ATTACHMENT 1B

Cultivation and Operations Plan

CMMLUO SITE/OPERATIONS OVERVIEW

APN: 314-203-008



<u>Project Description</u>: The Original Mom and Pops LLC is seeking a Conditional Use Permit under the CMMLUO to permit existing outdoor cannabis cultivation up to 10,000 ft2, ancillary processing activities, appurtenant support infrastructure/facilities. The applicant cultivates cannabis in an outdoor setting in greenhouses from roughly March to November in two separate cycles.

The applicant acknowledges that the commercial cannabis activity approval being sought under the conditional use permit application, pursuant to CMMLUO, is subject to compliance with all other applicable Humboldt County zoning and land use regulations, as well as other applicable provisions of the Humboldt County Code and applicable state laws.

A determination of compliance will require multi-agency review of activities/development described in the permit application and in some cases, site inspections.

If development and/or activities on the subject parcel are determined, for some reason, to be out of compliance with any applicable State or County code, regulation or policy, a compliance agreement can be formulated between the applicant and relevant agency or agencies, which includes a compliance timeline whereby operations may continue under a "Provisional Clearance or Permit" and corrective action is initiated to achieve compliance under agreed upon terms.

<u>Parcel Information</u>: The subject parcel (APN: 314-203-008)) is approximately 214 acres, zoned Timber Production Zone (TPZ). It is located approximately 4.64 miles from the intersection of Kneeland Road and Mountain View Rd on the property known as 7211 Mountain View Rd.

<u>Topography/Landscape</u>: The parcel is gently sloped along a ridgetop with a mostly easterly aspect with the made up of conifer timberland.

<u>Surface Water Features</u>: There is one unnamed Class III watercourse located on the property and it is a tributary to the Mad River.

Roads/Stream Crossings/Easements: Most roads on the parcel are nearly flat, well drained and are used seasonally. There will not be any road related drainage, sediment transport/delivery problems. There is one stream crossing on the property which is functioning adequately.

<u>Site Development (residence, structures, other, year built):</u> The parcel has a history of agricultural activity including timber, and cannabis cultivation. The residence was built in 1991. At the Cannabis cultivation site there is a 10 * 12 cabin used for office space, a pesticide and garden tool shed, all built in 2019. Also there are plans to build a 20 * 30 drying shed, and a nursery.

<u>Utilities (electric, propane, sewer)</u>: Electric power is supplied to the farm from portable generators with plans to move mostly to solar. Power is/will be supplied to the cabin, shed, nursery and drying shed. Propane is currently stored in 25 gallon metal tanks with plans to install a 250 or 500 gallon metal tank. There is a B&B portable toilet which will be serviced regularly.

<u>Water Supply</u>: Currently water is sourced from a spring located northeast of the property line with an easement to operate and maintain point of diversion. Water is then pumped from a gas powered water pump to storage tanks above the cultivation site and gravity pulls it down.

<u>Water Storage</u>: Current water storage consists of two 4,400 gal. and two 5,000 gal. hard plastic tanks and three 300 gal tanks for nutrient mixing and dispersal are also kept on site. Plans are for adding additional hard storage tanks for both forbearance storage and fire suppression/protection. A well is in the process of being installed. Hopefully a pond can be dug. Rain catchment is also being proposed.

<u>Cultivation Areas (proposed. existing):</u> The existing cultivation has been decommissioned and moved northeast onto a more even landscape and a new cultivation site constructed. The applicant proposes a total of (4) flowering greenhouses. Two (2) greenhouses will measure 24 x96 ft. and two (2) will measure 20x96 this results in a 8,448 ft2 footprint. Additionally 1552 ft2 of outdoor space will be used, and perhaps another greenhouse built in the future, for cultivation totalling 10,000 ft2.

<u>Peak Water Demand:</u> The peak water demand projected to maintain plants for the summer months of July through September is an average of 17,000 gallons per month. The "Monthly Water Use" table below shows estimated water use throughout the grow season. Water usage will be monitored and recorded by use of in-line totalizing flow meters in accordance with applicable regulations. At this time, the applicant does not have adequate storage to forbear water use during the required season. However, the proposal to alleviate this issue is to purchase additional hard storage tanks for both forbearance storage and fire suppression/protection. A well site is currently being evaluated. Hopefully a pond can be dug. Rain catchment is also being proposed.

