PROPERTY MANAGEMENT PLAN

2400 CLOVER VALLEY ROAD
UPPER LAKE, CA, 95485
APN: 004-007-1200

APPLICANT:
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1. Introduction

This Property Management Plan has been prepared to fulfill the requirements of Ordinance No.3073 Ordinance Amending Chapter 21, Article 27 of the Lake County Code Pertaining to Cannabis Cultivation. The Property Management Plan, and all the sub-plans, have been prepared using the guidance that is listed in sub-section 5 of the proposed amendments to Chapter 21, article 27 of the Lake County Code. The Ordinance describes the Plan as follows: "All permittees shall prepare a Property Management Plan. The intent of said plan is to identify and locate all existing cannabis and non-cannabis related uses on the property, Identify and locate all proposed cannabis and non-cannabis related uses on the property, and describe how all cannabis and non-cannabis related uses will be managed in the future. The property management plan shall demonstrate how the operation of the commercial cannabis cultivation site will not harm the public health, Safety, and welfare or the natural environment of Lake County.

"This Plan is intended to be a "living" document, updated as necessary, such that when operational activities or processes are modified or replaced, the applicable sub-plans are revised to reflect these changes. Relevant sub-plans should also be amended whenever the goals of the plan are not met, whenever a significant pollution event occurs, or whenever a violation notice is issued.

2. Project Location And Description

2.1 Project Location

Project is located at street address 2400 Clover Valley Road, Upper Lake. It is the second to last parcel on Clover Valley Road with only one more parcel at the end of the road. The Parcel is on located on the flat of the south west of the Clover Valley bordered by Clover Creek on its north.

2.1 Project Description

Project is a commercial outdoor cannabis cultivation. With early activation outdoor cultivation with a total of 217,800 sf of canopy and 252,960 sf of cultivation area. Project will also include a 40' x 62' agricultural steel building used for harvest and processing. Existing structures will be utilized for employee break rooms and rest rooms, secure product storage, hazmat storage, and security monitoring and server room.

3. Air Quality Management Plan

3.1 Ordinance Requirements

Intent: All cannabis permittees shall not degrade the County's air quality as determined by the Lake County Air Quality Management District (LCAQMD).
In this section, permittees shall identify any equipment or activity that which may cause, or potentially cause the issuance of air contaminates including odor and shall identify measures to be taken to reduce, control or eliminate the issuance of air contaminants, including odors.
All cannabis permittees shall obtain Authority to Construct Permit pursuant to LCAQMD Rules and Regulations, if applicable, to operate any article, machine, equipment or other contrivance which causes or may cause the issuance of an air contaminant, prior to the construction of the facility described in the Property Management Plan. All permittees shall maintain an Authority to Construct or Permit to Operate for the life of the project, until the operation is closed and equipment is removed.
The applicant shall prepare an odor response program that includes (but is not limited to):

- *a) Designating an individual(s) who is/are responsible for responding to odor complaints 24 hours per day/seven (7)days a week, including holidays.*
- *b) Providing property owners and residents of property within a 1,000 foot radius of the cannabis facility, with the contact information of the individual responsible for responding to odor complaints.*
- *c) Policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint.*
- *d) The description of potential mitigation methods to be implemented for reducing odors, including add-on air pollution control equipment.*
- *e) Contingency measures to mitigate/curtail odor and other emissions in the event the methods described above are inadequate to fully prevent offsite nuisance conditions.*

3.2 Project Location and Potential Air Contaminate Sources

The project is in the Lake County Air Basin. The Lake County Air Quality Management District (LCAQMD) regulates air quality in Lake County. Lake County currently meets the EPA's health standards for five pollutants: carbon monoxide; nitrogen dioxide; sulfur dioxide; lead; and coarse particulates. For the other two ground-level ozone and fine particulate pollution Lake County is considered to be a part of a regional non-attainment area.
No public facilities such as schools and churches are within a 3 miles radius.

Area source emissions estimates are derived from the consumption of propane, electricity, and consumer products, as well as emissions resulting from landscape maintenance. This cultivation operation will require minimal use of propane & electricity.

During construction phase which will last approximately 4.5 months emissions fugitive dust and exhaust emissions created by construction equipment. Most of this will happen during site preparation which will only take about 2 weeks to complete. During the operational life of the cultivation emissions from small gasoline engines (tillers, weed eaters, lawnmowers, etc…) and from day to day traffic from employees and visitors. During the late flowering stages of the cannabis cultivation cycle the plant will produce odors that can be detected.

3.3 Authority to Construct and Permit to Operate

LC2400 will obtain an Authority to Construct Permit prior to any construction and will also secure a Permit to Operate before starting up the cultivation operation. If this is deemed necessary based on parameter of the project and is made a condition of approval.

3.4 Odor Response Program

a) Designated Responsible Individuals (DRIs):
   a. Adam Carlo Quihuis; (707)321-5562 cell ; aqiwi888@gmail.com
   b. Shana Schuette ; (707) 362-6200 ; shanaschuette@gmail.com

b) There are only 3 Property owners who are within 1000 feet radius of the project and they all will be made aware of the project and given DRIs information.

c) Order Complaint Procedure
   a. Fill out Odor Compliant Form (See Exhibit A)
   b. Conduct Investigation:
      i. Make Map showing Distance from Occurrence site to Project Location
      ii. Get Historical weather Data (wind, humidity, etc.) For time of Occurrence
      iii. Obtain Weather data from onsite weather recording device For time of Occurrence
      iv. Make note of stages of Plants in Greenhouses (weeks of Flower)
      v. Investigate if all equipment was operational at time of occurrence specifically odor mitigation measures.
      vi. Take all of these findings and discuss between DRIs and conclude validity of complaint and possible solutions or mitigations.
      vii. Call back complainant and offer to send report and inform them about mitigations measures.
      viii. File Complaint by complainants name for future reference.
   c. Implement mitigation Measures

d) Potential Odor Control Mitigations
   a. Fugitive Dust: The proposed construction activities and cultivation operation may generate small amounts of fugitive dust through ground-disturbing activities, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Dust will be controlled by wetting soils with a Water Truck during construction and minimizing and covering soil stockpiles. The access road of the Project Property will be graveled and will be well maintained and monitored annually for quality of its surfacing.
   b. Odor control Mitigation: the level of odor control mitigation will escalate depending on the legitimate complaints filed against the facility. There are only three homes within 1000 feet radius of the facility and all will have contact information of DRIs to make complaints as per county Ordinance. The first level of mitigation will be not to open greenhouses when winds are blowing in direction of homes which are southwest and west of the facility. If a complaint is made a filtration system will be put on the outgoing ventilation of the green house and drying/curing facilities addition to this. Example of such as system is given in Exhibit B.

e) If Odor complaints continue ozone generators can be employed in addition to filtration. If there is further evidence that odor is still a nuisance level problem misting/fog type system on the exterior of the greenhouse can be installed.

4. Cultural Resources

4.1 Ordinance Requirements

a) Intent: All permittees shall protect the cultural, historical, archaeological, and paleontological resources on the lot of record where the permitted activity is located.

b) The Department shall consult with appropriate Tribe regarding the potential of such resources being located on the lot of record.

c) Based on that consultation, the Department may require a cultural resource study of the property to determine the extent such resources exist on the lot of record.

d) Based on that study and in consultation with the appropriate Tribe(s), the Department may require the inclusion in this section.

e) This section shall include:
   a. Detailed procedures on actions to take if such resources are found.
   b. Describe the procedures to be followed if cultural, historical, archaeological, and paleontological resources are found on the property.

4.2 **Cultural Resource Evaluation**
A full cultural resource evaluation study has already completed by John W. Parker, Ph.D., RPA and is attached as exhibit C.
“No historic or prehistoric cultural materials were encountered during the field inspection.” And “As no "significant" historic resources have been identified within the project area, it is recommended that the project be approved as planned.”

