430.

4.1. 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:

Cultivation Room 1 = 2,196 Square Feet

Veg Area = 288 Square Feet

Mother Area = 100 Square Feet

Cultivation Room 2 = 388 Square Feet (Cultivation Room 2 is veg and mother area)

Cultivation Room 3 = 1,400 Square Feet

Clone Room/Germination Room = 314.65

Overall square footage of the facility = 4,298.65

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You must be able to certify the statement below. Read the following and then sign your initials in the box to the right: Initials

4.2. The proposed area(s) for cultivation are clearly identified on the Form MJ-02: Premises Diagram that is submitted with this application. DH

Answer "Yes" or "No" to the following question: Yes No

4.3. Will the marijuana cultivation facility include outdoor production? ☐ ☑

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

4.4. Describe the method(s) used to ensure that any marijuana at the marijuana cultivation facility, whether indoors or outdoors, cannot be observed by the public from outside the facility:

Tundra Farms will ensure that marijuana cannot be visible by the public from any door to the facility and will not have windows to the cultivation areas. All movement/transport of marijuana will be discrete, utilizing the designated door. Additionally, there will be a sight obscuring fence surrounding the entire facility, further preventing marijuana from being viewable by the public. All growing, processing, curing, packaging and labeling activities will be done inside the facility, not visible from outside. All marijuana will be securely packaged, labeled and organized for transport within the facility before being moved to the transport vehicle.

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

The growing mediums Tundra Farms will use are:
- Rockwool
- Coco
- Soil-less medium farming
- Hydroponics
- Aeroponics

4.6. Provide the complete product name and EPA registration # (if applicable) for each of the cultivation facility's pesticides and pest control products to be used. All proposed products must be on DEC's list of approved pesticides in the state of Alaska:

Tundra Farms will be using the following Pesticides:
Any Pesticides on the DEC's evolving excel spread sheet and Neem Oil (70051-2-54705) and rosemary oil (NA),

4.7. Describe all other fertilizers, chemicals, gases, and delivery systems, including carbon dioxide management, to be used at the marijuana cultivation facility:

The following fertilizers will be utilized at the Tundra Farms cultivation facility:
Chemical gases - co2 burners using natural gas.
Fertilizers - General Hydroponics brand (flora grow, flora bloom and flora micro), Extreme Gardening (Azos and Mykos), Power Si (Silicit Acid) and CloneX. Advance Nutrients (PH up) - Potassium Hydroxide, Advance Nutrients (PH down) - Phosphoric Acid.
Citiric acid, Potassium Bicarbonate, Hydrogen Peroxide

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

Tundra Farms will use a drip irrigation watering system and will utilize soil-less hydroponic recirculation, Danny will make the nutrients solution in a feeding reservoir, which will be pumped into each growing room and feed the plants via drip irrigation system. The runoff nutrient solution will be collected into a runoff reservoir and pumped back into the feeding reservoir. Little to no waste water is expected. If there is any sizable amount of waste water, Tundra Farms will use Reverse Osmosis water filters to collect clean filtered water into a RO reservoir tank (2:1 filtered water to drain ratio). Danny will then send this filtered RO water to smaller feeding reservoirs where nutrients will be added and pH levels adjusted. From this feeding reservoir, Tundra Farms will be using water pumps connected to PVC pipes that are plumbed to the rooms. These pipes will then be further divided into smaller hoses that will connect to individual rockwool cubes with plants. These plants will be on trays that collect the runoff nutrient water. This runoff nutrient water will be draining into a recirculating reservoir, which will be plumbed into the drain and also plumbed back to the feeding reservoir where it will be fed again to the plants.

Section 5 – Waste Disposal

Review the requirements under 3 AAC 306.740.

