



AMENDMENT TO CULTIVATION, OPERATIONS, AND SECURITY PLAN

PROJECT DESCRIPTION

Upon review of the Humboldt County Planning and Building cultivation area verification, the applicant agrees with the what the County was able to verify. However, the applicant would propose to eliminate the mixed light lighting type from the application and permit the project as an outdoor cultivation project utilizing no mixed light cultivation. Rather, the applicant proposes to permit existing outdoor cultivation in the amount of 15,289 sq. ft. with 9,289 sq. ft. being strictly outdoor cultivation and the remaining 6,000 sq. ft being light deprivation cultivation. This cultivation operations plan and the accompanying site plan have been updated to reflect these changes. The applicant is proposing 2,000 sq. ft. of accessory propagation area and a proposed processing facility.

OPERATIONS PLAN

1. Description of Water Source, Storage, Irrigation Plan, and Projected Water Usage

WATER SOURCE AND STORAGE: Applicant will use groundwater to irrigate crops. Applicant has obtained a well permit and completion report for a well located on the subject property (Permit No. 18/19 1171; WCR2019-011314). A copy of the well completion report is attached hereto. The well is 150 ft. deep with a total boring depth of 180 feet. The well's approximate yield is twenty gallons per minute.

Applicant intends to use the springs identified as backup sources of irrigation water only. The filed LSA included herein incorporates the springs as part of the project to be permitted under Fish and Game Code Section 1602. If the springs are used, applicant will observe the required forbearance period and will only use the springs to fill irrigation tanks outside of the forbearance period as a backup water source.

Applicant's storage includes ten (10) five-thousand-gallon water tanks and one 20,000-gallon water bladder for total storage capacity of 70,000 gallons.

Applicant will follow BMPs for properly anchoring tanks and bladders to minimize threat to water quality. Further, the water bladder will be equipped with secondary containment existing of an earthen berm surrounding the bladder sufficient to catch its volume when full. Additionally, the berm will extend one foot above bladder when full to prevent overflow in the event of catastrophic failure.

IRRIGATION PLAN: Irrigation water is applied via drip line irrigation at agronomic rates to minimize over watering cannabis plants and reduce the risk of irrigation runoff. Applicant anticipates watering cannabis plants every other day during the growing season. Applicant 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 during watering. Applicant uses natural soil amendments to aid in soil moisture retention as part of irrigation plan.

PROJECTED WATER USAGE: Applicant intends to cultivate 15,289 sq. ft. of cannabis including 9,289 sq. ft. of outdoor cannabis and 6,000 sq. ft. of light deprivation cannabis. Applicant proposes 2,000 sq. ft. of accessory propagation.

Applicant anticipates two cycles of light deprivation cannabis. Applicant anticipates using 41,120 gallons of water annually for light deprivation cannabis.

Applicant anticipates one cycle of outdoor cannabis. Applicant anticipates using 83,750 gallons of water annually for outdoor cultivation.

Total annual water usage is projected to be 124,870 gallons of water. The below table breaks down the projected monthly water usage in gallons:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	De	С	.,,,
Outdoor	0	0	0	0	8900	17835	18443	18443	17835	2294	0	0		
Light Dep	0	0	0	3663	7313	7556	7556	7556	7556	7313	0	0	Total	124,870

The above figures are in gallons and are weather dependent. Applicant will monitor annual water usage going forward with water meters installed from source and storage to determine actual water usage.

2. Description of Site Drainage, Including Runoff and Erosion Control Measures

<u>SITE DRAINAGE</u>: Per the Lake and Streambed Alteration Agreement Notification submitted to the California Department of Fish and Wildlife, there are three stream crossings in use and one stream crossing to be decommissioned. Applicant's project proposes to resize culverts to meet sufficient flow requirements for proper drainage of watercourses. The cultivation sites themselves are in gently sloping areas that do not present a risk of runoff to surface water, and the soil is well drained.

<u>EROSION CONTROL MEASURES</u>: Applicant will continuously monitor discharge points to minimize potential erosion hazards. Applicant will address road erosion and rills by installing water bars and discharge points and installing outlets that disperse flows. Rolling dips will be utilized to disperse road surface runoff and prevent road surface

erosion. Roads will be appropriately rocked and the stream crossing culverts will be adequately sized and set to grade to further minimize erosion at the site. Applicant will seed areas of exposed soils with native grasses to prevent bare soil erosion. Applicant will consult with Timber Resource Consultants to implement best management practices to prevent erosion from occurring around roads and developed areas.