4.3 **Procedures if Cultural Resource Discovered**
Protective measures consist primarily of minimizing ground disturbance, especially in sensitive areas. All cultivation activities will occur above ground in planters. Riparian zones of streams are also protected under various federal, state, and county regulations.
Another protective measure is awareness. All people involved will be made aware of the regulations protecting cultural resources, the location of sensitive areas, and indicators of buried historic or archaeological resources or human remains, such as fragments of bone, shells, or pottery, unusual odors or staining of soil and building foundations.
An inadvertent Discovery Work Plan is only required by the County for properties known to have cultural resources. No cultural resources are known to occur within, or adjacent to, the cultivation area. Nevertheless, Inadvertent Discovery Measures are provided here and will be implemented, and are taken directly from the California Department of Food and Agriculture's Program Environmental Impact Report (2017) prepared for the Cal-Cannabis Cultivation Licensing program:
"Existing cultivation activities have limited to no potential for adverse impacts on cultural resources as cultivation does not involve excavation within soil that has not been disturbed previously.
The Cal-Cannabis Licensing Program's environmental protection measures related to cultural resources, specifically the accidental discovery of human remains (Section 8313[c] of the proposed regulations), would require applicants to halt cultivation activities and implement Health and Safety Code Section 7050.5 if human remains were discovered.

In the event that a cultural, historical, archaeological, and paleontological resource during any phase of the project the following procedures will be conducted:

a) Work in that area will stop and Dr. John Parker will be immediately notified.
b) Dr. Parker will oversee if resources are either preserved or mitigated as outlined in CEQA (sec. 21083.2 [b] or 15126.4c).[See Exhibit C]

5. Energy Usage

5.1 **Ordinance Requirements**

(a) Intent: Permittees shall minimize energy usage.
(b) In this section permittees shall:
(1) Provide energy calculation as required by the California Building Code
(2) Identify energy conservation measures to be taken and maintained including providing proof of compliance with CCR Title 3, Division 8, Chapter 1, Section 8305 the Renewable Energy Requirements.
(3) If alternative energy sources are to be used, describe those sources and the amount of electricity that will be provided.
(4) For indoor cannabis cultivation licensees, ensure that electrical power used for commercial cannabis activity shall be provided by any combination of the following:
(1)On-grid power with 42 percent renewable source. (2) Onsite zero net energy renewable source providing 42 percent of power. (3) Purchase of carbon offsets for any portion of power above 58 percent not from renewable sources. (4) Demonstration that the equipment to be used would be 42 percent more energy efficient than standard equipment, using 2014 as the baseline year for such standard equipment.(5)Describe what parameters will be monitored and the methodology of the monitoring program.

(c) The Ordinance also identifies these prohibited activities that are relevant to this sub-plan:
“The indoor or mixed-light cultivation of cannabis shall not rely on a personal gasoline, diesel, propane, or similar fuels, powered generator as a primary source of power and shall only allow properly permitted (when applicable) generators for temporary use in the event of a power outage or emergency that is beyond the permittee’s control.”

5.2 Energy Calculations

			Summary of Loads							
Description	per house	**Qty/Total**	**V**	Amps@100%	**Phase**	Watts	Power Factor	VA	Inductive	Non-inductive
	Prop Green houses									
Gavita double ended HPS (600 watt bulb)	16	16	240	5.7	1	21,888	0.96	22,800		22,800
Humidifier(Ideal-Air Commercial Grade Humidifier - 75 Pints)	1	1	110	0.9	1	99	0.85	116	116	
5 ton A/C Bryan Model 569J	2	2	208	16	3	6,656	0.85	7,831	7,831	
Osc Fans(Air King 9012)	9	9	120	0.46	1	497	0.85	584	584	
Ambient lighting(MNLK L48 830 M4 LED Strip Light)	2	2	120	0.3	1	72	0.85	85	85	
Drain Pump(Zoller 1/2 Hp submersible)	1	1	120	10.5	1	1,260	0.96	1,313		1,313
Heating Pads(VIVOSUN 10" x 20.75")	10	16	120	8.3	1	15,936	0.99	16,097		16,097
4 Lamp - LED T8 - MaxLite	10	16	120	1.2	1	2,304	0.95	2,425		2,425
	TRIM ROOM									
	DRY ROOM									
215 Quest Dehumidifier	1	1	220	6.9	3	1,518	0.85	1,786	1,786	
Turbo Air STI070LR-404A2 SMART 7 Refer unit	1	1	208	13.3	3	2,766	0.85	3,255	3,255	
Osc Fans(Air King 9012)	16	16	120	0.46	1	883	0.85	1,039	1,039	
Ambient lighting(MNLK L48 830 M4 LED Strip Light)	8	8	120	0.3	1	288	0.95	303		303
Plugs	8	8	120	15	1	14,400	1	14,400		14,400
	BREAK ROOM/OFFICES									
5 ton A/C Bryan Model 569J		1	208	16	3	3,328	0.85	3,915	3,915	
Ambient lighting		9	120	0.3	1	324	0.99	327		327
Refrigerator		1	120	8.5	1	1,020	0.85	1,200	1,200	
Microwave		1	120	7.9	1	948	0.85	1,115	1,115	
coffee Maker		2	120	8	1	1,920	0.95	2,021		2,021
Elkay EZH2O Bottle Filling Station		2	115	2	1	460	0.85	541	541	
Plugs		10	120	15	1	18,000	1	18,000		18,000
					Total	**94,567**		**99,154**	**21,468**	**77,686**

5.3 Energy Conservation

Outdoor cultivation and existing structures

The following Energy Conservation Measures/Practices:

a) Provide employees with guidelines, tips and tricks for energy efficient practices and Attach laminated guidelines to the interior walls of the proposed processing facility
b) Turn off lights and unnecessary electronics when possible
c) Use of LEDs high efficiency lights
d) Conduct annual employee energy efficiency training to review conservational practices
e) Use energy efficiency features in all technology including computers, data storage, Processing machinery, or other devices which consume excess energy
f) Aim for new construction to be net zero energy as soon as possible
g) Schedule pumps, motors, and other energy intensive machinery for operation during off-peak use hours
h) Replace and recycle old electronics
i) Conduct an on-farm energy efficiency assessment/energy audit

The Applicant recognizes that they are subject to requirements of CCR Title 3, Division 8, Chapter 8305 and as a new licensees, without a record of weighted greenhouse gas emissions intensity from the previous calendar year, shall report the average weighted greenhouse gas emissions intensity, as provided in section 8203(g)(4), used during their licensed period at the time of license renewal. If a licensee's average weighted greenhouse gas emissions intensity is greater than the local utility provider's greenhouse gas emissions intensity for the most recent calendar year, the licensee shall provide evidence of carbon offsets or allowances to cover the excess in carbon emissions. With one of the following:

a) Voluntary greenhouse gas offset credits purchased from any of the following recognized and reputable voluntary carbon registries:
    a. American Carbon Registry;
    b. Climate Action Reserve;
    c. Verified Carbon Standard.
b) Offsets purchased from any other source are subject to verification and approval by the Department.

6. <u>Fertilizer Usage</u>

6.1 Ordinance Requirements

According to the Ordinance, the Property Management Plan must have a section on Fertilizer.
(a) Intent: To ensure consistency fertilizer storage and use with the other sections of the property management plan.
(b) This section shall describe how cultivation and nursery permittees will comply with the following fertilizer application and storage protocols:

1. Comply with all fertilizer label directions.
2. Store fertilizers in a secure building or shed.
3. Contain any fertilizer spills and immediately clean up any spills.
4. Apply the minimum amount of product necessary.
5. Prevent offsite drift.
6. Do not spray directly to surface water or allow fertilizer product to drift to surface water. Spray only when wind is blowing away from surface water bodies.
7. Do not apply fertilizer when they may reach surface water or groundwater; and
8. The use of fertilizer shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of CIear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.

(c) This section shall include a map of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record of land or within 100 feet of the lot of record and a 100-foot setback from any identified spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.
(d) Describe what parameters will be monitored and the methodology of the monitoring program.

6.2 Inventory of Fertilizers

INPUTS

List all soil mix ingredients, rooting hormones, fertility products, foliar sprays, and weed, disease and pest management inputs used.

