# CULTIVATION and OPERATIONS PLAN

***Updated April 28th 2020 Phase #1***

## Applicant:

# Amarok Ventures, LLC

# App# 11021

**APN: 221-021-023**

**Salmon Creek, CA**

**Mailing Address:**

**106 2nd Street**

**Encinitas, Ca 92024**

## Agent:

**1 Degree Consulting, a division of Humboldt Green, LLC**

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# CULTIVATION & OPERATIONS PLAN

Amarok Ventures, LLC (AV) submitted Apps# 11021 in 2016 for an existing Outdoor cultivation area of 21,732 sq.ft. and an existing Mixed-light cultivation area of 5,280 sq.ft. Humboldt County Planning and Building Department, Cannabis Services Division has amended these areas to an existing Outdoor cultivation area of 10,230 and an existing Mixed-light cultivation area of 8,370 sq.ft. This is a total existing cultivation area of 18,600 sq.ft. of cannabis canopy.

AV is updating the Operations Plan PHASE 1 to utilize the 18,600 sq.ft. as follows:

Outdoor cultivation areas will total 13,179 sq.ft and the Mixed-light cultivation area will be 5,431 sq.ft. This greenhouse has always used light deprivation techniques, and therefore can be included as part of Mixed-light cultivation area. The remainder of the Outdoor cultivation areas will be full term and not be utilizing any light deprivation.

## ***Description of Water Source, Storage, Irrigation Plan, and Projected Water Usage***

### WATER SOURCE AND STORAGE

The source of irrigation water for the project is an on-stream reservoir. The reservoir's capacity is approximately 700,000 gallons. AV will update this cultivation operations plan with respect to anticipated yearly catchment once more information becomes available. Historically, including the most recent drought years, the amount of surface water diverted has been sufficient to meet the irrigation needs. AV has filed a Lake and Streambed Alteration Agreement with the California Department of Fish and Wildlife (CDFW) for this on-stream reservoir. AV has eleven (11) hard storage tanks with storage capacity of 22,950 gallons. See Site Plan for location and sizes. Total water storage capacity including the reservoir and the hard tanks will be approximately 722,950 gallons. AV will add rain catchment and reservoirs to increase storage.

### IRRIGATION PLAN

Irrigation water is applied at agronomic rates to minimize over watering of cannabis plants and reduce the risk of irrigation runoff. Irrigation is applied through a traditional drip irrigation and hand watering for feeding applications. AV will be watering every other day, and feeding plants every other watering, during the growing season. AV waters in the morning/early evening hours to reduce evaporative loss. Ground cover and weed barrier is used to minimize weed growth, which reduces water loss. AV uses natural soil amendments to aid in soil moisture retention, as part of the Irrigation Plan. Hay will be placed on base of plants to limit evaporation.

### PROJECTED WATER USAGE

AV will be cultivating 13,179 sq. ft. of Outdoor cannabis and 5,431 sq. ft. of Mixed-light cannabis.

AV will stagger the full-term outdoor cultivation, planting approximately half of the cultivation area in late May and the second half in early June. Based on historical usage and estimates of cannabis irrigation, and the irrigation practice of watering every 3rd day, AV anticipates using approximately 308,606 gallons annually for irrigation of Outdoor cultivation.

For Mixed-light cultivation, AV is anticipating approximately four (4) cultivation harvests. with the first cycle beginning March 1st and the fourth cycle ending in February. Essentially, year-round growing. Based on historical and estimates from and AV's practice of watering every 3rd day, AV anticipates using approximately 115,000 gallons annually for irrigation of Mixed-light cultivation.

Accordingly, AV's total water usage for the growing season is projected to be approximately 423,606 gallons annually. The above figures are weather dependent and are only estimated water usage totals. AV will install flow meters at all critical points to measure actual yearly water usage upon implementation of the project.