MONTHS	NURSERY	FLOWERING	START/MOTHER/ FLOWER	TOTAL GALLONS
JANUARY	600		MOTHERS	600
FEBRUARY	600		MOTHERS	600
MARCH	1000		MOTHERS/STARTS	1000
APRIL	2000	5000	ALL	7000
MAY	3,000	15,000	ALL	18,000
JUNE	3,000	15,000	ALL	18,000
JULY	4,000	20,000	FLOWER/HARVEST	24,000
			VEGETATIVE/FLOWE R SECOND CYCLE	
AUGUST	3,000	18,000	VEGETATIVE/FLOWE R 2ND CYCLE	21,000
SEPTEMBER	600	10000	FLOWER 2nd	10,600
OCTOBER	600	5000	HARVEST 2nd	5600
NOVEMBER	600		HARVEST 2nd MOTHERS	600
DECEMBER	**************************************		MOTHERS	600

TOTAL 107,600 gallons

<u>Irrigation Methods:</u> Water and nutrient delivery to the plants will be by means of individually hand watering for maximum efficiency taking into consideration temperature, plant demand etc. Water delivery throughout the system is carefully monitored on a regular basis to ensure proper function and responsible water use. Mulch is carefully placed as a top dressing to optimize soil water retention.

Irrigation Runoff/Erosion control: The use of hand watering ensures the plants are more evenly and efficiently watered. Through a watering practice of high interval and low quantity we expect near zero runoff. Cultivation activities are limited to the immediate area surrounding cultivation areas and conducted so products/materials are kept confined and not allowed to spread. The ground surface within and around the cultivation areas are formed and managed year-round to prevent any movement of entrained constituents such as fine sediment, fertilizer or other organic particles beyond the cultivation areas.

<u>Watershed Protection:</u> The Cultivation areas on the subject parcel meet applicable setback requirements to watercourses, riparian zones or wetlands (see site plan). Sheet flow of rainwater or transport of cultivation byproducts over permeable, gently sloped soils in and around the cultivation areas is unlikely. Vegetative buffers have been maintained at a natural slope around the entire perimeter of cleared/developed areas.

Watershed protection will be ensured by adherence to measures prescribed in the Water Resources Protection Plan (WDID:1B161504CHUM). developed specifically for this parcel by Mother Earth Engineering under Regional Water Quality Control Board WDR Order # R1-2015-0023 and the subsequent enrollment requirements. Also Timberland Resources will be completing the SMP in spring 2021.

Under R1-2015-0023, participants are required to engage in ongoing monitoring, reporting and maintenance including periodic site inspections and reviews of operational practices to ensure regulatory requirements related to the following listed items are being met:

Site maintenance, erosion control, and drainage features

Stream crossing maintenance

Riparian and wetland protection and management

Spoils management

Water storage and use Irrigation runoff Fertilizers and soil amendments Pesticides and herbicides Petroleum products and other chemicals Cultivation-related wastes Refuse and human waste

Additionally, participants must ensure that management measures and controls are effectively protecting water resources, and that any newly developing problems representing a water quality concern are identified and corrected quickly.

Fertilizers. Pesticides. other Regulated products:

The applicant will use powdered fertilizers, and organic supplements. Crops will be irrigated and fertilized at agronomic rates in accordance with North Coast Regional Water Quality Control Board Oder R1-2015-0023. Any fertilizer and pesticides will be stored and labeled in a secured shed adjacent to the cultivation zone (refer to site plan). Any potentially hazardous substances will be labeled and stored as required by MSDS (material safety data sheets), and will be maintained onsite.

In terms of pesticides we will follow existing protocols established by the California Department of Pesticide Regulations, using OMRI certified products such as Green Cure, Neem Oil, and Plant Therapy.

Cultivation Related Wastes: All solid waste accumulated by operations and will be sorted on site and contained in lidded cans and a fenced enclosure. The garbage will be disposed of regularly offsite at a location such as at Humboldt Waste Management. All green waste material is composted on site (refer to site plan). Human Waste: The cultivation site has a B&B portable bathroom which will be serviced as necessary.

Cultivation Operations/Practices (include generator and light usage): In order to maximize efficiency, we will use a system of staggered harvests made possible by initiating the plants to flower on a defined schedule. We will use cold frames constructed from structural steel tubing. Each harvest will be offset by two weeks. This will reduce the need for required drying space and limit the energy inputs for drying.