Name and Formulation	Brand Name/Source	Reason for Use
DR EARTH BUD & BLOOM	DR EARTH	AMEND SOIL
DIATENASIOUS EARTH	NORCAL	AMEND SOIL
WORM CASTINGS	GRAIN FEED WORM	AMEND SOIL
BIOCHARR	GRAIN FEED WORM	AMEND SOIL
DAIRY COMPOST	MALIBU COMPOST	AMEND SOIL
CHICKEN MANURE	STUTZMANS	AMEND SOIL
MOLASSAS	SPARE TIME	COMPOST TEA
FISH HYDROSLATE	VITAL EARTH	FOOD
ELEMENTAL	ROOT ORGANIC	CAL/MAG/FOOD
MAMMOTH P/MICROBES	MAMMOTH P	FOOD
BAT GUANO	ROOTS ORGANIC	FOOD
SEA BIRD GUANO	ROOT ORGANIC	FOOD
DR ZYMES		IPM
PLANT THEARPY		IPM
ORGANICIDE		IPM
F-1 SPRAY	ADVANCE NUTRIENTS	FOLIAR
BLOOM SOLUABLE	ADVANCE NUTRIENTS	FOOD
TRACE MINERIALS	AV KARMA	FOOD
PURE CROP 1		IPM
GRANDEVO		IPM
VENERATE		IPM
REGAILA		IPM
CLONEX	DIRT CHEAP	CUTTINGS
PH UP/DOWN	GENERAL HYDROPONIC	MIXES
DIP-N-GROW	DIRT CHEAP	CUTTINGS
B-1	LUQUINOX	FOOD
VERDE	HIMBOLDT NUTRIENTS	FOOD

6.3 Fertilizer Storage and Handling

Liquid or granular fertilizers can be mixed with water in mixing tanks; plastic tubing and driplines can then be used to gravity-feed the water - fertilizer mixture to the plant. Fertilizers and soil amendments can also be applied directly to the planting stations by shovel or by using an all- terrain vehicle. Fertilizers will be stored in a stormproof shed. Fertilizers will be properly labeled, and open containers sealed when stored. Personal protective equipment will be used.
All Fertilizers will be store in Building marked Hazmat storage on site plans provided.
Fertilizers will be handled and applied according to their instructions. See Material Safety Data Sheets for specific information.
The following fertilizer application and storage protocols will be implemented:

a) Comply with all label directions.
b) Store chemicals in a secure building or shed to prevent access by wildlife.
c) Contain any chemical leaks and immediately clean up any spills.
d) Apply the minimum amount of product necessary.
e) Prevent offsite drift.
f) Do not apply chemicals when pollinators are present.
g) Do not spray directly to surface water or allow chemical product to drift to surface water.

7. Fish and Wildlife Protection

7.1 Ordinance Requirements

According to the Ordinance, the Property Management Plan must have a section on Fish and Wildlife Protection:

a) Minimize adverse impacts on fish and wildlife.
b) In this section permittees shall include:
    a. A description of the fish and wildlife that are located on or utilize on a seasonal basis the lot of record where the permitted activity is located.
    b. A description of the habitats found on the lot of record.
    c. A description of the watershed in which the permitted activity is located.
    d. Describe how the permittee will minimize adverse impacts on the fish and wildlife.
    e. A map showing the location of any conservation easements or wildlife corridors.

The Ordinance also identifies these prohibited activities that are relevant to this plan:

"Tree Removal, The removal of any commercial tree species as defined by the California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (Quercus species) or Tan Oak (Notholithocarpus spices) for the purpose of developing a cannabis cultivation site should be avoided and minimized. This shall not include the pruning of any such tree species for the health of the tree or the removal of such trees if necessary, for safety or disease concerns." The removal of commercial tree species requires either a Timberland Conversion Permit from California Department of Forestry and Fire Protection for the conversion of timberland greater than 3 acres, or an exemption for the conversion of timberland less than 3 acres. No trees will be removed as part of this project. There are virtually no plants or animals in the operational areas. These areas support only disturbance tolerant species. No special-status animals or plants are within the operational areas or adjacent areas.

7.2 Wildlife Habitats

The only wildlife habitats that are present in the general area of the cultivation site are agricultural. The surrounding area contains various wildlife habitats: agricultural; barren, rock outcrop, riparian, grassland, woodland, forest. The cultivation site is not within any designated listed species' critical habitat. The nonnative grassland, agricultural, and urbanized habitats within, and adjacent to, the cultivation site has a low potential for harboring special-status species due to the dominance of aggressive non-native grasses, forbs and disturbance from human activities. No cultivation operations will take place within 400 feet of any watercourse. No impacts to special-status species have been identified If land clearing is performed in the future a pre-construction special-status species survey would be conducted.

7.3 Protection of Waterbodies and Sensitive Habitats

There is no evidence that project implementation will impact any water resources. Water resource protection will be achieved by compliance with this Plan and compliance with the State Water Board's Cannabis Cultivation General Order. Note that if the total area of ground disturbance required for construction activities of the cultivation operation is greater than 1 acre, the landowner or cultivator will need to enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity and implement a storm water pollution prevention plan. If operational activities occur near sensitive habitats, it is recommended that signage and/or fencing be erected that identifies the resource and limits entry to these areas. Security fencing that surrounds the cultivation area can

function as wildlife exclusion devices. It is recommended that fencing be constructed to prevent passage of wildlife through the fencing. This is a proposed 217,800 sq. ft cultivation site

7.4 Biological Assessment

See Exhibit D

8. OPERATIONS MANUAL

8.1 Ordinance Requirements

Intent: To describe the operating procedures of the commercial cannabis cultivation site to ensure compliance with the use permit, protect the public health, safety and welfare, as well as the natural environment of Lake County.
This section shall include the following:

a) Authorization for the County, its agents, and employees, to see verification of the information contained within the development permit or use permit applications, the Operations Manual, and the Operating Standards at any time before or after development or use permits are issued;
b) A description of the staff screening processes;
c) The hours and days of the week when the facility will be open;
d) Description of measures taken to minimize or offset the carbon footprint from operational activities;
e) Description of chemicals stored, used and any effluent discharged as a result of operational activities;
f) The permittee shall establish and implement written procedures to ensure that the grounds of the premises controlled by the permittee are kept in a condition that prevents the contamination of components and cannabis products. The methods for adequate maintenance of the grounds shall include at minimum:

i. The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass so that the premises shall not
Constitute an attractant, breeding place, or harborage for pests.
ii. The proper maintenance of roads, yards, and parking lots so that these areas shall not constitute a source of contamination in areas where cannabis products are handled or transported.
iii. The provision of adequate draining areas in order to prevent contamination by seepage, foot-borne filth, or the breeding of pests due to unsanitary conditions.
iv. The provision and maintenance of waste treatment systems so as to prevent contamination in areas where cannabis products may be exposed to such a system's waste or waste by-products.

If the lot of record is bordered by grounds outside the applicant's control that are not maintained in the manner described in subsections (i) through (iv) of this section, inspection, extermination, and other reasonable care shall be exercised within the lot of record in order to eliminate any pests, dirt, and/or filth that pose a source of cannabis product contamination.

8.2 Authorization

Shanna Schuette the owner and CEO of the Applicant entity LC2400 has given the County, its agents, and employees, to see verification of the information contained within the development permit or use permit applications, the Operations Manual, and the Operating Standards at any time before or after development or use permits are issued. See Exhibit E

8.3 Staff Screening Process

All employees must undergo a 'live scan' background check by the Lake County Sheriff Department before starting employment. The Applicant (LC2400) will not employ individuals that have convictions of an offense that is substantially related to the qualifications, functions, or duties of the proposed cultivation operation, unless the Sheriff determines that the individual would not compromise the operation or public safety after a thorough review of the crime, conviction, circumstances, and evidence of rehabilitation. All staff must be a United States citizen or eligible for employment within the US. Employees will be hired on a probationary status for 4 months, at which point there conduct will be evaluated to the regulatory standards of the county and LC2400.

