Addendum – APPS:12179

A revised Site Plan and CMMLUO Site/Operations Overview is included herein to provide information requested in a letter from the Cannabis Services Division (June 5, 2018).

The following items are addressed as follows:

Cultivation square footage consistency between the Site Plan and Site/Operations Overview

The number of individuals engaged in cultivation operations is specified in the "Processing" section of the Site/Operations Overview.

The Site/Operations Overview indicates that all greenhouse floors are impermeable.

Specifications for the generator are included along with noise attenuation calculations; explanatory description is located in the Site/Operations Overview under "Watershed Protection".

A copy of the Water Resources Protection Plan, $30.00 THPO checks and a Road Evaluation were previously submitted.

Pending information including Notarized owner's consent for the applicant to cultivate and CDFW NSLA documents will be provided as it becomes available.

Peak Water Demand (include Monthly Water Use Table): The peak monthly water demand projected to maintain plants during the warmest months is 19,400 gallons per month. The "Monthly Water Use" table below shows water use during the grow season. Totalizing flow meters shall be incorporated into the irrigation system enabling accurate monitoring and recording of water usage in compliance with applicable regulations.

There is no agricultural water use during the months not shown

	Plant Stage	*Total Gallons*
May	*veg*	*14,500*
June	*veg*	*16,750*
July	*veg*	*18,500*
August	*veg*	*19,400*
September	*Veg/flwr*	*18,500*
October	*flwr*	*15,000*

Irrigation Method(s): Plants are irrigated by use of conventional gravity flow drip lines. The flow to drip lines is carefully regulated and adjusted for maximum efficiency taking into consideration temperature, plant demand etc. Hand watering with conventional garden hoses may also occur. 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. Occasional hand watering may be employed if needed.

Irrigation Runoff/Erosion control: The use of carefully administered hand watering and controlled drip irrigation minimizes the chance of any overwatering or residual discharge of irrigation solutions outside of the "targeted" root zone. In the unlikely event that residual discharge did occur, it would be absorbed upon contact with permeable soil surrounding the cultivation area. Cultivation activities are limited to the immediate area surrounding the greenhouses/gardens and conducted so materials are kept confined. The ground surface within and around the cultivation area is monitored and managed to prevent any movement of entrained constituents such as fine sediment, fertilizer or other organic particles beyond the cultivation area.

Watershed Protection: The Cultivation Areas on the subject parcel meet applicable setback requirements to watercourses, riparian zones or wetlands (see site plan). The applicant ensures BMP's related to storage, use and disposal of cultivation related materials/products in and around cultivation areas are in use at all times. This includes limiting cultivation activities to the immediate area where cultivation occurs and keeping products/materials securely confined so spreading due to weather or pests does not occur. **Watershed protection** will be ensured by adherence to measures prescribed in the Water Resources Protection Plan being developed specifically for this parcel by Timberland Resource Consultants under Regional Water Quality Control Board WDR Order # R1-2015-0023 enrollment requirements. Included with this submittal is a signed copy of Appendix A "Enrollment Notice of Intent"

Once enrolled 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 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.

Generator use on the subject parcel occurs at locations no closer than 400 feet to any neighboring property line. A **Multiquip 10kw Whisperwatt Generator** is used and the spec sheet indicating the sound pressure level is included with this submission. Also included, is the calculated sound pressure level at the nearest property line – which is **36.2 dbA** which complies with provisions under CMMLUO 55.4.11(o).

Light Spillage is prevented by careful placement of black-out tarps. The use of supplemental lighting in the cultivation operation is limited to a 3 week period in the beginning of May during which time low watt fluorescent bulbs are used for 2-3 hours. The bulbs come 10/per string and a total of 5 strings are used.

Fertilizers/Amendments/Regulated Products:

List and describe machinery and equipment used for cultivation and associated activities.

10 kw Whisperwatt Diesel Generator, Fans, Dehumidifier

Describe equipment service and maintenance; including where it is done

Generators are taken off site for servicing at Humboldt Motorsports.