Once plants have achieved sufficient size and vigor they will be moved from the nursery greenhouse and planted in the flowering zones. These zones will be equipped with blackout tarps to block out natural light during extended daylight hours in the summer months. The sizes of each flowering greenhouses are (2) 24'x 96' and (2) 20'x 96' plus an additional 1552ft2 of outdoor growing space'. At full capacity, the greenhouses and additional full term space will total 10,000 ft2. Flowering will be induced between the months of May thru August by manually covering each flowering greenhouse with blackout tarp from the hours of 7pm to 7am. After mid-August plants will be allowed to naturally flower. Low level lighting will be added during any desired vegetative growth stages. This will be from full spectrum and efficient LEDs suspended within the nursery greenhouse. Power used for exhausting the greenhouses will be solar, and all other farming activities will be from an off grid solar system and back up portable generator. All crops will be irrigated by hand watering. As final fall crops are harvested greenhouses will be replanted with winter cover crops. All other equipment will be stored away for winter. Any mixed lighting activities will adhere to the International Dark Sky Association Standards and control light spillage as required.

Monthly Activity Schedule Month Activities Light Usage/hours Power must run 24/7 to keep mothers and nursery powered.

<u>January</u>: Finalize farm plans, prepare for ordering supplies, take care of mother plants <u>February</u>: Order tarps, fertilizers, and other supplies/equipment. Maintain mother plants and begin cloning.

March: Maintain mother plants, continue cloning and begin site preparations.

<u>April</u>: Plant greenhouses, maintain mother plants. Begin pulling tarps on two greenhouses. Trellis, support, and branch plants in greenhouses.

May: Begin pulling tarps on the remaining greenhouses. Mid-month, begin bottom branch removal on flowering plants, take clones for the second crop.

<u>June</u>: Take more clones, grow, maintain flowering greenhouses. Trellis and support plants, bottom branch,

<u>July:</u> Mid-month begin harvest. Re-plant greenhouses as plants are being harvested. Dry harvest. Process

<u>August:</u> Trimming and packaging of first crop onsite. Mid-month greenhouses are back in flower. Trellis support plants, take new mother plants before the plants mature into flower. September: Flower, transplant new moms, bottom branch plants.

October: Begin second harvest mid-month. Dry, process, trim and package.

November: Finish harvesting. Remove and store tarps, or replant with cover crops. Clean up site. Maintain mother plants.

December: Maintain mother plants, repair infrastructure and equipment.

Harvest and Processing procedures:

<u>Harvest</u>: When flowering plants are ready for harvest they will be stripped of all water leaves and cut at the base. They will then be processed for fresh frozen or moved to the drying shed and hung for drying and curing. Drying and curing will be done in a building constructed for drying and processing. Trimming will be done by onsite employees by means of a mechanical trimming machine. After trimming, the flowers will be packaged for distribution.

Processing: When the drying process is complete the flowers will be removed from the stems

<u>Processing</u>: When the drying process is complete the flowers will be removed from the stems and processed. We will use a combination of mechanized trimming machines and onsite employed labor. We will be equipped with all necessary personal protective equipment. Processing operations are conducted such that all surfaces, equipment and utensils which come into contact with harvested products are maintained in a clean, sanitary condition at all times. We do not expect that our road use will be increased or impacted significantly.

Security:

We will deploy a multilevel security plan.

The first level is Operational security. Operational security includes building an internal culture structure for protecting critical information. We will not allow unauthorized persons on the property. We will operate as discreetly as possible and not reveal times or dates for harvest, processing, or transportation operations. Operational security will require that we refer any suspicious activity to the appropriate authorities.

The second level of the security plan is surveillance. We will equip all areas with motion triggered cameras and a recording system for the production and processing site.

The third level of security planning all be physical security The natural topography of the property allows for securing vehicle access by a single entrance/exit point. This access point is secured with a locking gate that will be locked at all times. This property is located three miles from the county maintained road and behind three other locked gates only accessible to other neighboring land owners. The cultivation zone will be secured with appropriate fencing. The processing zone and associated structures will also be locked and secured. Any processed products will be secured, locked, and monitored as appropriate.

The fourth and final level of our security plan will be to hire third party security. If required will provide for a physical guarded presence. These services will follow all applicable laws and have appropriate insurances and performance certification.