## ***Description of Site Drainage, including Runoff and Erosion Control Measures***

**SITE DRAINAGE**

There are two (2) Class II watercourses and four (4) Class III watercourses on the property. There are five (5) stream crossings located on the property. AV maintains all roads and developed areas on the property so that they are hydrologically disconnected from watercourses to the extent feasible. AV has consulted with Timberland Resource Consultants (TRC) to improve site drainage from all developed areas and roads on the property. AV notified CDFW and negotiated a LSAA for surface water diversion, the reservoir spillway, multiple stream crossings, and the steam restoration work.

**EROSION CONTROL MEASURES**

The roads on the property are well maintained to mitigate surface erosion along their pathways. All road on the property will be upgraded to function in compliance with the standards recommended in the *Handbook for Forest, Ranch & Rural Roads.* To mitigate potential erosion from road surface discharge, AV will install water bars to disconnect from streams and channel road surface runoff away from unstable locations and implement ditch relief culverts to disperse flows. AV has consulted with TRC to implement erosion control measures around the reservoir to ensure reservoir stability and prevent erosion from occurring at reservoir outlets, which may include adding rock armoring to outlet points and vegetating outlet areas to reinforce slopes.

**RUNOFF CONTROL MEASURES**

There is no runoff from AV's cultivation activities. AV uses drip irrigation, applies water at agronomic rates, uses timers to avoid overwatering and maintains vegetation around cultivation areas to promote infiltration and minimize runoff and sediment transportation to

receiving waters. AV's cultivation areas are setback at least 50-feet from all Class III watercourses and cultivation activities are excluded from this buffer area to maintain its essential function. AV has installed jute netting, seeded, and placed straw mulch around cultivation areas to prevent contaminant transportation to receiving waters. AV has consulted with TRC to effectively control runoff from presenting threats to water quality.

## ***Details of Measures Taken to Ensure Protection of Watershed and Nearby Habitat***

**PROTECTION OF WATERSHED AND HABITAT**

All Cultivation areas are setback at least 50-feet from the nearest Class III watercourses. Buffers are maintained at natural slope with native vegetation to prevent sediment transport to receiving waters. These buffers are unaltered and appear to be of sufficient width to filter wastes from potential runoff and to maintain essential functions of water courses. Riparian areas are protected in a manner that maintains their essential functions. AV will re-seed and re-vegetate areas within the buffers to mitigate any disturbance of natural habitat.

AV will implement measures to enhance the prevention of invasive species habitation of the reservoir area. AV will follow guidelines promulgated by the CDFW concerning prevention of invasive species habitation.

**CULTIVATION WASTE PROTOCOLS**

AV is implementing measures to reduce and/or eliminate cultivation related waste. Soils are left in place in beds within greenhouses at the end of the season to be reamended and reused for subsequent growing seasons. Greenhouses and beds are covered and are located at least 50 feet from the nearest Class III watercourse to ensure that spent soils are not windblown to receiving waters.

Pots containing starts and clones will be washed, rinsed, and reused between seasons and recycled at the end of their useful life. AV will recycle pesticide and fertilizer containers per California pesticide regulations.

All other associated waste will be placed in garbage cans with lids and placed under cover with roof and side wind protection near the exterior of the cabin or inside the processing facilities as shown on the site map. AV will determine frequency of disposal to permitted disposal sites that prevents rodent infestation and other nuisances on the property. This will likely be done on a bi-weekly schedule during the growing season.

**WASTE DISPOSAL**

The site generates a small amount of waste. All AV has waste cans equipped with lids in secondary containment to prevent leaching and transport of foreign materials to receiving waters. The cans are located next to the cabin under the roof cover and equipped with side wind protection. AV may store waste inside proposed processing facility or in the existing processing facility. AV will determine the frequency of pickup and delivery to disposal facilities

that prevents rodent infestation and other nuisances on the property. This will likely be done on a bi-weekly schedule during the growing season. For organic materials that are appropriate for compost AV will place said materials in their 8' x 15' compost area.

**HUMAN WASTE**

There is an on-site waste treatment system (OWTS) that services the on-site cabin. The OWTS appears to be functioning properly and there is no dispersal field failure. The OWTS meets all applicable setback requirements. No permit was obtained for this OWTS, however, it is likely that this system will fall under Tier 0 for existing systems that are properly functioning and do not meet the conditions of failing systems or otherwise require corrective action, as defined in the Humboldt County Local Agency Management Plan.

