Addendum

to

Cultivation and Operations Plan Tree Pharm, LLC.

APN: 210-191-059 (old APN: 210-191-015)

41400 State Highway 36 Bridgeville, CA 95526 Humboldt, County

February 20, 2020

Prepared by

Natural Resources Management Corporation



TABLE OF CONTENTS

Summary of Intent	3
Project Overview	4
Project Maps	4
Environmental Summary	7
Regulatory Compliance	7
Cultivation	10
Site Summary	11
Soils Management	11
Harvests	12
Water	12
Water Quality	13
Power	19
Employees	20
Compost	20
Solid waste	20
Wastewater	21
Fire Safe Standards	21
Roads	21
Roadway Turnouts	21
Roadway Turnaround	21
Signage/ Addresses	21
Emergency Water	21
Fuel Modification	22
References	23
Figures	
Figure 1. Project Vicinity	4
Figure 2 Tree Pharm Site Man: NRM October 2019	5
Figure 3 PWA Plot Plan (2017) with revisions by NRM	6
	0
Tables	
Table 1. Cultivation Schedule and Water Use	12
Table 2. Cultivation Water Supply – 2020 Growing Season	13
Table 3. Corrective Actions/Recommendation and Status Update	14
Appendixes	
Appendix A - Deficiency Letter; E.Moreno, Humboldt County Planning, Cannabis Division, 5/29/20	019.
Appendix B - Operations Manual for Tree Pharm, LLC. Cultivation Project; AgDynamix, 2017	
Appendix C - Plot Plan; PWA, 2017	
Appendix D - Relocation and Restoration Report, 210-191-059; NRM, 2020	
Appendix E - Cannabis SIUR from CA SWRCB Division of Water Rights: Certificate H100420.	
Appendix F - Water Resources Protection Plan and Map; PWA	
Appendix G - Septic Suitability Analysis; DTN Engineering	
Appendix H – CDFW, LSAA no. 1600-2108-0814-R1	
Appendix I – NRM Response to Humboldt County, 5/29/2019 Deficiency Letter	
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Summary of Intent

This addendum is a response to a letter that the county has sent in an effort to inform the cultivator of inconsistencies and inadequacies present in the previously submitted Cultivation and Operations Plan and Plot Plan. The letter from Humboldt County is dated May 29, 2019 and was written by Elizabeth Moreno, Cannabis Planner at Humboldt County. The letter is included as an Appendix (A) to this Addendum.

The Cultivation and Operations Plan previously submitted to the County is titled, "Operations Manual for Tree Pharm, LLC. Cultivation Project." This Cultivation Plan, dated November 2017, was written by AgDynamix. This plan is included as an Appendix (B) to this addendum. The Plot Plan, dated June 2017, was produced by Pacific Watershed Associates (PWA). The Plot Plan is included as an Appendix (C) to this addendum.

This document

1. addresses the deficiencies identified by the County of Humboldt as identified in the aforementioned letter.

This document hereby amends the Cultivation Plan produced by AgDynamix and the Plot Plan produced by PWA.

2. adopts the modified cultivation layout as described in the Relocation and Restoration Report (Appendix D).

Project Overview

Project Maps



Figure 1. Project Vicinity



Figure 2. Tree Pharm Site Map; NRM, February 2020.

APN: 210-191-059 Apps # 11207 Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC.





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Environmental Summary

This site is located in Humboldt County off of State Route 36 in the Van Duzen Planning Watershed. The parcel is approximately 20 acres in size with a landscape characterized by a mosaic of Bald Hills Prairie, Non-native Grassland, Mixed Evergreen Forest, and Oregon Oak Woodland. The elevation at the top of the property is approximately 2900-feet; at the bottom of the property, near State Route 36, the elevation is 2,540-feet. The parcel has, on average, a Northern aspect as the parcel slopes toward the Van Duzen River. The western portion of the property is dense forest canopy. The eastern half of the parcel is primarily open grasslands with a minor ridgeline that slopes downhill from the top of the parcel just inside the eastern boundary and provides additional west and east aspects. Two waterways were identified during previous surveys as present on the parcel; there is a class III that originates on the parcel and a class II that passes through the northeast corner of the parcel. The Van Duzen River is approximately 1,000-feet North of the project parcel and 340-feet below the lowest (most Northern) edge of the parcel boundary.