You must be able to certify the statement below. Read the following and then sign your initials in the box to the right: Initials

5.1. The marijuana cultivation facility shall give the board at least three days written notice required under 3 AAC 306.740(c) before making marijuana waste unusable and disposing of it. MY

5.2. Describe how you will store, manage, and dispose of any solid or liquid marijuana waste, including wastewater generated during marijuana cultivation, in compliance with any applicable laws. Include details about the material(s) you will mix with ground marijuana waste and the processes that you will use to make the marijuana waste unusable for any purpose for which it was grown:

Tundra Farms will be disposing of: (1) marijuana that is identified as contaminated, infected or is otherwise rejected for quality or fails to meet quality testing; (2) waste from marijuana flowers, plant material and trimmings; (3) run off water from cultivation and processing; (4) any other materials or containers in contact with marijuana that risks contamination; and (5) any other marijuana deemed as waste by the MCB or Director. Marijuana waste will be stored away from all other marijuana in a locked container in the facility as shown on the diagram. Marijuana waste will be rendered unusable by grinding and then mixing with other compostable and non-compostable material such as, oil and insulation; until the resulting mixture is no more than fifty percent (50%) marijuana waste. Once Marijuana is rendered unusable it will be stored in a locked dumpster until pick up. A notice via email will be sent to AMCO Enforcement not later than three days prior to rendering waste unusable and will be recorded in METRC when that function becomes available. Management will maintain a log on the status of all marijuana waste, tracking the type, date of disposal, reason for disposal, date it was rendered unusable, and final destination. Tundra Farms anticipates to have little to no water run off. If there is any sizable amount of waste water, the facility will use Reverse Osmosis water filters to collect clean filtered water into a RO reservoir tank (2:1 filtered water to drain ratio). Danny will then send this filtered RO water to smaller feeding reservoirs where nutrients will be added and pH levels adjusted. From this feeding reservoir, Tundra Farms will be using water pumps connected to PVC pipes that are plumbed to the rooms. These pipes will then be divided into smaller hoses that will connect to individual rockwool cubes with plants. These plants will be on trays that collect the runoff nutrient water. This runoff nutrient water will be draining into a recirculating reservoir, which will be plumbed into the drain and also plumbed back to the feeding reservoir where it will be fed again to the plants. This information will be recorded in the disposal log and securely stored as a business record, available to AMCO upon request.

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Section 6 – Odor Control

Review the requirements under 3 AAC 306.430.

Answer "Yes" or "No" to the following question:	Yes	No
6.1. Have you received an exemption from your local government for the odor control requirement set forth in 3 AAC 306.430(c)(2)?	☐	☒

If "Yes", you must be able to certify the statement below. Read the following and then sign your initials in the box:	Initials
I am attaching to this form documentation of my odor control exemption from the local government.	☐

If "No" to question 6.1., 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:

Commercial grade, activated carbon filters and heppa filtration will be used throughout the cultivation areas to filter all air before being vented outside. The carbon filters will be regularly replaced to ensure maximum performance at all times. Tundra Farms will seal off all doors and rooms in the cultivation facility to ensure no odor is detected outside of the cultivation area as well as utilizing air neutralizers and timed air fresheners throughout the cultivation facility. Additionally, employees will be tasked with weekly "smell tests". The "smell test" will consist of the employee walking to each edge of the property line and attempting to smell marijuana. If marijuana odor is present at the edge of property line - the facility will replace the carbon filters (if necessary) and/or install additional odor controls.

Section 7 – Testing Procedure and Protocols

Review the requirements under 3 AAC 306.455 and 3 AAC 306.465.

You must be able to certify each statement below. Read the following and then sign your initials in the corresponding box:	Initials
7.1. I understand and agree that the board or director will, 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.	DA
7.2. I will ensure that any individual responsible for collecting random, homogenous samples for required laboratory testing under 3 AAC 306.455 will prepare the necessary accompanying signed statement, provide the signed statement to the marijuana testing facility, and maintain a copy as a business record under 3 AAC 306.755.	DA