There will be no on-site housing available for employees. The onsite cabin is for commercial use, and currently hosts the only bathroom. AV is proposing to remodel the existing cabin and existing Processing Facility to meet all needs associated to the commercial use of the property. Bathroom facilities will meet local, state and federal requirements (i.e. ADA requirements) as required by ordinance. AV is proposing to use the existing OWTS to meet usage. AV has an ADA compliant Port a Let unit in place on site.

## ***Protocols for Proper Storage and Use of Fertilizers, Pesticides, and Other Regulated Products***

**FERTILIZERS**

The site has five (5) cargo containers each 8'x20', for commercial use. Nutrients/fertilizers will be stored in one of the cargo containers (CC#1) near the cultivation site referenced above. AV will store and use nutrients/fertilizers according to the protocols it uses for storage and use. Nutrients/fertilizers will be kept in secondary containment totes to further prevent leaching. AV will use all nutrients/fertilizers according to the label and use personal protective equipment as required by the label.

Before making a nutrient/fertilizer application, operators will evaluate equipment, weather conditions, and the property to be treated and surrounding areas to determine the likelihood of substantial drift or harm to non-target crops, contamination, or the creation of a health hazard.

**PESTICIDES**

Pesticides are stored in the same cargo container (CC#1) as the nutrients/fertilizers near the cultivation site. AV may relocate pesticide storage to proposed processing facility which will meet commercial building standards. Pesticides will be kept in original containers with labels affixed and kept in secondary containment totes to further minimize spills from being transported to groundwater or receiving surface waters. Approved spill-proof containers with appropriate warning and information labels will be used to transport pesticides to and from the site.

AV will maintain and keep personal protective equipment required by the pesticide label in good working order. Coveralls will be washed after all use when required. All required warning signs will be posted and material safety data sheets (MSDS) will be kept in the area where pesticides are stored. Emergency contact information in the event of pesticide poisoning shall also be posted at the work site including the name, address and telephone number of emergency medical care facilities.

Before making a pesticide application, operators will evaluate equipment, weather conditions, and the property to be treated and surrounding areas to determine the likelihood of substantial drift or harm to non-target crops, contamination, or the creation of a health hazard.

**SOIL AMENDMENTS**

AV does not store soil amendments on site. Instead, bulk amendments are purchased off-site and immediately mixed in to soil when delivered to the site.

Before making a soil amendment application, operators will evaluate equipment, weather conditions, and the property to be treated and surrounding areas to determine the likelihood of substantial drift or harm to non-target crops, contamination, or the creation of a health hazard.

**PETROLEUM PRODUCTS AND STORAGE**

AV does utilize gasoline and diesel generators for cultivation activities. See generator usage details in Cultivation Activities section below. Currently, AV stores all petroleum in a 1000-gallon containment with 100% overflow containment, capable of holding four (4) 55-gallon containers for gasoline. Five (5) 5-gallon gasoline cans are also onsite in the existing processing facility near the cultivation site. Gas cans are stored in secondary containment. AV has a spill-proof kit on site to prevent seepage into groundwater or transport to surface water.

AV is proposing to add a two (1) 1,000-gallon diesel fuel storage tanks for future use near the existing processing facility. AV currently has a 200-gallon propane tank which services the on-site cabin. AV is proposing to build a “fuel depot” to house the gasoline and diesel storage. This fuel depot will be located next to the road for easy access for delivery and gravity flow to the generators. See Site Plan for location. This would utilize one roof to cover all three of the containment reservoirs, 1000-gallon for gasoline, and 2 – 1,100-gallon containment reservoir for each 1,000-gallon tank. This would house all fuel storage for the project. This structure would also utilize seasonal side walls during winter months.

Generators are in a cargo container (CC#5), as a dedicated generator area. Generators are equipped with secondary containment and spill-prevention kits are onsite. AV will muffle generator noise to less than 50 decibels, by housing within the container, to prevent disturbance of surrounding habitat.