8.4 Hours Of Operation

Deliveries and Pickups (Monday through Saturday 9:00AM-7:00PM & Sundays 12:00PM – 5:00PM) The outdoor and mixed light cultivation will operate during normal business hours (7 a.m. to 7 p.m.) on weekdays and (8 a.m. to 7 p.m.) weekends, on site security system will operate 24 hours a day, seven days a week. This cultivation operation is closed to the public. Visitation is only allowed when specific permission is granted. During out door harvest days which will be approximately 10 days a year there may be expanded ours that correlate with the light hours in the day.

8.5 **Carbon Offsets**

The Majority of the Cannabis grown on the property (aprox. 90%) will be sun grown and the other cannabis cultivation will only use electrically created light in a supplemental way to make up for lack of sun in winter months. Additional Measures that will be taken to minimize or offset the carbon footprint from operational activities are:

a) energy-saving measures
b) water-saving measures
c) solid waste reduction measures
d) air emissions reduction measures
e) proper site selection, use of existing contours, and no grading
f) cultivation of fast-growing plants, that remove carbon dioxide from the air

8.6 **Hazmat storage and Effluent Discharge**

All fertilizer and Pest Management Products will be stored in the Hazmat storage shed (see Site Plan). Personal protective equipment will be used by staff when handling fertilizers and other chemicals, such as safety glasses, gloves, dust mask or respirator, boots, and pants and long-sleeved shirt. Pesticides and fertilizers will be handled and applied according to their labels and Safety Data Sheets (SDS) and guidelines set by the California Department of Food and Agriculture (CDFA) administered through the county AG commissioner. See Material Safety Data Sheets in the Appendix for specific information.
The following pesticide and fertilizer application and storage protocols will be implemented:

a) All applicators will be trained in accordance with California Department of Pesticide Regulations (CADPR) on how to read labels and safety data sheets prior to any product application and will comply with all label directions;
b) Store pesticides in a properly marked (Danger Pesticides) secure building or shed to prevent access or injury to wildlife or humans;
c) Contain any chemical leaks and immediately clean up any spills as required by product labels or SDS;
d) Apply the minimum amount of fertilizer in accordance with product labels and PCA/CCA recommendations;
e) Prevent offsite drift;
f) Do not apply insecticides toxic to bees when plants are flowering;
g) Do not spray directly to surface water or allow chemical product to drift to surface water.

Effluent discharge will be from employees bathroom, washing, and kitchen activities and will be processed through the existing on-site septic and the proposed septic. There is no anticipated effluent discharge from fertilizing activities because the amount administered will be calculated to the needs of the plant, absorption of substrate, and evaporation rates.

8.7 **Contamination Prevention**
Grounds keeping
Good housekeeping measures will be implemented. The grounds will be inspected at least once per day and any litter picked up. Trash containers will be emptied when full. Roads will be maintained so that erosion does not occur. This may include wetting dusty roads, armoring with gravel, patching holes, and maintaining drainage features such as water bars, culverts and side ditches. Weeds and grasses will be controlled by mulching or by cutting with a line trimmer.

Property maintenance will follow Best Management Practices. The following CASQA Industrial and Commercial Handbook BMP Fact Sheets are applicable (Left out of his report for brevity but available on line):

a) BG-40 Landscape Maintenance
b) SC-41 Building & Grounds Maintenance
c) SC-40: Contaminated or Erodible Areas
d) SC-43 Parking Area Maintenance
e) SC-44 Drainage System Maintenance

Wastes will be managed as specified in the Waste Management subsection.

9. **<u>Pest Management</u>**

9.1 **Ordinance Requirements**

This section shall describe how permittee will comply with the following pesticide application and storage protocols:

a) All pesticide applications must fully comply with the California Food and Agriculture Code, Division 6 Pest Control Operations and Division 7 Agriculture Chemical: Chapter 1 - 3.6 and California Code of Regulations, Division 6 Pest Control Operations.
b) These pesticide laws and regulations include but are not limited to:
    a. Comply with all pesticide label directions.
    b. Store chemicals in a secure building or shed to prevent access by wildlife.
    c. Contain any chemical leaks and immediately clean up any spills.
    d. Prevent offsite drift.
    e. Do not apply pesticides when pollinators are present.
    f. Do not allow drift to flowering plants attractive to pollinators.
    g. Do not spray directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies.
    h. Do not apply pesticides when they may reach surface water or groundwater; and
    i. Only use properly labeled pesticides.

The use of pesticides shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.
This section shall include a map of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record of land or within 100 feet of the lot of record and a 100 foot setback from any identified spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.

9.2 Pesticide Practices

Under state and federal law, a pesticide is any substance intended to control, destroy, repel, or otherwise mitigate a pest. Any organism that causes damage or economic loss, or transmits or produces disease, may be the target pest. Pests can be insects or animals (e.g. mice), unwanted plants (weeds) or organisms that cause plant diseases. “Pesticide” is an umbrella term that includes many kinds of chemicals—natural and synthetic. A pesticide is any substance intended to control, destroy, repel or attract a pest. Any living organism that causes damage, economic loss, and/or transmits or produces disease may be the target pest. Some common pesticides include insecticides, herbicides, rodenticides, merlucciids, fungicides, repellents, disinfectants and sanitizers. (California Department of Pesticide Regulation fact sheet, available at http://www.cdpr.ca.gov/).

At this cultivation operation, pests will be controlled by employing only approved, organic-certified pesticides. Weed control will not be necessary as plants will be grown in an enclosed greenhouse; herbicides will not be used. Live traps will be used for rodent control.
The CA Department of Pesticide Regulation lists allowable pesticides in their publication “Legal Pest Management Practices for Marijuana Growers in California.” Table 3 (Pest Management Practices For Marijuana Grown Indoors) is reproduced here. Note that the Department of Pesticide Regulation has developed a brief synopsis of appropriate pesticide usage called *Legal Pest Management Practices for Marijuana Growers in California* which can be found as Attachment D in Order R5-2015-0113. Currently, no pesticides are registered for use on Cannabis. Therefore, commercial cultivators are limited to only using pesticides that are exempt from residue-tolerance requirements and are either: (1) registered and labeled for a use that is broad enough to include use on cannabis (e.g., unspecified green plants), or (2) exempt from registration requirements as a minimum-risk pesticide under FIFRA Section 25(b).
The CDFA CalCannabis Program describes pesticide use as follows:

“*Although California Department of Pesticide Regulation (CDPR) is responsible for managing California’s statewide pesticide regulatory program, the local enforcement of pesticide use regulations is delegated to County Agricultural Commissioners (CACs). With oversight by CDPR, CACs plan and develop county programs and regulate pesticide use to ensure that applicators comply with label directions and pesticide laws and regulations (CDPR 2011). CACs oversee pesticide use reporting, promote best management practices, and monitor field applications, and they may assist in cleanup of accidental pesticide spills.*
CACs inspect operations and records of growers, nonagricultural (including industrial and institutional) applicators, pest control dealers, agricultural pest control advisers (PCAs), farm labor contractors, and government agencies for compliance with worker protection standards and other pesticide safety requirements. CACs, assisted by CDPR, investigate incidents in which pesticides harm agricultural workers, people nearby, and the environment, including environmental damage (such as fish or wildlife kills) and water quality contamination. When an enforcement action is needed, CACs have the option to revoke or suspend the right of a company to do business in their county or to issue civil or criminal penalties (CDPR 2011) ….License and 7 certificate types issued by CDPR under the pesticide regulatory program include, but are not limited to, the following (CDPR 2017)….. Because there are no restricted-use pesticides registered for use on cannabis, application of pesticides for cannabis cultivation would not require any type of license or certificate. Cultivators, however, may obtain a QAC or QAL, or private applicator certificate, or hire individuals with these credentials, in order to avail themselves of information such as proper mixing, loading, and application techniques and selection and use of personal protective

equipment. Cannabis cultivators would not necessarily be required to obtain the services of a PCA but, nonetheless, may choose to do so in order to get professional advice on pest control." (CDFA 2017)

Cultivators must comply with pesticide laws and regulations as enforced by the Department of Pesticide Regulation. All employees applying regulated pesticides shall have a Qualified Applicator License from the Department of Pesticide Regulation. The CDFA CalCannabis Licensing Program has the following pesticide application and storage protocols, which will be implemented:
(1) Comply with all pesticide label directions;
(2) Store chemicals in a secure building or shed to prevent access by wildlife;
(3) contain any chemical leaks and immediately clean up any spills;
(4) apply the minimum amount of product necessary to control the target pest;
(5) Prevent offsite drift;
(6) Do not apply pesticides when pollinators are present;
(7) Do not allow drift to flowering plants attractive to pollinators;
(8) Do not spray directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies;
(9) Do not apply pesticides when they may reach surface water or groundwater; and
(10) Only use properly labeled pesticides. If no label is available consult the Department of Pesticide Regulation.