Regulatory Compliance

• Water Board – Water Rights

The cultivator has a Small Irrigation Use Registration (SIUR) with the State Water Resources and Control Board (SWRCB) (Appendix E). This SIUR limits the cultivator's storage capacity to 0.77 acre feet (250,905 gal) and the diversion rate to the more restrictive rate of 10 gal/min as described in the current version of the SWRCB Cannabis Cultivation Policy ATTACHMENT A Definitions and Requirements for Cannabis Cultivation. The cultivator is required to comply with the terms of the SIUR and observe the seasonal forbearance period (between April 1st and Oct 31st) until the SWRCB reviews and approves the applicant's claim of a hydraulically isolated spring on the parcel – at which time, if the DWR agrees that the spring is isolated, the cultivator's SIUR will be cancelled. The cultivator commissioned an evaluation by a geologist at Lindberg Geologic Consulting. The geologist determined the spring to be hydrologically isolated – not connected to surface water. The isolated spring report was submitted to the SWRCB Division of Water Rights in August 2019; no determination regarding the spring has yet been made.

• Water Board - Cannabis

The parcel was enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) under order no. R1-2015-0023-DWQ. The WDID issued to the cultivator was: 1B16554CHUM

The parcel is now (June 2019) enrolled in the SWRCB Cannabis General Order (Order No. WQ 2019-0001-DWQ). The cultivator was issued an application number, 410462; The cultivator is waiting to receive their Notice of Applicability (NOA) that provides their final enrollment confirmation and new WDID from the SWRCB. The technical document for the SWRCB, the Site Management Plan, is in progress. This document once completed (Spring 2020) will be submitted to the Water Board and the County, where it will take the place of the Water Resources Protection Plan (WRPP).

• Clean Water Act Section 401

The cultivator had a 401 permit prepared and submitted (June 2019) by NRM. The 401 was submitted under the Appendix D of the NCRWQCB Cannabis policy

• California Department of Fish and Wildlife

The LSAA for the parcel (Appendix H), with the consultation of CDFW staff, Greg O'Connell, was revised per the request of CDFW and submitted to CDFW in August of 2019. The application includes: 1 culvert replacements, two culvert removals, a rocked ford, an improved pond spillway, a road with use restrictions and two Points of Diversion (POD1 & POD2). The spring POD is supported by the evaluation of Lindberg Geologic Consulting that determined the spring to be hydrologically isolated. The evaluation was sent to

CDFW in August 2019. The POD2 is the existing pond, constructed pre 2016 and used as rainwater catchment and secondary containment for a water bladder. Discontinuing the use of the bladder, the cultivator will use the pond exclusively as an onstream pond from which he will draw water during the summer season. CDFW staff, Greg O'Connell, has indicated via email (Oct 2019) that he is willing to permit the use of the pond for water diversion and storage and this is confirmed in the language of the Final LSAA.

• Humboldt County Property Lines and Cultivation Areas

As a result of the in progress road work on the northern property boundary, State Route 36, the California Department of Transportation (Caltrans) had appropriated (2017), through the prescriptive easement process, a portion of what was known as APN 210-191-015. The redrawing of the new northern boundary and new APN, 210-191-059, on the Humboldt County GIS layer placed the new APN boundary (APN 210-191-059) through the existing cultivation area. See Figure 4 below.



Figure 4. Humboldt Web GIS – Existing cultivation and mapped APN (from Hum GIS).