## ***Description of Cultivation Activities (Immature, Outdoor, Mixed-light)***

**CULTIVATION ACTIVITIES**

AV is proposing to permit an existing, Outdoor cultivation site with cultivation area of 13,179 sq. ft. and an existing, Mixed-light cultivation site with a cultivation area of 5,431 sq. ft. using light deprivation with some artificial lighting techniques. AV will be using stored water from the reservoir to irrigate all cannabis. AV will be cultivating in raised beds and grow pots to prevent excess irrigation runoff and promote soil moisture retention. Cover crops will be planted at the end of the year to promote soil regeneration.

All power is supplied by generator power. The generators are housed inside a shipping container (CC#5). They are equipped secondary containment to prevent seepage of fuels to groundwater or surface water. AV will sufficiently muffle sound from generators to less than 50 decibels to protect surrounding habitat.

AV anticipates hiring three (3) employees for cultivation. AV does not anticipate increase road activity. Employees carpool to and from the site each day. AV's parcel is located on a private road, and a Road Evaluation Report was conducted. Peak road usage will be between 8:00 AM and 9:00 AM and 5:00 PM to 6:00 PM. Parking will be located next to the Immature Plant Area.

AV will comply with all applicable federal, state, and local laws and regulations governing California agricultural employers. AV will follow all performance standards outlined in Humboldt County's Commercial Cannabis Land Use Ordinance ("CCLUO") with respect to cultivation activities, including developing employee safety protocols which include: 1) an emergency action response plan and spill prevention protocols; 2) employee accident reporting and investigation policies; 3) fire prevention policies; 4) maintenance of Material Safety Data Sheets (MSDS); 5) materials handling policies; 6) job hazard analyses; and 7) personal protective equipment policies.

AV will ensure that all safety equipment is in good and operable condition, and provide employees with training on the proper use of safety equipment. AV will post and maintain an emergency contact list which includes: 1) operation manager contacts; 2) emergency responder contacts; and 3) poison control contacts. All cultivation activities will be charted and calendared and visibly posted in the cultivation facilities.

***Immature –***

AV cultivates their own stock plants in areas dedicated for immature plants only. Currently, propagation occurs in the Processing Facility and in one of the cargo containers CC#3. AV is proposing to relocate all propagation to a proposed area. Cumulatively, this totals 1,850 sqft. which is less than 10% of the approved cultivation areas (18,600sq.ft.) These plants will be transferred to the cultivation areas when appropriate. No mature or flowering plants will be cultivated in this area. See Site Plan for location.

***Outdoor –***

AV will cultivate 13,179 sq.ft. of outdoor cultivation in three (3) cultivation areas (CA#2-3). These areas (Full Term Only) will be harvested only once per year. See table below showing schedule of activities. See Site Plan for locations.

***Mixed Light -***

AV will cultivate Six (6) greenhouses totaling 5,431 sq ft., One (1) is 78' x 14.5', two (2) are 83'x 20', one (1) 40' x 9.8', one (1) 35' x 9.8', one (1) 24' x 9.8' (Site # 1-2). AV is anticipating four (4) harvest cycles of Mixed-light cultivation. The lighting source for the Mixed-light facilities will comply with the International Dark Sky Association's standards as outlined in the county's ordinance. AV will cover and sufficiently shield greenhouses so that artificial-light will not escape to neighboring parcels. See table below showing schedule of activities. See Site Plan for locations.

## ***Schedule of Activities During Each Month of the Growing and Harvesting Season***

| CA# | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | F | F & H | F | F | F & H | F | F | F & H | F | F | F & H | F |
| **2** | F | F & H | F | F | F&H | F | F | F &H | F | F & H | F | F |
| **3** | - | - | - | - | V | V | V | F | F | F & H | - | - |
| | | | | | | | | | | | | |

V = Vegetative F = Flowering H = Harvest
CA #1 will have 4 harvests per year with 8 or 10-week flowering cycles (mixed-light)
CA #2 & #3 will harvest (outdoor)

**PROCESSING PLAN AND ACTIVITIES PLAN**

AV is proposing to utilize multiple structures on the parcel to accommodate all Processing activities, these include a cabin, processing facility and five (5) cargo containers.