INPUTS

List all soil mix ingredients, rooting hormones, fertility products, foliar sprays, and weed, disease and pest management inputs used.

Name and Formulation	Brand Name/Source	Reason for Use
DR EARTH BUD & BLOOM	DR EARTH	AMEND SOIL
DIATENASIOUS EARTH	NORCAL	AMEND SOIL
WORM CASTINGS	GRAIN FEED WORM	AMEND SOIL
BIOCHARR	GRAIN FEED WORM	AMEND SOIL
DAIRY COMPOST	MALIBU COMPOST	AMEND SOIL
CHICKEN MANURE	STUTZMANS	AMEND SOIL
MOLASSAS	SPARE TIME	COMPOST TEA
FISH HYDROSLATE	VITAL EARTH	FOOD
ELEMENTAL	ROOT ORGANIC	CAL/MAG/FOOD
MAMMOTH P/MICROBES	MAMMOTH P	FOOD
BAT GUANO	ROOTS ORGANIC	FOOD
SEA BIRD GUANO	ROOT ORGANIC	FOOD
DR ZYMES		IPM
PLANT THEARPY		IPM
ORGANICIDE		IPM
F-1 SPRAY	ADVANCE NUTRIENTS	FOLIAR
BLOOM SOLUABLE	ADVANCE NUTRIENTS	FOOD
TRACE MINERIALS	AV KARMA	FOOD
PURE CROP 1		IPM
GRANDEVO		IPM
VENERATE		IPM
REGAILA		IPM
CLONEX	DIRT CHEAP	CUTTINGS
PH UP/DOWN	GENERAL HYDROPONIC	MIXES
DIP-N-GROW	DIRT CHEAP	CUTTINGS
B-1	LUQUINOX	FOOD
VERDE	HIMBOLDT NUTRIENTS	FOOD

Pesticides Marked as IPM

Pesticides will be used according to the instructions on the label or the material safety data sheets (MSDS). County regulations also apply to listed pesticides. Pesticides will be stored in shed marked Hazmat storage on the Site Plans. Chemicals will be properly labeled and open containers sealed when stored. When handling chemicals, staff will use personal protective equipment such as safety glasses, gloves, dust mask or respirator, boots, pants and long-sleeved shirt. Pesticides will not be applied on windy days or within 24-hours of a forecasted rain event.
Pesticides and fertilizers will be handled and applied according to their labels and Safety Data Sheets (SDS)). See Material Safety Data Sheets in the Appendix for specific information.

All applicators will be trained in accordance with California Department of Pesticide Regulations (CADPR) on how to read labels and safety data sheets prior to any product application and will comply with all label directions.

10. Security

10.1 Ordinance Requirements

According to the Ordinance, the Property Management Plan must have a section on Security:

(a) *Intent: To minimize criminal activity, provide for safe and secure working environments, protect private property, and to prevent damage to the environment. The Applicant shall provide adequate security on the premises, as approved by the Sheriff and pursuant to this section, including lighting and alarms, to ensure the safety of persons and to protect the premises from theft.*

(b) *Security Plan. This section shall include at a minimum:*

a. A description of the security measures to be taken to:

(1) *Prevent access to the cultivation site by unauthorized personnel and protect the physical safety of employees. This includes, but is not limited to:*

i. *Establishing physical barriers to secure perimeter access and all points of entry (such as locking primary entrances with commercial-grade, non-residential door locks, or providing fencing around the grounds, driveway, and any secondary entrances including windows, roofs, or ventilation systems);*

ii. *Installing a security alarm system to notify and record incident(s) where physical barriers have been breached;*

iii. *Establishing an identification and sign-in/sign-out procedure for authorized personnel, suppliers, and/or visitors;*

iv. *Maintaining the premises such that visibility and security monitoring of the premises is possible; and*

v. *Establishing procedures for the investigation of suspicious activities.*

(2) *Prevent theft or loss of cannabis and cannabis products. This includes but is not limited to:*

i. *Establishing an inventory system to track cannabis material and the personnel responsible for processing it throughout the cultivation process;*

ii. *Limiting access of personnel within the premises to those areas necessary to complete job duties, and to those time-frames specifically scheduled for completion of job duties;*

iii. *Supervising tasks or processes with high potential for diversion (including the loading and unloading of cannabis transportation vehicles); and*

iv. *Providing designated areas in which personnel may store and access personal items.*

(3) *Identification of emergency contact(s) that is/are available 24 hours/seven (7) days a week including holidays. The plan shall include the name, phone number and facsimile number or email address of an individual working on the commercial cultivation premises, to whom notice of problems associated with the operation of the commercial cultivation establishment can be provided. The commercial cultivation establishment shall keep this information current at all times. The applicant shall make every good faith effort to encourage neighborhood residents to call this designated person to resolve operating problems, if any, before any calls or complaints are made to the County.*

(4) *The permitee shall maintain a record of all complaints and resolution of complaints and provide a tally and summary of issues the annual Performance Review Report.*

(5) *A description of fences, location of access points, and how access is controlled.*

(6) *Video Surveillance.*

i. *At a minimum, permitted premises shall have a complete digital video surveillance system with a minimum camera resolution of 1280 X 720 pixel. The video surveillance system shall be capable of recording all pre-determined surveillance areas in any lighting conditions.*

ii. *The video surveillance system shall be capable of supporting remote access by the permittee.*

iii. *To the extent reasonably possible, all video surveillance cameras shall be installed in a manner that prevents intentional obstruction, tampering with, and/or disabling.*

iv. *Areas that shall be recorded on the video surveillance system include, but are not limited to, the following:*

a. *The perimeter of the cannabis cultivation site and cannabis nursery,*

b. *Areas where cannabis or cannabis products are weighed, packed, stored, quarantined, loaded and/or unloaded for transportation, prepared, or moved within the premises;*

c. *Areas where cannabis is destroyed;*

d. *Limited-access areas;*

e. *Security rooms;*

f. Areas containing surveillance-system storage devices, in which case, at least one camera shall record the access points to such an area; and

g. The interior and exterior of all entrances and exits to the cannabis cultivation sites and cannabis nursery including all buildings where cannabis or cannabis products are weighed, packed, stored, quarantined, loaded and/or unloaded for transportation, prepared, or moved within the premises.

v. The surveillance system shall record continuously 24 hours per day and at a minimum of 30 frames per second.

vi. All exterior cameras shall be waterproof, I-66 minimum.

vii. All interior cameras shall be moisture proof.

viii. Cameras shall be color capable.

ix. Video management software shall be capable of integrating cameras with door alarms.

x. Video recordings shall be digital.

xi. Thermal technology shall be use for perimeter fencing.

xii. All cameras shall include motion sensors that activates the camera when motion is detected.

xiii. In areas with inadequate lighting for the cameras being used, sufficient lighting shall be provided to illuminate the camera's field of vision.

xiv. All recording shall be located in secure rooms or areas of the premises in an access and environment-controlled environment which is separate from the room where the computer and monitoring equipment is located.

xv. All surveillance recordings shall be kept on the applicant's recording device or other approved location for a minimum of 30 days.

xvi. All video surveillance recordings are subject to inspection by the Department and shall be copied and sent, or otherwise provided, to the Department upon request.

xvii. The video recordings shall display the current date and time of recorded events. Time is to be measured in accordance with the U.S. National Institute Standards and Technology standards. The displayed date and time shall not significantly obstruct the view of recorded images.