To clarify the location of the property line in relation to the existing cultivation, the cultivator employed a professional land surveyor, Ed George Junior, to survey the eastern property line. On February 12, 2020, the property line, on the Eastern side, was determined to be 2-3-feet inside (West) of the existing fence line and between 2.2 and 4.7-feet away from the existing cultivation (See Figure 5 for Certified Survey Exhibit; See Figure 6 for orthographic overlay)



Figure 5. Certified Survey Exhibit; Ed George Jr., Feb 18, 2020.



Figure 6. Existing cultivation with respect to surveyed property line and APN boundaries (Hum GIS).

The surveyed property line and the setback waiver from the neighbor to the east (on file with Humboldt County), mean that the cultivation location complies with the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO no. 2559).

Cultivation

There were six (6) pre-existing outdoor cultivation areas on the property according to Humboldt County's Cultivation Area Verification report that amounted to 25,515 sq. ft. of total cultivation area. Of this original amount, Humboldt County awarded the cultivator 24,000 sq. ft. of outdoor cultivation in the cultivator's interim permit. The original layout of the cultivation on this parcel has since been modified (See Relocation and Restoration Report, Appendix D) in order to relocate cultivation out of stream buffers and away from slopes above sensitive stream reaches. The following cultivation site summary reflects the layout described in the Relocation Report: APN 210-191-059, Sept 19, 2019 (Appendix D) and seen in Figure 2 and 3 above.

Site Summary

The total cultivation area on this site, after relocation, will be: <u>**24,000 square feet**</u>. All dimensions (feet) are adapted from PWA Plot Plan (Figure 2).

The relocation area, when work is complete, will have a total of <u>22,680 square feet</u> of cultivation:

- Five (5) 35-foot x 120-foot greenhouses = 21,000 sq. ft.
- One (1) 35-foot x 48-foot greenhouse = 1,680 sq. ft.

The other hoop house cultivation on site will be <u>1,320 square feet</u>:

- Greenhouse #7 will be modified; a portion will remain on the roadbed at its current location: GH #7 (section) = 570 sq. ft.
- Greenhouse #6 will remain as is:
 - GH #6- approximately 750 sq. ft.

The **propagation facilities**, comprising <u>2,210 square feet</u>, on site will are not impacted by the relocation:

- North of property Two shipping container facilities 8 x 20 = 160; 160 x 2 = 320 sq. ft.
- North of property large fabric house 18 x 55 = 990 sq. ft.
- West of property, near travel trailer residences 20 x 45 = 900 sq. ft.

Soils Management

The project has one spoils pile on site where the outdoor cloth pots were emptied after the 2018 growing season. The pile was tarped and remains tarped. This soil will be amended and reused for the 2020 growing season. The cultivator does not plan to include any soils piles, neither for disposal, nor for amending in the future. Instead of dumping soil from pots, future winterization will include planting exposed soil with a cover crop (clover) and mulching with weed-free straw or gathering and tarping the pots. The cultivator plans to add nutrients to the soil directly - in each pot/bag or bed as needed and typically before replanting occurs.

The cultivator will not use any rodenticide.

The cultivator will apply one organically derived product to control mildew, mold and pests

• Trifecta Crop Control (5gal on hand)

This product will be applied with backpack misters when outbreaks occur. This product and the backpack misters will be stored in the locked shed north of the processing area.

The cultivator will use a variety of organic nutrients. All nutrients will be stored in the locked shed north of the processing area.

F	ertilizer/Nutrient	Amount on Hand
•	Azomite	100 lbs.
•	Fish Bone Meal	40 lbs.
•	Worm Castings	2,000 lbs.
•	Feather Meal	40 lbs.
•	Glacial Rock Dust	320 lbs.
		7,6,11

• Kelp Meal 75 lbs.

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. APN: 210-191-059 Apps # 11207

- Oyster Shell 35lbs.
- Chicken Manure 200 lbs.