List and describe petroleum products and automotive fluids used onsite-Indicate amounts normally stored and how/where they are stored.

Fuel used in the generator is stored in an above ground 500 gallon storage tank equipped with secondary containment.

List and describe compressed gases, cleaners, solvents and sanitizers used-indicate amounts normally stored and how/where they are stored.

Cleaners and solvents are not stored onsite

List and describe fertilizers, soil amendments, pesticides, herbicides and rodenticides used.

Indicate the amount normally stored and how/where they are stored.

Products	The products listed are primarily used at the start of the cultivation season. Any product remaining after initial start-up is kept securely protected in original packaging/containers atop pallets inside the Ag storage shed. Quantities of products stored may range from 250 to 350 pounds.
Black Gold Soil	
Rainbow Grow – Earth Juice	
Dr. Earth – All Purpose	
Composted Steer Manure	
Worm Castings	
Bat Guano	
Tri-Fecta - stored in 1 quart container on shelf inside Ag building in original container	
Green-clean - stored in 1 quart container on shelf inside Ag building in original container	

Fertilizer and amendment use is monitored and reported annually under requirements set forth in Appendix C, RWQCB Order No. R1-2015-0023

The applicant acknowledges that the storage and/or use of certain materials in specified volumes and/or weights will be subject to regulation through Humboldt County Division of Environmental Health CUPA and may require: submittal of inventories for those materials, documentation of emergency and training procedures, maintenance of hazardous waste disposal records, obtaining an EPA generator ID number and be subject to site inspections.

Cultivation Related Wastes: Cultivation related wastes are sorted such that green waste materials are recycled/composted onsite within a small area equipped with perimeter and top containment to

prevent unwanted movement of materials due to weather conditions or animals/pests. Other materials, unsuitable for composting, are stored in conventional lid trash containers along with domestic garbage and hauled to an approved transfer station/disposal facility as needed. If it becomes necessary, exhausted soil will be removed from cultivation beds and carefully mixed and spread over native soils on level ground at select locations to initiate microbial reconditioning and prevent unwanted constituent migration. Spent growth medium containing inorganic substances such as perlite, will be stored in weatherproof containers and hauled to an approved waste facility as needed.

Human Waste: All operations are conducted by individuals residing on the subject parcel. Restrooms within the residence/cabin are served by conventional septic systems and are easily accessed as needed.

Cultivation Operations/Practices: There are two cultivation cycles completed in the grow season with the first harvest occurring in July and the final harvest in October. During the first three weeks of May, young plants are provided supplemental lighting for 2-3 hours in the evening; blackout coverage is used to prevent any light spillage. The lighting consists of 5 strings of 7.5 watt LED bulbs; each string contains 10 bulbs which makes 50 the total of bulbs used.

	Cultivation Practices	Generator Hours/day	Lights On Hours/day
January	Winter Conditions – no activity		
February	Winter Conditions – no activity		
March	Initial site preparation/clean up		
April	Begin garden preparation and general site maintenance		
May	Establish young plants in greenhouses-evening light supplement, cover greenhouse to prevent light spillage	2-3	2-3
June	Transplant full term plants outdoors, maintain Dep plants in greenhouse etc., continue propagation		
July	Transplant 2nd round Dep into greenhouse, maintain light dep. Ongoing maintenance of full term outdoor plants and site.		
August	Harvest 1st round dep plants; ongoing garden care/site maintenance, stake and trellis plants as needed. Ongoing processing 1st harvest.	15	Fans
September	Complete processing 1st round; Continue garden care and site maintenance		
October	2nd Harvest plants – Dry, trim/process activities	15	Dehum
November	Clean up cultivation sites, winterize roads etc.		

Processing: Cultivation Operations utilize three (3) persons throughout the season.

Harvested plants will be brought to the Ag Building on APN: 220-201-021 (APPS# 11832) under the same ownership and set to dry. The use of fans and dehumidifiers may be used to aid with natural air drying.