(7) Fences

i. All commercial cannabis cultivation sites shall be enclosed by a fence. The fence shall include, at a minimum, the following: Posts set into the ground. The posts may be steel tubing, timber or concrete and may be driven into the ground or set in concrete. End, corner or gate posts, commonly referred to as "terminal posts", must be set in concrete footing or otherwise anchored to prevent leaning under the tension of a stretched fence. Posts set between the terminal posts shall be set at intervals not to exceed 10 feet. A top horizontal rail is required between all posts. The fence shall be attached to the posts and top horizontal rail.

ii. No barbed wire, razor wire or similar design shall be used.

iii. The cultivation area shall be screened from public view. Methods of screen may include, but is not limited to, topographic barriers, vegetation, or solid (opaque) fences.

The Ordinance also identifies these prohibited activities that are relevant to this sub-plan:

"All lights used for cannabis related permits including indoor or mixed light cultivation of cannabis shall be fully contained within structures or otherwise shielded to fully contain any light or glare involved in the cultivation process. Artificial light shall be completely shielded between sunset and sunrise.
Security lighting shall be motion activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the lot of record upon which they are placed."

10.2 Security Protocols

The surveillance system will operate continuously 24 hours per day and at a minimum of 30 frames per second.

All exterior cameras will be waterproof. Locations Can be found on Site Plan Sheet 7 Security Plan.

Cameras will be color capable.
Video management software will be capable of integrating cameras with door alarms.
Video recordings are digital.
Thermal technology will be used for perimeter fencing.
All cameras will include motion sensors that activates the camera when motion is detected.

In areas with inadequate lighting for the cameras being used, sufficient lighting shall be provided to illuminate the camera's field of vision.
All recording will be located in secure areas of the premises in an access and environment-controlled environment which is separate from the room where the computer and monitoring equipment is located.
All surveillance recordings shall be kept on operator's recording device or other approved location for a minimum of30 days.
All video surveillance recordings are subject to inspection by the Department and shall be copied and sent, or otherwise provided, to the Department upon request.

The video recordings shall display the current date and time of recorded events. Time is to be measured in accordance with the U.S. National Institute Standards and Technology standards. The displayed date and time shall not significantly obstruct the view of recorded images.
Personnel rules and responsibilities are as follows:

a) Obey the rules of the Security Plan
b) Sign in when entering the facility and sign out when exiting the facility
c) Do not carry any weapons
   Only authorized vehicles are allowed in operational areas.
d) Do not bring backpacks or other unnecessary storage devices that might complicate the theft control program. Lockers will be provided for personal items.
e) Do not enter restricted areas unless authorized to do so.

Access to the facility can only be gained through a security gate with a coded entry. Staff will be the only ones given the entry codes which will be specific to each team member. They will be instructed not to give there code to anyone. Visitors and deliveries will gain access through arrangement and will be given a temporary code which will expire.

Any suspicious activity will be logged and reported to management, who will assess if Law Enforcement needs to be notified.

10.3 Emergency Contacts

Shana Schuette: 707-362-6200
Adam Quihuis: 707-321-5562

10.4 Theft and Loss Prevention

The applicant will adhere to the inventory tracking and recording requirements of the California Cannabis Track-and-Trace (CCTT) system. All personnel will be trained in the requirements of the CCTT system, and all cannabis transfers/movement will be reported through the CCTT system. At least two members of the managerial staff will be designated track-and-trace system administrators. A track-and-trace system administrator will supervise all tasks with high potential for diversion/theft, and will document which personnel took part in the task(s). In the event of any diversion/theft, law enforcement and the appropriate licensing authority will be notified within 24 hours of discovery.

10.5 Fences

The commercial cannabis cultivation site is enclosed by a fence. The fence includes, at a minimum, the following: Posts set into the ground. The posts may be steel tubing, timber or concrete and may be driven into the ground or set in concrete. End, corner or gate posts, commonly referred to as "terminal posts", must be set in concrete footing or otherwise anchored to prevent leaning under the tension of a stretched fence. Posts set between the terminal posts shall be set at intervals not to exceed 10 feet. A top horizontal rail is required between all posts. The fence shall be attached to the posts and top horizontal rail.
No barbed wire, razor wire or similar design will be used.

The cultivation area is screened from public view. Methods of screen may include, but is not limited to, topographic barriers, vegetation, or solid (opaque) fences.

Trees will be planted along the edge of the property adjacent to Clover Valley Road to obstruct public view of the project.

11. **Storm Water Management**
11.1 **Ordinance Requirements**

According to the Ordinance, the Property Management Plan must have a section on Storm Water Management:
(a) Intent: To protect the water quality of the surface water and the stormwater management systems managed by Lake County and to evaluate the impact on downstream property owners.
(b) All permittees shall manage storm water runoff to protect downstream receiving water bodies from water quality degradation.

(c) All cultivation activities shall comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.
(d) Outdoor cultivation, including any topsoil, pest management, or fertilizer used for the cultivation cannabis shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.
(e) The illicit discharge of irrigation or storm water from the premises, as defined in Title 40 of the Code of Federal Regulations, Section 122.26, which could result in degradation of water quality of any water body is prohibited.
(f) All permittees shall prepare a Storm Water Management Plan based on the requirements of the California Regional Water Quality Control Board Central Valley Region or the California Regional Water Quality Control Board North Coast Region to be approved by the Lake County Water Resources Department. In addition to those requirements, the plan shall include:
a. Identification of any Lake County maintained drainage or conveyance system that the stormwater is discharged into and documentation that the stormwater discharge is in compliance with the design parameters of those structures.
b. Identification of any public roads and bridges that are downstream of the discharge point and documentation that the stormwater discharge is in compliance with the design parameters of any such bridges.
c. Documentation that the discharge of stormwater from the site will not increase the volume of water that historically has flow onto adjacent properties.
d. Documentation that the discharge of stormwater will not increase flood elevations downstream of the discharge point.
e. Documentation that the discharge of stormwater will not degrade water quality of any water body.
f. Documentation of compliance with the requirements of Chapter 29, Storm Water Management Ordinance of the Lake County Ordinance Code.
g. Describe the proposed grading of the property.
h. Describe the storm water management system.
i. Describe the best management practices (BMPs) that will be used during construction and those that will be used post-construction. Post-construction BMPs shall be maintained through the life of the permit.
j. Describe what parameters will be monitored and the methodology of the monitoring program

11.3 Responsible Party

Shana Schuette: 707-362-6200
Compliance Officer: Adam Quihuis: 707-321-5562

11.4 Storm Water Management Plan

A storm water management plan is not necessary because the proposed use of the property will not significantly affect surface runoff'.

If one is deemed necessary during the building permit phase the applicant will have one prepared by a licensed professional engineer.

To protect the water quality of the surface water and the storm-water management systems managed by permittee and to evaluate the impact on downstream property owners.

Permittee shall manage storm water runoff as needed to protect downstream receiving water bodies from water quality degradation.

All cultivation activities comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.
Outdoor cultivation, including any topsoil, pesticide or fertilizers used for the cultivation cannabis is not located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.
The illicit discharges of irrigation or storm water from the premises, as defined in Title 40 of the Code of Federal Regulations, section 122.26, which could result in degradation of water quality of any water body is prohibited.
Permittee does not need to prepare a Storm Water Management Plan based on the requirements of the California Regional Water Quality Control Board Central Valley Region or the California Regional Water Quality Control Board North Coast Region.
A copy of the Notice of Applicability for the Cannabis General order is attached as exhibit F and when a Site Management Plan is generated for the Water Board the applicant will provide it to the county.