7.3. Describe the testing procedures and protocols the marijuana cultivation facility will follow:

All harvested marijuana will be processed into batches of five (5) pounds or less. A designated agent from the facility will collect a testing sample at random from each batch. The individual responsible for collection will prepare a signed statement attesting that each sample was randomly selected, provide a signed statement to the testing facility, and maintain a copy as a business record. Tundra Farms will transport all samples to a licensed testing facility in compliance with the state regulations and the company's transportation policies. The facility will ensure that any individual transporting marijuana has a valid marijuana handler permit issued by AMCO. While awaiting the testing results, the remainder of the batch will be segregated in the secured quarantine area. The facility will maintain all testing results as part of its official business records, and will enter the results in METRC. Tundra Farms will comply with any request from AMCO for a random sample from any growing medium, soil amendment, fertilizer, crop production aid, pesticide, or water and shall bear the expense for all such requests.

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Section 8 – Packaging and Labeling

Review the requirements under 3 AAC 306.470 and 3 AAC 306.475.

Answer "Yes" or "No" to the following question:	Yes	No
8.1. Will the marijuana cultivation facility be packaging marijuana for a retail marijuana store to sell to a consumer without repackaging?	☑	☐

If "Yes", describe how the marijuana cultivation facility will ensure that the marijuana sold will meet the packaging requirements in 3 AAC 306.470, and provide a sample label that the facility will use to meet the labeling requirements set forth in 3 AAC 306.475:

The shipping container will have a label stating that a licensed testing facility has tested each batch in the shipment, and list: (1) the date of final testing; (2) the cannabinoid potency profile, expressed as a range of percentages that extends from the lowest percentage to highest percentage of concentration for each cannabinoid listed from every test conducted on that strain of marijuana from the same marijuana cultivation facility within the last three months; (3) a statement listing the results of microbial testing; and (4) a statement listing the contaminants for which the marijuana was tested, including molds, mildew, filth, herbicides, pesticides, fungicides, and harmful chemicals. Any packaging done at the facility will be performed in an area specifically set aside for packaging and monitored with 24 hour surveillance. Packaging will be uniform with labels secure and prominently displayed. The facility will use certified scales in compliance with the Alaska Weights and Measures Act, and will maintain registration and inspection reports at the facility. After agents package marijuana they will be placed in sanitized, air-tight containers, labeled with all compliant labeling information, and be given a barcode for the inventory control system. Plastic packaging will be heat-sealed without an easy-open tab, dimple, corner, or flap. Packaged marijuana will be stored in a secured area until ready for transport. All packaging will be inspected, accepted or rejected, and recorded in the log, and Danny and/or the on site manager will check all final packages to ensure that they will secure marijuana from contamination and not impart toxic or deleterious substances. Labels will include: (1) the name and license number of the cultivation facility; (2) the date the marijuana was harvested; (3) the harvest batch number assigned to the marijuana; (4) the date the marijuana was packaged; (5) the net weight and the quantity of usable marijuana packaged in a standard of measure compatible with the inventory tracking system; (6) a complete list of all pesticides, fungicides, and herbicides used in the cultivation of the marijuana. When Tundra Farms cultivation facility packages marijuana for a retail marijuana store to sell to a consumer without repackaging, the packaging may not have any printed images, including cartoon characters, that specifically target persons under 21 years of age. In addition, the packaging must protect the product from contamination and may not impart any toxic or damaging substance to the marijuana.

Answer "Yes" or "No" to the following question:	Yes	No
8.2. Will the marijuana cultivation facility be packaging marijuana in wholesale packages?	☑	☐

If "Yes", describe how the marijuana cultivation facility will ensure that the marijuana sold will meet the packaging requirements in 3 AAC 306.470, and provide a sample label that the facility will use to meet the labeling requirements set forth in 3 AAC 306.475:

Wholesale packages of marijuana will be sold to other licensed facilities in packages up to five pounds consisting of a single strain or a mixture of strains with strain names identified on the label. Plastic packaging will be heat-sealed without an easy-open tab, dimple, corner, or flap. Packaged marijuana will be stored in a secured area until ready for transport. All packaging will be inspected, accepted or rejected, and recorded in the log, and the on site manager or Danny will check all final packages to ensure that they will secure marijuana from contamination and not impart toxic or deleterious substances. Wholesale labels will be checked for: (1) the date of final testing; (2) the cannabinoid potency profile, expressed as a range of percentages that extends from the lowest percentage to highest percentage of concentration for each cannabinoid listed from every test conducted on that strain of marijuana from the same marijuana cultivation facility within the last three months; (3) a statement listing the results of microbial testing; and (4) a statement listing the contaminants for which the marijuana was tested, including molds, mildew, filth, herbicides, pesticides, fungicides, and harmful chemicals. A METRC generated tracking label will be affixed to each package. The shipping container will have a label stating that a licensed testing facility has tested each batch in the shipment, and list: (1) the date of final testing; (2) the cannabinoid potency profile, expressed as a range of percentages that extends from the lowest percentage to highest percentage of concentration for each cannabinoid listed from every test conducted on that strain of marijuana from the same marijuana cultivation facility within the last three months; (3) a statement listing the results of microbial testing; and (4) a statement listing the contaminants for which the marijuana was tested, including molds, mildew, filth, herbicides, pesticides, fungicides, and harmful chemicals. If a wholesale shipment sold to another licensed facility is from a harvest batch that has not been tested for contaminants, a label will be affixed identifying each such contaminant.

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 AS 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 unsworn falsification that this form, including all accompanying schedules and statements, is true, correct, and complete.

Signature of licensee

Daniel Hordoan

Printed name of licensee

VALERIE MASTOLIER
Notary Public
State of Alaska
My Commission Expires Jun 7, 2022

Notary Public in and for the State of Alaska

My commission expires: 6/7/22

Subscribed and sworn to before me this 10 day of September, 2018.

Received by AMCO 1.29.19

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(Additional Space as Needed):

Front of Package	Back of Package
Strain Name **Indica-Dominant** *Insert statement disclosing a complete list of all pesticides, fungicides and herbicides tested for and not tested* Net Weight: 1LB	Cultivator: Tundra Farms License #18704 HB#: XXXXX Strain: **METRC #:** **Testing Lab:** _____**License #:** _____ **Testing Date:** _____ HBXXXX test results: **Fungicides:** None **Herbicides:** None **Pesticides:** None **Total THC:** XXXX% **Total CBD:** XXXX% **THC:** XXXX% **CBD:** XXXX% **THC-A:** XXXX% **CBD-A:** XXXX% **CBN:** XXXX% **3 months of past test results for same strain of plant type: Cannabinoid Profile:** **Total THC:** XXXX% **Total CBD:** XXXX% **THC:** XXXX% **CBD:** XXXX% **THC-A:** XXXX% **CBD-A:** XXXX% **CBN:** XXXX% **Alaska Safety Warning**: Marijuana has intoxicating effects and may be habit forming and addictive. Marijuana impairs concentration, coordination and judgment. Do not operate a vehicle or machinery under its influence. There are health risks associated with consumption of marijuana. For use only by adults twenty-one and older. Keep out of the reach of children. Marijuana should not be used by women who are pregnant or breast feeding.

*or similar format and content

Retailer: Tundra Farms **License No: 18704**
Cultivator: **License No:**
Harvest Batch No: **Package No:**
Net Weight: **Strain:**
Testing Facility: **License No:**
THC: **THCA:** **CBD:** **CBDA:** **CBN:**
Microbial Test: **Fungicides:** **Pesticides:** **Herbicides:**
Fertilizers: **Soil Amendment:**

Alaska Safety Warning: Marijuana has intoxicating effects and may be habit forming and addictive. Marijuana impairs concentration, coordination and judgment. Do not operate a vehicle or machinery under its influence. There are health risks associated with consumption of marijuana. For use only by adults twenty-one and older. Keep out of the reach of children. Marijuana should not be used by women who are pregnant or breast feeding.

*Logo to be added

123456789
Product:
Tundra Farm 1 Inc. 4a - 17120

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