

## **Operations Plan – APN 530-151-004 – Bee Kind Farms LLC**

### **Outdoor Cultivation Permit**

The applicant's proposed project for APN 530-151-004 includes applications for an (pre-2016) outdoor cultivation Use Permit for 33,250 ft<sup>2</sup> pursuant to CMMLUO 55.4.8.2. This parcel is approximately 160 acres and is zoned TPZ.

### **Cultivation Plan**

#### *Water Operations*

This property has two primary sources of water: (1) a point of diversion (POD) from a fully contained seepage spring used for domestic water and small irrigation; (2) a POD from the headwater spring to unnamed Class II stream used for domestic water and small irrigation with dry-season forbearance (May 15<sup>th</sup> to October 15<sup>th</sup>). The location of the spring POD #1 and stream POD #2 are shown on the Site Plan.

Domestic water is supplied by both PODs as needed with consumptive use estimated at 200 to 400 gallons per day during the cultivation season with little or no use during the winter. Total estimated domestic water consumption is approximately 60,000 gallons per year. Irrigation water for cannabis cultivation is provided by POD #1 during the dry-season forbearance period in combination with tank storage and is provided by POD #2 outside of the forbearance period. Water is gravity fed to settling and short-term storage water tanks from both PODs but is then pumped uphill to the place of use from POD #2 while POD #1 is entirely gravity fed.

Total estimated agricultural irrigation water use is approximately 542,400 gallons for the growing season, although this is highly contingent on annual and monthly variation in meteorological conditions, cannabis strains, and cultivation techniques. The applicant irrigates at an agronomic rate that does not produce runoff.

#### *Drainage and Water Resource Protections*

Water resources, cultivation areas, and the road network were assessed by Sweet River Sciences as part of the permitting process for the North Coast Regional Water Quality Control Board (NCRWQCB) and the California Department of Fish and Wildlife (CDFW). This included multiple inspections during the dry and wet seasons. There is one blue line stream on the parcel, which is a tributary to Bluff Creek, but no stream crossings on the private road network. The LSA 1600 permit application to the CDFW covers the PODs with forbearance already occurring from POD #2. The NCRWQCB's cannabis program requires the development of a Monitoring and Reporting Plan and Water Resources Protection Plan (WRPP), which focuses on protecting water resources from erosion and sediment delivery from cultivation areas, infrastructures, and road. The road network was constructed by prior landowners as part of timber harvest operations. Presently the road is functional and in decent condition, which is due in part to the predominance of upland rocky soils. Road remediation actions proposed as part of the WRPP includes the construction or further maintenance of several rolling dips and seasonal closure of the steep section of road. These remediation actions are designed to

improve road drainage to decrease existing and potential sediment delivery to tributaries Bluff Creek in northeastern Humboldt County.

All cultivation areas are located on landings constructed and utilized by the previous property owners for timber harvest activities and/or 3-acre conversion, which has been examined in a timberland conversion evaluation by a Registered Professional Forester at Timberland Resource Consultants. A retro-grading plan and permit application are being developed by Trinity Valley Engineers. The cultivation areas are subject to the following general treatments:

- General BMPs to be implemented at all cultivation areas: spreading straw (summer 2017) and seed (fall 2017) on all un-vegetated slopes; conduct minor grading to prevent runoff concentration as needed.

#### Storage of Regulated Products

No synthetic chemical fertilizers or pesticides will be used, and in the event of an emergency need, use would be from MMRSA approved list of chemical pesticides under their cannabis program requirements. Such products would be used according to the label specifications and any applicators will receive training and certification by Department of Pesticide Regulation along with appropriate protective gear.

Cultivation practices rely on regular foliar and root area spraying of compost tea as a preventive treatment to prevent problems with parasitic microbes, especially fungal. In the event of a fungal outbreak, OMRI approved pest control products such as Neem Oil or Dr. Zymes will be used. Plant fertilization will only be from organic OMRI approved products that will be added to the growing soil medium prior to the growing season as solids and also as liquid to irrigation tanks for fertigation during the growing season. All organic fertilizers will be stored out of the elements in the shop or the shipping container sheds.

Portable gasoline tanks for equipment will be stored in covered sheds. Gas generators to provide electricity for drying and processing will be housed appropriately to contain noise at acceptable levels (e.g., <60 decibels at property boundaries) and provide protection from the elements, including a proper fuel containment system for any fuel tanks.

#### Cultivation Activities and Schedules

The outdoor cultivation area of 33,250 ft<sup>2</sup> is currently comprised of two separate flats (see Site Plan, Site #1A and #1B), also within the footprint of logging deck landings. These flats are properly sited relative to County and agency guidelines. Cultivation methods include the use of raised bed with growing medium and bags, both in open air and under covered hoops for day-length control and protection from the elements. Light deprivation may be used to allow for two cycles but no supplemental lighting will be used with the growing season from approximately April to October. If needed, heating for inside the hoops as needed will be provided by propane based forced air heating systems. The growing medium will be reused for years with annual amendments prior to the growing season and fertigation during the growing season following bio-dynamic practices. Irrigation water is distributed from the water tanks via 1 inch poly tubing.

There are no schools, public facilities, significant Tribal Cultural resources, or neighboring residences in the vicinity (i.e., 600 and 300 foot setbacks) of the cultivation areas. Cultivation area are well outside of streamside and wetland setbacks.

#### Processing Plan

The location of processing facilities is shown on the Site Plan map. Shops will be used for drying and processing. No processing of concentrates will occur. The residential cabin will be used to house seasonal employees. Current facilities for employees include a kitchen with potable water, hand washing stations and showers, pit toilets, and sleeping quarters. The cabins and structures are wired and lighted with electivity provided by diesel generators. The facilities will be upgraded in a phased approach, with most of these building will either be demolished or converts to simple dry storage shed space as part of preparation for building permitted structures for housing and processing. For processing, employees will be trained and have access to safety protocols and protective equipment.

There are no schools, public facilities, significant Tribal Cultural resources, or neighboring residences in the vicinity (i.e., 600 and 300 foot setbacks) of the processing areas.

#### **Security Plan**

Security is provided by a combination of controlling the limited entry points, lack of public visibility, and surveillance. The remote location and forested and hilly terrain serve to obscure any view of cultivation areas from public roads or access points and also make off-road vehicle access impossible. No public access is allowed or proposed. The property has only two access entry points at the top and bottom of the road system, only one of which is accessible to the public, and both have sturdy locked metal gates. Hidden and open video surveillance and motion detecting warning systems will be used to alert to the presence of any vehicular or foot traffic and to document any suspicious activity on the roads, gates, processing facilities, and cultivation areas. No cash will be stored on site. Employees will have access to an emergency contact list and evacuation plan.