<u>RUNOFF CONTROL MEASURES</u>: Applicant waters at agronomic rates to avoid potential runoff from cultivation activities. Applicant will re-seed and regarding-vegetate any exposed soils around the cultivation areas and install straw bales and sediment control fencing on slopes or discharge points that may transport sediment to receiving waters. Applicant will consult with, and implement recommendations from, Timberland Resource Consultants to improve runoff control measures on an as needed basis.

3. Details of Measures Taken to Ensure Protection of Watershed and Nearby Habitat

PROTECTION OF WATERSHED AND HABITAT: Applicant has relocated two historic cultivation areas as shown on the site map. Applicant has removed all cultivation related items from the area and did not disturb any native vegetation in the area. Applicant will apply seed and mulch as erosion control and plant the disturbed buffer area with native riparian plants. No spoils from road grading or site grading are stored on the project site. Applicant maintains sufficient buffer areas between the existing cultivation areas and riparian zones and potential habitat. All cultivation related activities are located at least 300 feet from any watercourses on the property. Applicant will consult with and implement recommendations by Timberland Resource Consultants to promote and maintain watershed and riparian habitat areas.

CULTIVATION RELATED WASTE PROTOCOLS: Applicant is implementing measures to reduce and/or eliminate cultivation related waste. All plant related material will be composted in piles covered with plastic sheeting to prevent nutrient transport and will be reused as part of Applicant's soils management plan. Pots containing starts and clones will be washed, rinsed, and reused between seasons and recycled at the end of their useful life. Applicant will recycle pesticide and fertilizer containers per California pesticide regulations. Cultivation will occur in native soils and using bio-amendments (cover crops) to re-amend soils, resulting in zero soil waste on site. All other associated waste will be placed in garbage cans with lids and placed on concrete surfaces to prevent nutrients from being leached to groundwater or transported to watercourses. Applicant 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.

REFUSE DISPOSAL: The site generates little human refuse. However, Applicant has garbage cans equipped with lids in secondary containment to prevent leaching and transport of foreign materials to receiving waters. The cans are stored outside within a fenced area. Applicant 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 monthly schedule during the growing season.

HUMAN WASTE: The previously referenced on-site waste treatment system (OWTS) is no longer in use. Applicant anticipates adding an OWTS to service the processing facility for the cultivation, but it is not constructed at this time. In the meantime, applicant will utilize ADA accessible portable toilet facilities to service the cultivation needs.

4. Protocols for Proper Storage and Use of Fertilizers, Pesticides, and Other Regulated Products

<u>PESTICIDES</u>: Pesticides will be stored in an-on site shipping container equipped with a non-permeable floor liner to prevent leaching of pesticides into groundwater or transport to surface waters. 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 site.

Applicant 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. Change areas and decontamination rooms will be available off-site.

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.

<u>FERTILIZERS</u>: Fertilizers will be stored in the on-site shipping container which is equipped with a non-permeable floor liner to prevent leaching and transport to surface waters. Applicant will store and use fertilizers according to the protocols it uses for pesticide storage and use. Fertilizers will be kept in secondary containment totes to further prevent

leaching. Applicant will use all fertilizers according to the label and use personal protective equipment as required by the label. Before making a 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.

SOIL AMENDMENTS: Applicant will store and use soil amendments according to the protocols it uses for pesticide storage and use. Soil amendments will be kept in secondary containment totes to further prevent leaching. Applicant will use all soil amendments according to the label and use personal protective equipment as required by the label. Applicant will seek out and use soil amendments that are advertised as naturally based. Applicant will follow appropriate application rates of soil amendments. 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.

<u>PETROLEUM PRODUCTS AND STORAGE</u>: Applicant does not store petroleum products or compressed gasses on site. Applicant houses one generator on the property in the shed shown on the site plan. Generators are equipped with secondary containment, and spill-prevention kits are on-site. Applicant will muffle generator noise to less than 50 dbs. to prevent disturbance of surrounding habitat.