12. <u>Waste Management</u>
12.1 Ordinance Requirements

According to the Ordinance, the Property Management Plan must have a section on Waste Management:
(a) Intent: To minimize the generation of waste and dispose of such waste properly, to prevent the release of hazardous waste into the environment, minimize the generation of cannabis vegetative waste and dispose of cannabis vegetative waste properly, and manage growing medium and dispose of growing medium properly.
(b) This section shall include the following components:
a. Solid Waste Management
The solid waste section shall include:
1. Provide an estimate of the amount of solid waste that will be generated on an annual basis and daily during peak operational seasons, broken down into the following categories: paper;
glass; metal; electronics; plastic; organics; inerts; household hazardous waste; special waste, and mixed residue
2. Describe how the permittee will minimize solid waste generation, including working with vendors to minimize packaging.
3. Describe the waste collection frequency and method.
4. Describe how solid waste will be temporarily stored prior to transport to a compost, recycling,
or final disposal location.
5. Describe the composting, recycling, or final disposal location for each of the above categories
of solid waste.
b. Hazardous Waste Management
The hazardous waste section shall include:
1. Hazard Analysis.
The applicant shall conduct a hazard analysis to identify or evaluate known or reasonably foreseeable hazards for each type of cannabis product produced at their facility in order to determine whether there exist any hazards requiring a preventive control. The hazard analysis shall include:
The identification of potential hazards, including:
i. Biological hazards, including microbiological hazards;
ii. Chemical hazards, including radiological hazards, pesticide(s) contamination, solvent or other residue, natural toxins, decomposition, unapproved additives, or food allergens; and/or
iii. Physical hazards, such as stone, glass, metal fragments, hair or insects.
The evaluation of the hazards identified in order to assess the severity of any illness or injury that may occur as a result of a given hazard, and the probability that the hazard will occur in the absence of preventive controls.
The hazard evaluation shall consider the effect of the following on the safety of the finished cannabis product for the intended consumer:
i) The sanitation conditions of the manufacturing premises;
ii) The product formulation process;
iii) The design, function and condition of the manufacturing facility and its equipment;
iv) The ingredients and components used in a given cannabis product;
v) The operation's transportation and transfer practices;
vi) The facility's manufacturing and processing procedures;
vii) The facility's packaging and labeling activities;
viii) The storage of components and/or the finished cannabis product;
ix) The intended or reasonably foreseeable use of the finished cannabis product.
x) Any other relevant factors.
(2) Management Plan
The Management Plan shall:
i. Identify all Resource Conservation and Recovery Act (RCRA), Non-RCRA hazardous waste and Universal wastes and the volume of each.
ii. Identify all containers and container management.
iii. Describe storage locations and chemical segregation procedures.
iv. Describe hazardous waste manifest and recordkeeping protocol.
v. Outline inspection procedures.
vi. Identify emergency spill response procedures.
vii. Describe staff responsibilities.
viii. Describe the staff training program.
ix. Describe the methodology on how the amount of hazardous materials and waste that is generated on the site, the amount that is recycled, and the amount and where hazardous materials and waste is disposed of, is measured, and
x. Include a map of any private drinking water well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record or within 100 feet of the lot of record and a 100 foot setback from any identified private drinking water

well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. The map shall also include any public water supply well on the lot of record or within 200 feet of the lot of record and a 200 foot setback from any public water supply well.
Pursuant to the California Health and Safety Code, the use of hazardous materials shall be prohibited except for limited quantities of hazardous materials that are below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. The production of any Hazardous Waste as part of the cultivation process is prohibited.
(c) Cannabis Vegetative Material Waste Management
The cannabis vegetative material waste management section shall include:
(1) Provide an estimate of the type and amount of cannabis vegetative waste that will be generated on an annual basis.
(2) Describe how the permittee will minimize cannabis vegetative waste generation.
(3) Describe how solid waste will be disposed.
(4) Describe the methodology on how the amount of cannabis vegetative waste that is generated on the site, the amount that is recycled, and the amount and where cannabis vegetative waste is disposed of is measured.
(d) Growing Medium Management
The growing medium management section shall include:
(1) Provide an estimate of the type and amount of new growing medium that will be used and amount of growing medium will be disposed of on an annual basis.
(2) Describe how the permittee will minimize growing medium waste generation.
(3) Describe any non-organic content in the growing medium used (such as vermiculite, silica gel, or other non-organic additives.
(4) Describe how growing medium waste will be disposed.

12.2 Waste Generated

Estimated Solid Waste Generation

	Annual Basis (pounds per year)	**Peak daily (pounds per day)**
Paper	5	n/a
Glass	11	n/a
Metal	11	n/a
Electronics	1	n/a
Plastic	100	n/a
Organics	1500	25
Household hazardous waste	1	n/a
Special Waste	0	0
Mixed residue	0	0

12.3 Solid Waste

The estimated amount of solid waste that will be generated on an annual basis is not more than can be self-hauled to recycling center and local:

Although not anticipated if Household hazardous waste Special waste, and mixed residue are generated they will be taken to a Land fill.
Permittee will minimize solid waste generation by recycling, Plastic, Paper, Glass, Metal and Electronics and composting organics.
The waste collection frequency as described will be daily with bulk runs weekly to recycling as needed.
Organic solid waste will be temporarily stored outside and covered by the barn prior to composting in the final disposal at the compost bin.

12.4 Hazardous Waste Management

Permittee shall conduct a hazard analysis to identify or evaluate known or reasonably foreseeable hazards for each type of cannabis product produced at their facility in order to determine whether there exist any hazards requiring a preventive control. The hazard analysis shall include:

The identification of potential hazards,
Including biological hazards and microbiological hazards.

Chemical hazards, including radiological hazards, pesticide(s) contamination, solvent or other residue, natural toxins, decomposition, unapproved additives, or food allergens; and/or
Physical hazards such as stone, glass, metal fragments, hair or insects.
The evaluation of the hazards identified in order to assess the severity of any illness or injury that may occur as a result of a given hazard, and the probability that the hazard will occur even in the absence of preventive controls is very unlikely however as conditions present themselves procurers for prevention will be adapted,

The hazard evaluation shall consider the effect of the following on the safety of the finished cannabis product for the intended consumer:

The sanitation conditions of a manufacturing premises don't exist as there is no manufacturing premise.
There is no product formulation process.
There is no design, function or condition of the manufacturing facility or its equipment as there is not a manufacturing facility or equipment at this time.

There are no ingredients and components for cannabis product at this time Cultivation Only at this time.

The storage of components and/or the finished cannabis product will be stored in secure storage area and secured Cannabis waste areas.
The Management Plans shall:

Identify all Resource Conservation and Recovery Act (RCRA), Non-RCRA hazardous waste and Universal wastes and the volume of each; There are none at this time if/ and when there is they will be added to the Property Management Plan and Site Management Plan and be updated as required.
Containers and trash containers will be emptied daily as needed and stored in the under canopy of break area.
All chemicals will be stored in a locked shed the storage locations as identified on Plans.
Hazardous waste manifest and record keeping will be part of the Property Management Plan and Site Management Plan and updated as required.
Outline of inspection procedures and logs shall also be kept in the Property Management Plan and Site Management Plan and updated as required.
Emergency spill response and containment will be performed with the required spill kits stored in Hazmat Storage shed. There are no staff responsibilities at this time as there is no staff. When a staff member is added a set of responsibilities will be issued and added to the Property Management Plan and Site Management Plan and updated as required.
Staff training program will be established as needed as staff us added at a later date.
Maps of all private drinking water well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record or within 100 feet of the lot of record and a 100 foot setback from any identified private drinking water well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. There are no public water supply wells on the lot of record or within 200 feet of the lot of record.

Pursuant to the California Health and Safety Code, the use of hazardous materials shall be prohibited except for limited quantities of hazardous materials that are below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas.
The production of any Hazardous Waste as part of the cultivation process is prohibited and not performed.

12.5 Cannabis Vegetative Material Waste Management

The estimated 1500 lbs. of Cannabis Vegetative Material Waste will be placed inside secure cannabis waste shed for composting or transportation to an offsite disposal area by a licensed waste handler.

12.6 Growing Medium Management

The CDFA CalCannabis Program describes soils handling as follows:
"*Soils used in cannabis cultivation may be treated, reused, stockpiled, and/or discarded. For reuse, soils are piled and covered with tarps for an extended period (months to a year) to allow heat from sunlight to destroy any potential soil pathogens or pests. Another practice for soil reuse is to run a compost tea through the soils between harvests to restore soil nutrients. Although it is not a direct component of the Proposed Program, another aspect of soil reuse can include laboratory testing of soil samples to identify nutrient deficiencies or other issues. Identifying such deficiencies allows the soil to be properly treated or amended with fertilizers or other soil amendments, thereby correcting these deficiencies, prior to being reused with a new cannabis crop.*" (CDFA 2017)
"*Outdoor cultivation typically involves planting rooted cannabis cuttings or seeds in the early spring and harvesting the plants in the fall (mid-September through November), after the plants flower. Soils used in the pots or grow bags are typically amended to ensure that nutrients are available to the plants throughout the growing season. Compost teas, which are created by steeping compost material in water,*

may also be used to fulfill nutrient needs (Ingham 2014)."