The existing Cabin would meet commercial building code standards, including an ADA parking spot. It will be equipped with an ADA compliant restroom and handwashing facilities to support employee or visitor use, as well as supplies for cleanliness and sanitation. Hand sanitizing liquid, gloves, potable water, and face masks shall be provided to employees. Potable water will be supplied from groundwater source located on the property and stored in a 2,500-gallon water tank. The Cabin will also house all packaging and labeling activities as well as any administrative tasks. Some hand trimming will also take place within the cabin.

The existing Processing facility is a 2-story structure. Upstairs is exclusively secured

storage of finished goods. Downstairs will also have some finished goods, as well as an indoor propagation area.

The five (5) cargo containers are used as follows:

CC#1 Storage of nutrients/fertilizers/pesticides

CC#2 General Storage

CC#3 Immature plant propagation

CC#4 Drying/curing area.

CC#5 Generator area

Drying and processing rooms will be sanitized after every use using organic cleaning products to prevent mold growth and other contaminants. A daily cleaning routine for all work rooms and surface areas will be prepared and carried out by employees. Employees will be required to wash their hands prior to handling the product and after using the restroom. Sanitary equipment and products such as hand sanitizing liquids, paper towels, gloves, water and face masks will be provided and kept in good and operable condition. Emergency contact numbers will be posted in working areas, including the local poison control center.

AV will implement the following safety practices as a part of the processing plan: 1) functioning safety equipment, including masks, gloves, and respiratory equipment will be provided to employees in good and operable condition; 2) sanitized protective overcoats will be provided to prevent cross contamination and skin irritation; 3) poison control and emergency services contacts will be posted in processing areas; 4) safety signage will be posted and spillage prevention policies will be developed; 5) safety training on proper use of trimming equipment; and 6) development and implementation of a workplace health and safety survey.

**PROCESSING ACTIVITIES**

During harvest months, the climate is warm and dry. Therefore, harvested plants can be air-dried. Humidity and temperature will be monitored to ensure proper conditions for curing. Cut flowers will be de-leafed and inspected for mold and then brought to the drying container (CC#4). Flowers will remain on-stalk and hung on screen racks for approximately 4-7 days. The dry room is thermostatically controlled to regulate temperature and humidity levels. AV will use a moisture meter to determine dryness. If the moisture content is below 15%, mold development is prevented. Upon reaching sufficiently safe moisture content, flowers will be bucked, placed into sealed plastic bins, and moved into the curing area. The cure area is also thermostatically controlled to regulate temperature and humidity and to ensure an even, slow cure. Bins will be regularly opened and closed to enhance flavor and aroma and to ensure a fully dried product for packaging and storage.

Flowers will then be bagged, barreled, and moved to secured storage with in the processing facility or the cabin where they will remain until ready to be trimmed. Flowers will be hand-trimmed and finished. They will be separated and packaged in one-pound increments, bagged, sealed, and moved back into secured storage for transport. Biomass which doesn't not get packaged as flower will be gathered for secondary manufacturing markets.

**SECURITY FEATURES**

AV has implemented security measures to safeguard the product and prevent nuisance from occurring on the property. Security gates are installed along all main roads. AV has installed multiple security cameras around the exterior of the processing facility, the cultivation sites, and at the entrances to the parcel.

To ensure the non-diversion of product, AV will enroll in a track and trace program upon the implementation of those programs at the local and state level.

**SOIL AMENDMENTS****

Bone Meal**
Chicken Guano**
Perlite**
Oyster Shell**
Dr. Earth All Purpose**
Bloom and Bud**
**Products are not stored on-site; purchased on an as-needed basis and introduced into soil immediately.

*See attached Safety Data Sheets for pesticides:*

Neem Oil
Trifecta
Vermafire

# CULTIVATION and OPERATIONS PLAN

***Updated April 28th 2020 PHASE 2***

## Applicant:

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# App# 11021

**APN: 221-021-023**

**Salmon Creek, CA**

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AV is updating the Operations Plan to utilize the 18,600 sq.ft. as follows:

Outdoor cultivation areas will total 9,024 sq ft and the Mixed-light cultivation area will be 9,576 This plan utilizes adding the 1,296 sq.ft. of "outdoor" in the greenhouse at the end of the flat, to the total Mixed-light canopy. This greenhouse has always used light deprivation techniques, and therefore can be included as part of Mixed-light cultivation area. The remainder of the Outdoor cultivation areas will be full term and not be utilizing any light deprivation.