Processing facilities on APN:220-201-021 shall be brought into compliance with applicable state/county requirements relative to the aforementioned Special Permit application. Currently, assessment of existing structures and/or supplemental development to achieve compliance is underway.

All equipment, utensils and surfaces which come into contact with cannabis are cleaned, rinsed and sanitized on a regular basis in accordance The National Organic Program's (NOP) Organic Standards (USDA organic regulations 7 CFR 205.272). These standards require that an organic handling operation take measures to prevent the commingling of organic and nonorganic products and protect organic products from contact with prohibited substances and list acceptable and prohibited compounds.

Individuals involved with processing utilize PPE including disposable face masks and latex gloves. Ample potable water for handwashing and restroom facilities are in close proximity to all processing activities. The restroom is equipped with first aid kits and an eye-wash station.

Individuals involved with processing will receive information/training prior to commencement of any work to ensure all operational activities are conducted in a safe manner. This will include the following:

Explanation of the required use of personal protection equipment – sterile safety gloves, protective eyewear and respiratory protection.
Emergency action response plans.
Fire prevention and response.
Hazard communications policies, including maintenance of material safety sheets (MSDS).
Job hazard analyses.
Periodic review and evaluation of operational practices including security procedures.

Security: Access to the subject parcel is obtained from private drives with metal locking gates. Only persons attending agricultural operations use interior roads; they provide no access to neighboring parcels. There is usually someone present on-site throughout the cultivation season.

MULTI QUIP WHISPERWATT

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The DCA10SPXU4C is a 10 kW Single Phase generator with a 1.0 power factor and 120/240 volt output. It features an electronic governor control; an easy to read analog control panel; a sound attenuated, weatherproof steel housing that is lockable and designed with a single point lifting eye. Its easy to maintain design offers quick access to all filters and drain extensions.

Performance Data | Options

Unit Specifications

Prime Rating	10 kW
Standby Rating	11 kW
Generator RPM	1800
Voltage - Single Phase	120/240 V
Generator Design	Revolving field, Self-ventilated, Drip-proof, Single bearing
Voltage Regulation (No Load to Full Load)	±0.5%
Power Factor	1.0
Armature Connection	Series
Excitation	Brushless with AVR
No. Poles	4-pole
Frequency	60 Hz
Frequency Regulation (steady state load)	±0.25%
Sound Level (Full Load at 23 ft.)	61 dB(A)

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www.engineeringtoolbox.com says

dL - Sound Pressure Level Difference (dB): -24.81

Lp2 - Sound Pressure Level at Distance (dB): 36.2

OK

L_{p1} = sound pressure level at location 1 (dB)

L_{p2} = sound pressure level at location 2 (dB)

R_1 = distance from source to location 1 (ft, m)

R_2 = distance from source to location 2 (ft, m)

A "free field" is defined as a flat surface without obstructions.

Example - Rifle Shot and Sound Pressure at Distance

If the sound pressure from a rifle shot is measured to *134 dB* at *1.25 feet* - the reduction in sound pressure level at distance *80 feet* can be calculated as

$dL = 20 \log ((80 \text{ ft}) / (1.25 \text{ ft}))$

$= \underline{36}$ dB

The sound pressure level at distance *80 ft* can be calculated as

$L_{p2} = (134 \text{ dB}) - (36 \text{ dB})$

$= \underline{98}$ dB

Distance (feet) (m)	Sound Pressure L_p (decibel)
1.25	134
2.5	128
5	122
10	116
20	110
40	104
80	98
160	92
320	86
640	78
1280	74
2560	68
5120	62

Inverse Square Law Calculator

Use the calculator below to calculate the sound pressure level at distance.

61 L_{p1} - sound pressure level at location 1 (dB)

23 R_1 - distance from source to location 1 (m, ft)

400 L_{p1} - distance from source to location 2 (m, ft)

Calculate!

Example - Noise from a Machine