5. Description of Cultivation Activities (e.g. outdoor, indoor, mixed light)

<u>CULTIVATION ACTIVITIES</u>: Applicant proposes to permit existing outdoor cultivation in the amount of 15,289 sq. ft. with 9,289 sq. ft. being strictly outdoor cultivation and the remaining 6,000 sq. ft. being light deprivation cultivation. Applicant is also proposing 2,000 sq. ft. of accessory propagation area and a processing facility.

Applicant is anticipating two cycles of light deprivation cultivation. Generators may be used in the nursery portion of the greenhouses.

Applicant anticipates hiring 2-3 employees to assist with cultivation activities. Applicant does not anticipate increase road activity. Employees car pool to and from the site. 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 processing facility. There will be no on-site housing available. Applicant will execute a statement declaring it is an agricultural employer as that term is defined under the California Labor code.

Applicant will follow all performance standards outlined in Humboldt County's Commercial Medical Marijuana Land Use Ordinance ("CMMLUO") 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. Applicant will ensure that all safety equipment is in good and operable condition and provide employees with training on the proper use of safety equipment.

Applicant 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.

6. Schedule of Activities During Each Month of the Growing and Harvesting Season

January, February, March

- Purchasing seeds and clones of desired strains
- Clean greenhouses and make necessary repairs
- Prepare greenhouses and beds for planting
- Amend soil using blood meal, bone meal, dolomite, chicken manure
- Pot clones and starts
- Generator hours: 45

April

- Rotate mixed run starts and clones into greenhouses
- Planting into beds
- Water greenhouses
- Covers are attached
- Constructing trellis
- Generator hours: 0

May

- Watering continues
- Nursery activities
- Apply nutrient and feed
- Generator hours: 45

June

- Harvest first run of mixed light
- Rotate second run of mixed light plants
- Watering
- Apply nutrient
- Begin planting outdoor plants
- Generator use: 90 hours (for drying and processing activities)

July

- Watering
- Feed applications
- De-leafing and trellising
- Continue harvesting first run plants complete harvest
- Generator use: 90 hours (for drying and processing activities)

August

- Water greenhouses
- Apply nutrient feed
- De-leaf and trellis
- Processing activities
- Generator use: 0 hours

September

- Watering activities
- Apply feed
- De-leaf plants
- Begin harvesting plants
- Generator use: 0 hours

October

- Watering activities
- Apply nutrient feed
- Harvest activities
- Generator use: 90 hours (for drying and processing activities)

November, December

- Finish harvesting activities
- End of year reporting
- Clean beds and areas

Generator use: 0 hours

PROCESSING PLAN AND ACTIVITIES

<u>PLAN</u>: Applicant proposes the construction of a 40 x 60 metal building adjacent to the cultivation site in which processing activities will occur as shown on the site plan. The processing facility will meet commercial building standards. It will be equipped with portable, ADA compliant restrooms and handwashing facilities, as well as supplies for cleanliness and sanitation. The system will be designed to meet the needs of 2-3 employees working in the processing facility. Hand sanitizing liquid, gloves, potable water, and face masks shall be provided. Applicant will ensure there is sufficient potable water available for use. Applicant anticipates using 2-3 employees for processing activities. Drinking water may be addressed by having bottled water on site for employee drinking water. Road usage will be consistent with cultivation activities and employees will be encouraged to carpool to minimize road usage during processing activities.

The dry rooms and processing facilities 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.

Applicant 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.

<u>PROCESSING ACTIVITIES</u>: 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 dry room. 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.

The Applicant 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 room. The cure room 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 in the cultivation facility.

Flowers will then be bagged, barreled, and moved to storage rooms 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 storage for transport. Trim will be gathered for secondary manufacturing markets.

SECURITY FEATURES

The subject property is a rural property and the road is solely accessed by the owners.

Applicant will implement security measures to safeguard the product and prevent nuisance from occurring on the property. Perimeter fencing around the cultivation areas have been established. All doors and windows on buildings are lockable. Finished product is stored in a locked area away from the processing facility. There are locked gates on all access roads. "No Trespassing" signs and "Private Property" signs have been posted along the property perimeter.

Applicant intends to install security cameras around the exterior of the proposed processing facility, the cultivation sites, and at the entrances to the parcel.