## ***Description of Water Source, Storage, Irrigation Plan, and Projected Water Usage***

**WATER SOURCE AND STORAGE**

The source of irrigation water for the project is an on-stream reservoir. The reservoir's capacity is approximately 700,000 gallons. AV will update this cultivation operations plan with respect to anticipated yearly catchment once more information becomes available. Historically, including the most recent drought years, the amount of surface water diverted has been sufficient to meet the irrigation needs. AV has filed a Lake and Streambed Alteration Agreement with the California Department of Fish and Wildlife (CDFW) for this on-stream reservoir. AV has eleven (11) hard storage tanks with storage capacity of 22,950 gallons. See Site Plan for location and sizes. Total water storage capacity including the reservoir and the hard tanks will be approximately 722,950 gallons. AV plans on adding rain catchment and will buy more reservoirs.

**IRRIGATION PLAN**

Irrigation water is applied at agronomic rates to minimize over watering of cannabis plants and reduce the risk of irrigation runoff. Irrigation is applied through a traditional drip irrigation and hand watering for feeding applications. AV will be watering every 3rd day, and feeding plants every other watering, during the growing season. AV waters in the morning/early evening hours to reduce evaporative loss. Ground cover and weed barrier is used to minimize weed growth, which reduces water loss. AV uses natural soil amendments to aid in soil moisture retention, as part of the Irrigation Plan.

**PROJECTED WATER USAGE**

AV will be cultivating 9,024 sq. ft. of Outdoor cannabis and 9,576 sq. ft. of Mixed-light cannabis.

AV will stagger the full-term outdoor cultivation, planting approximately half of the cultivation area in late May and the second half in early June. Based on historical usage and estimates of cannabis irrigation, and the irrigation practice of watering every other day, AV anticipates using approximately 211,803 gallons annually for irrigation of Outdoor cultivation.

For Mixed-light cultivation, AV is anticipating approximately four (4) cultivation harvests. with the first cycle beginning March 1st and the fourth cycle ending in February. Essentially, year-round growing. Based on historical and estimates from and AV's practice of watering every 3rd day, AV anticipates using approximately 211,803 gallons annually for irrigation of Mixed-light cultivation.

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cultivation areas to promote infiltration and minimize runoff and sediment transportation to receiving waters. AV's cultivation areas are setback at least 50-feet from all Class III watercourses and cultivation activities are excluded from this buffer area to maintain its essential function. AV has installed jute netting, seeded, and placed straw mulch around cultivation areas to prevent contaminant transportation to receiving waters. AV has consulted with TRC to effectively control runoff from presenting threats to water quality.

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## ***Protocols for Proper Storage and Use of Fertilizers, Pesticides, and Other Regulated Products***

**FERTILIZERS**

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**PETROLEUM PRODUCTS AND STORAGE**

AV does utilize gasoline and diesel generators for cultivation activities. See generator usage details in Cultivation Activities section below. Currently, AV stores all petroleum in a 1000-gallon containment with 110% overflow containment, with additional containment capable of holding four (4) 55-gallon containers for gasoline. Five (5) 5-gallon gasoline cans are also onsite in the existing processing facility near the cultivation site. Gas cans are stored in secondary containment. AV has a spill-proof kit on site to prevent seepage into groundwater or transport to surface water.

AV is proposing to add one (1) 1,000-gallon diesel fuel storage tank for future use near the existing processing facility. AV currently has a 200-gallon propane tank which services the on-site cabin. AV is proposing to build a “fuel depot” to house the gasoline and diesel storage. This fuel depot will be located next to the road for easy access for delivery and gravity flow to the generators. See Site Plan for location. This would utilize one roof to cover all three of the containment reservoirs, 220 gallons for gasoline, and (2) – 1,100-gallon containment reservoir for each 1,000-gallon tank. This would house all fuel storage for the project. This structure would also utilize seasonal side walls during winter months.