Harvests

The table below is from the Cultivation and Operations Plan produced by AgDynamix. The cultivator describes this table as an accurate estimate of the expected cultivation schedule and water use. The hoop houses will employ light deprivation techniques (cover to reduce daylight) to produce two harvests per year. The cover crop will be clover. The cultivator will also use apply straw cover to reduce potential soil loss (splash erosion) to pots and bare ground for winterization.

Table 1. Two (2) harvests per year: Cultivation Schedule and Water Use (reproduced from 2017 COP, AgDynamix)

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Greenhouse 1	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 2	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 3	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 4	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 5	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 6	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 7	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Water	1860	1680	2460	2400	21860	21800	26800	31860	31800	1860	1800	1860

Water

The water budget is based on a hand watering and drip irrigation system. The cultivator is planning to install a complete drip irrigation system in 2020 or 2021 once the cultivation permit has been approved and permitted relocating has occurred. According to Table 1, the total veg/bloom water requirements for the project is 135,980 gallons. The project currently has 3,500 gallons of tanks on the top (south) of the parcel and a 200,000 gallon storage/ rainwater catchment pond. The cultivator will add an additional 2,500 gallon tank near GH #6 for the 2020 growing season. The project will have a total of 206,000 gallons of water storage for cannabis irrigation.

The cultivator's Cannabis Small Irrigation Use Registration (SIUR) from the SWRCB allows seasonal diversion (from the onsite spring) between December 15 and March 31 (or as soon as Nov 1 depending on surface water flow). The SIUR allows up to 0.77 acre-feet (250,905 gallons) of storage and 0.614 acre-feet (200,073 gallons) of total annual diversion. The current rate of withdrawal from a surface waterbody or subterranean stream is limited to an instantaneous rate of 10 gallons/minute by the current version of the SWRCB Cannabis Policy (WQ 2019-0001-DWQ: Attachment A, Section 2, Requirement 78). The water diversion for this project is further limited by CDFW (LSAA no. 1600-2018-0814-R1: Section 2.22) to a maximum rate of 3gpm.

In the absence of a flow test, the measure of sufficient water for cultivation and storage is based on observation and past experiences. In late Summer, August 2019, the point of diversion, the spring, was observed to be flowing. The geologist, David Lindberg (Isolated Spring Report, 2019; Lindberg Geologic Consulting) describes seeing a "constant trickle" of water flowing from two pipes driven into the hillside. In the past, the cultivator filled the water bladder that was in use (175,000 gallons) as well as the existing 3,500 gallons in tanks from the singular spring source. It is also true that the that the primary water storage feature (pond) will also be a passive collector of rainwater. Based on the demonstration of all season flow, past experiences and supplemental rainwater collection, the cultivator is confident that all water storage will be filled at the end of the diversion period (March 31) and will be more than sufficient for cultivation.

Table 2. Cultivation water Suppl	y = 2020 Olowing Season	
Cultivation Water Requirements	Amount of Stored Water Available	Requirement
(gallons)	(gallons)	Met?
135,980	206,000	YES

Table 2. Cultivation Water Supply - 2020 Growing Season

The question regarding sufficient water for a drought or multiple drought years is already, inherently addressed. According to the National Integrated Drought Information Systems, 2019 was the first year since 2011 that California has not been classified as experiencing drought. Therefore, all past cultivation and water needs, having been met at this site by spring water only, are evidence that the water available to the site is sufficient even in a drought or consecutive drought years.

In addition to the mapped 3,500G of tanks on the south end (top) of the parcel and the planned 2,500 gallon Fire Water supply tank near GH #6, there is an additional tank of 2,500 gallons, located near the trailer residences that is used exclusively for a domestic supply. The project will add additional water infrastructure as needed to supply water to the proposed restroom with sink and shower (connected to proposed septic system) that is planned to go in near the processing area. The water will be sourced from the spring.

Water Quality

In 2017, Pacific Watershed Associates (PWA) completed a Water Resources Protection Plan (WRPP) as a component of the county permit requirements. The table below is adapted from the original table in the WRPP - the columns describing the Completion date and Comments are edits made by NRM in this document.