1) Provide an estimate of the type and amount of new growing medium that will be used and amount of growing medium will be disposed of on an annual basis;
   a) Approximately 3000 cubic yards of soil (combination of present soil and purchased mix)will be used in first year.
   b) No soil will be disposed of only a small amount added each year.
2) Describe how the permittee will minimize growing medium waste generation;
   a) Waste of Medium is reduced by farming techniques that allow to the soil to be reused yearly.
3) Describe any non-organic content in the growing medium used (such as vermiculite, silica gel, or other non-organic additives;
   a) There may be a small percentage of rice hulls or perlite in the soil mix.
4) Describe how growing medium waste will be disposed; and
   a) There should be no disposal of medium waste required any extra soil will be used in landscaping.
5) Describe the methodology on how the amount of growing medium waste that is generated on the site, the amount that is recycled, and the amount and where growing medium waste is disposed of, is measured.
   a) When growing medium is delivered that amount will be on an invoice for record.
   b) The volume of total soil used can be estimated by dimensions of raised beds. And the purchase amount can be subtracted to determine amount of native soil used.
   c) If soil has to be disposed of it will be measured by dimensions of container it leaves property by and recoded. Ie. 1-1 yrd.- truck bed or 3-5 yrds- dump truck load.

13. **Water use**

13.1 **Ordinance Requirements**

According to the Ordinance, the Property Management Plan must have a section on Water Use:
(a) Intent: To conserve the County's water resources by minimizing the use of water.
(b) All permitted activities shall have a legal water source on the premises, and have all local, state, and federal permits required to utilize the water source. If the permitted activity utilizes a shared source of water from another site, such source shall be a legal source, have all local, state, and federal permit required to utilize the water source, and have a written agreement between the owner of the site where the source is located and the permitted activity agreeing to the use of the water source and all terms and conditions of that use.
(c) Permittee shall not engage in unlawful or unpermitted drawing of surface water.
(d) The use of water provided by a public water supply, unlawful water diversions, transported by a water hauler, bottled water, a water-vending machine, or a retail water facility is prohibited.
(e) Where a well is used, the well must be located on the premises or an adjacent parcel. The production well shall have a meter to measure the amount of water pumped. The production wells shall have continuous water level monitors. The methodology of the monitoring program shall be described. A monitoring well of equal depth within the cone of influence of the production well may be substituted for the water level monitoring of the production well. The monitoring wells shall be constructed and monitoring begun at least three months prior to the use of the supply well. An applicant shall maintain a record of all data collected and shall provide a report of the data collected to the County annually.
(f) Water may be supplied by a licensed retail water supplier, as defined in Section 13575 of the Water Code, on an emergency basis. The application shall notify the Department within 7 days of the emergency and provide the following information:
a. A description of the emergency.
b. Identification of the retail water supplier including license number.
c. The volume of water supplied.
d. Actions taken to prevent the emergency in the future.
(g) All permittees shall prepare a Water Use Management Plan to be approved by the Lake County Water Resources Department. Said plan shall:
a. Identify the source of water, including location, capacity, and documentation that it is a legal source.
b. Described the proposed irrigation system and methodology.
c. Describe the amount of water projected to be used on a monthly basis for irrigation and separately for all other uses of water and the amount of water to be withdrawn from each source of water on a monthly basis.
d. Provide calculations as to the efficiency of the irrigation system using the methodology of the Model Water Efficient Landscape Ordinance (California Code of Regulations, Title 23, Division2, Chapter 27).
f. Describe the methodology that will be used to measure the amount of water used and the required monitoring.

13.2 Water Sources and Metering

The Cannabis cultivation operations will use water from an existing, agricultural groundwater well (see site plan).

This well is permitted with the County and uses an electric pump. The well produces approximately 120 gallons per minute as per well documents (see Exhibit G).

13.3 Irrigation Methodology
All cannabis will be irrigated using drip irrigation pressurized by electric pumps from the well source. Attached is a drawing of the irrigation layout and some product brochures of key components of the system. (See Exhibit H)

The project site will utilize an irrigation system using stored water from on-site well.
Note that water may be supplied by a licensed retail water supplier, as defined in Section
13575 of the Water Code, on an emergency basis. The applicant shall notify the Department within 7 days of an emergency and provide the following information: a description of the emergency; identification of the retail water supplier including license number; the volume of water supplied; and actions taken to prevent the emergency in the future.
Estimated Water Use Water use requirements for outdoor cannabis production are similar to water use requirements for other agricultural crops such as corn. CDFA (2017) reports the following regarding the water use for cannabis: "According to Hammon et al. (2015), water use requirements for outdoor cannabis production (25-35 inches per year) The outdoor cannabis production average usage per acre is 1.8 acre-feet. There is sufficient daily water output from the on-site well to supply water for the proposed activities.

13.4 Monthly Water Use Projections

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
5 Acre OutDoor	-	-	-	96,600	210,000	310,800	462,000	588,000	966,000	966,000	-	-	3,599,400
Domestic/ landscaping	6,000	6,000	6,000	6,000	6,000	6,000	7,000	7,000	7,000	7,000	7,000	7,000	78,000
Totals	6,000	6,000	6,000	102,600	216,000	316,800	469,000	595,000	973,000	973,000	7,000	7,000	3,677,400
					Note: Only source of Water is a Private Ground water Well								

13.5 Water Conservation
Water conservation practices will be implemented, including some combination of the following strategies and actions:

a) selection of plant varieties that are suitable for the climate of the region
b) the use of drip lines and drip emitters (instead of spray irrigation)
c) mulching to reduce evaporation
d) water application rates modified from data documented from soil moisture meters and weather monitoring

14. **Monitoring and Reporting For County Licensing**
14.1 **Ordinance Requirements**

According to the Ordinance, the licensee must perform annual compliance monitoring and prepare annual reports. A compliance monitoring inspection of the cultivation site shall be conducted annually during growing season. The permittee shall pay a compliance monitoring fee established by resolution of the Board of Supervisors prior to the inspection.
If there are no violations of the permit or state license during the first five years, the inspection frequency may be reduced by the Director to not less than once every five years.
Annual Reports
Performance Review
(b) All cannabis permittees shall submit a "Performance Review Report" on an annual basis from their initial date of operation for review and approval by the Planning Commission. The Planning Commission may delegate review of the annual Performance Review Report to the Director at the time of the initial hearing or at any time thereafter. This annual "Performance Review Report" is intended to identify the effectiveness of the approved development permit, use permit, Operations Manual, Operating Standards, and conditions of approval, as well as the identification and implementation of additional procedures as deemed necessary. In the event the Planning Commission identifies problems with specific Performance Review Report that could potentially lead to revocation of the associated development or use permit, the Planning Commission may require the submittal of more frequent "Performance Review Reports."
Pursuant to sub-section 6.i. above, the premises shall be inspected by the Department on an annual basis, or less frequently if approved by the Director. A copy of the results from this inspection shall be given to the permittee for inclusion in their "Performance Review Report" to the Department.
Compliance monitoring fees pursuant to the County's adopted master fee schedule shall be paid by permittee and accompany the "Performance Review Report" for costs associated with the inspection and the review of the report by County staff. Non- compliance by permittee in allowing the inspection by the Department, or refusal to pay the required fees, or noncompliance in submitting the annual "Performance Review Report" for review by the Planning Commission shall be deemed grounds for revocation of the development permit or use permit.

The permittee can be reached at 707-362-6200 and emailed at shanaschuette@gmail should there be a problem associated with the operation of the commercial cultivation establishment. Additional contact of local personal will be added during cultivation season. The permittee will keep this information current at all times and shall make every good faith effort to encourage neighborhood residents to call 707-321-5562 to resolve operating problems, if any, before any calls or complaints are made to the County.