Generators are in a cargo container (CC#5), as a dedicated generator area. Generators are equipped with secondary containment and spill-prevention kits are onsite. AV will muffle generator noise to less than 50 decibels, by housing within the container, to prevent disturbance of surrounding habitat.

## ***Description of Cultivation Activities (Immature, Outdoor, Mixed-light)***

**CULTIVATION ACTIVITIES**

AV is proposing to permit an existing, Outdoor cultivation site with cultivation area of 0,024 sq. ft. and an existing, Mixed-light cultivation site with a cultivation area of 9,576 sq. ft. using light deprivation with some artificial lighting techniques. AV will be using stored water from the reservoir to irrigate all cannabis. AV will be cultivating in raised beds to prevent excess irrigation runoff and promote soil moisture retention. Cover crops will be planted at the end of the year to promote soil regeneration.

All power is supplied by generator power. The generators are housed inside a shipping container (CC#5). They are equipped secondary containment to prevent seepage of fuels to groundwater or surface water. AV will sufficiently muffle sound from generators to less than 50 decibels to protect surrounding habitat.

AV anticipates hiring three (3) employees for cultivation. AV does not anticipate increase road activity. Employees carpool to and from the site each day. AV's parcel is located on a private road, and a Road Evaluation Report was conducted. Peak road usage will be between 8:00 AM and 9:00 AM and 5:00 PM to 6:00 PM. Parking will be located next to the Immature Plant Area.

AV will comply with all applicable federal, state, and local laws and regulations governing California agricultural employers. AV will follow all performance standards outlined in Humboldt County's Commercial Cannabis Land Use Ordinance ("CCLUO") with respect to cultivation activities, including developing employee safety protocols which include: 1) an emergency action response plan and spill prevention protocols; 2) employee accident reporting and investigation policies; 3) fire prevention policies; 4) maintenance of Material Safety Data Sheets (MSDS); 5) materials handling policies; 6) job hazard analyses; and 7) personal protective equipment policies.

AV will ensure that all safety equipment is in good and operable condition, and provide employees with training on the proper use of safety equipment. AV will post and maintain an emergency contact list which includes: 1) operation manager contacts; 2) emergency responder contacts; and 3) poison control contacts. All cultivation activities will be charted and calendared and visibly posted in the cultivation facilities.

***Immature –***

AV cultivates their own stock plants in areas dedicated for immature plants only. Currently, propagation occurs in the Processing Facility and in one (1) of the cargo containers ( CC#3). AV is proposing to relocate all propagation to a proposed area. Cumulatively, this totals 1,800 sqft. which is less than 10% of the approved cultivation areas (18,600sq.ft.) These plants will be transferred to the cultivation areas when appropriate. No mature or flowering plants will be cultivated in this area. See Site Plan for location.

***Outdoor –***

AV will cultivate 9,024 sq.ft. of outdoor cultivation in two (2) cultivation areas (CA#2-3). These areas will only be harvested once a year. See table below showing schedule of activities. See Site Plan for locations.

***Mixed Light -***

AV will cultivate Five (5) greenhouses totaling 9,576 sq.ft., one (1) is 18' x 72', three (3) are 30'x72' and one (1) is 30'x60' (CA#1). AV is anticipating four (4) harvest cycles of Mixed-light cultivation. The lighting source for the Mixed-light facilities will comply with the International Dark Sky Association's standards as outlined in the county's ordinance. AV will cover and sufficiently shield greenhouses so that artificial-light will not escape to neighboring parcels. See table below showing schedule of activities. See Site Plan for locations.

## ***Schedule of Activities During Each Month of the Growing and Harvesting Season***

| CA# | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | F | F & H | F | F | F & H | F | F | F & H | F | F | F & H | F |
| **2** | - | - | - | - | V | V | V | F | F | F & H | - | - |
| **3** | - | - | - | - | V | V | V | F | F | F & H | - | - |
| | | | | | | | | | | | | |

V = Vegetative F = Flowering H = Harvest
CA #1 will have 4 harvests per year with 8 or 10-week flowering cycles (mixed-light)
CA #2 & #3 will have 1 harvest (outdoor)

**PROCESSING PLAN AND ACTIVITIES PLAN**

AV is proposing to utilize multiple structures on the parcel to accommodate all Processing activities, these include a cabin, processing facility and five (5) cargo containers.

The existing Cabin would meet commercial building code standards, including an ADA parking spot. It will be equipped with an ADA compliant restroom and handwashing facilities to support employee or visitor use, as well as supplies for cleanliness and sanitation. Hand sanitizing liquid, gloves, potable water, and face masks shall be provided to employees. Potable water will be supplied from groundwater source located on the property and stored in a 2,500-gallon water tank. The Cabin will also house all packaging and labeling activities as well as any administrative tasks. Some hand trimming will also take place within the cabin.

The existing Processing facility is a 2-story structure. Upstairs is exclusively secured

storage of finished goods. Downstairs will also have some finished goods, as well as an indoor propagation area.

The five (5) cargo containers are used as follows:

CC#1 Storage of nutrients/fertilizers/pesticides

CC#2 General Storage

CC#3 Immature plant propagation

CC#4 Drying/curing area.

CC#5 Generator area

Drying and processing rooms will be sanitized after every use using organic cleaning products to prevent mold growth and other contaminants. A daily cleaning routine for all work rooms and surface areas will be prepared and carried out by employees. Employees will be required to wash their hands prior to handling the product and after using the restroom. Sanitary equipment and products such as hand sanitizing liquids, paper towels, gloves, water and face masks will be provided and kept in good and operable condition. Emergency contact numbers will be posted in working areas, including the local poison control center.

AV will implement the following safety practices as a part of the processing plan: 1) functioning safety equipment, including masks, gloves, and respiratory equipment will be provided to employees in good and operable condition; 2) sanitized protective overcoats will be provided to prevent cross contamination and skin irritation; 3) poison control and emergency services contacts will be posted in processing areas; 4) safety signage will be posted and spillage prevention policies will be developed; 5) safety training on proper use of trimming equipment; and 6) development and implementation of a workplace health and safety survey.

**PROCESSING ACTIVITIES**

During harvest months, the climate is warm and dry. Therefore, harvested plants can be air-dried. Humidity and temperature will be monitored to ensure proper conditions for curing. Cut flowers will be de-leafed and inspected for mold and then brought to the drying container (CC#4). Flowers will remain on-stalk and hung on screen racks for approximately 4-7 days. The dry room is thermostatically controlled to regulate temperature and humidity levels. AV will use a moisture meter to determine dryness. If the moisture content is below 15%, mold development is prevented. Upon reaching sufficiently safe moisture content, flowers will be bucked, placed into sealed plastic bins, and moved into the curing area. The cure area is also thermostatically controlled to regulate temperature and humidity and to ensure an even, slow cure. Bins will be regularly opened and closed to enhance flavor and aroma and to ensure a fully dried product for packaging and storage.

Flowers will then be bagged, barreled, and moved to secured storage with in the processing facility or the cabin where they will remain until ready to be trimmed. Flowers will be hand-trimmed and finished. They will be separated and packaged in one-pound increments, bagged, sealed, and moved back into secured storage for transport. Biomass which doesn't not get packaged as flower will be gathered for secondary manufacturing markets.

**SECURITY FEATURES**

AV has implemented security measures to safeguard the product and prevent nuisance from occurring on the property. Security gates are installed along all main roads. AV has installed multiple security cameras around the exterior of the processing facility, the cultivation sites, and at the entrances to the parcel.

To ensure the non-diversion of product, AV will enroll in a track and trace program upon the implementation of those programs at the local and state level.

**SOIL AMENDMENTS****

Bone Meal**
Chicken Guano**
Perlite**
Oyster Shell**
Dr. Earth All Purpose**
Bloom and Bud**
**Products are not stored on-site; purchased on an as-needed basis and introduced into soil immediately.

*See attached Safety Data Sheets for pesticides:*

Neem Oil
Trifecta
Vermafire