Joiot Kuy, Kud – Iligii	ucaunem priority, renow – moderate ucaunem priority as assigned by r w.r. orey mode	Status:	pieted as established by NKM.
Requiring	Summary of Corrective Action/Recommendation	Anticipated Time of	Comments
Action		Completion	
	 Install rolling dip(s) on Access Road #7 approximately 75 feet to the right of Stream Crossing #3 (SC #3). Install a second rolling dip on Access Road #0 directly dependence of the rolling dip on Access Bood #7 to compare the second second s		Road improvements (as described by PWA in the WRPP and by the engineer that performed the
	#8 directly downslope of the rolling dip on Access Road #7 to convey and disperse road surface runoff onto the hillslope below and to disconnect		cultivator's Road Evaluation) will be installed in 2020. The driveway access to the site has been greatly
	concentrated surface runoff and sediment delivery to streams.	Incomplete;	impacted by the ongoing improvements to State Route $\frac{36}{26}$
	 Instan 2 forming dips on the Main Koad near Greenhouse #1, one between Outhouse #2 and Storage Shed #2 and the second immediately east of the intersection of the Main Road and Access Road #8. See Figure 2 for 	<u>Fall 2020/</u> Spring 2021	The Relocation and Restoration Report (Appendix D)
1_Site	proposed rolling dip locations.		describes the proposed widening of the main access
Maintenance, Erosion Control	• Install additional rolling dips with adequate spacing intervals at any location where concentrated road runoff, rilling and/or gullying is observed.		
and Drainage Features	 Have the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. 		The berm design and outlet for the proposed rainwater catchment pond have been submitted to CDFW for evaluation.
	Bare soil areas should be mulched and seeded with native erosion control	Complete/	If native grasses have not colonized bare soil during the 2019 'rest' season, the cultivator will reseed in
	to ensure no additional sediment delivery is occurring.	Cugoing	Spring of 2020.
			The Relocation Report (Appendix) for Tree Pharm LLC. Includes a revegetation plan for planned disturbances.
2- Stream	• Upgrade the stream crossings on the Project Site with culverts sized to pass the expected 100-year peak streamflow, including debris in transport, and with culverts that are horizontally and vertically aligned with the natural stream channel.	Incomplete Date	The revised LSAA application submitted in Aug 2019 includes detailed plans for one culvert replacement and the decommissioning of two existing processings
Maintenance	• Based on drainage area calculations, all three stream crossings should be upgraded to 24-inch diameter culverts. Insure none of the crossings have a		In June 2019, NRM submitted the Appendix D (401) to the NCRWQCB.

Table 3. Corrective Actions/Recommendation and Status Update Table adapted by NRM from PWA's 2016 WRPP for Tree Pharm, LLC.

		5-Water Use			Management	3- Riparian and Wetland Protection and				
 Monitor and record the timing and volume of surface water diversion, water storage and water use. 	• Install water monitoring meters on your surface water diversions and water storage vessels.	Implement a Water Monitoring Plan on the Project Site:Install float valves on storage tanks and the water bladder to prevent overflow.	 Develop and refine the Water Budget for the Project Site to determine water needs and required storage volumes needed to forbear during the entire dry season from May 15th - October 31s 	 PWA recommends immediately discontinuing use and fully decommissioning Outhouse #2 to prevent impacts to water quality. 	• Straw mulch and native erosion control grass seed should be applied to any bare soil areas closest to the Class III stream (within and near the 50 foot buffer) and where the potential for sediment delivery exists.	• Straw wattles, straw bale barriers or silt fences should be installed around the perimeter of HH #5 to prevent nutrient mobilization in surface runoff either during the wet season or during the cultivation period	• PWA recommends either (1) procure a variance from the NCRWQCB to allow for HH #5 to be within the 50-foot setback requirement, or (2) relocate HH #5 outside of the 50-foot riparian buffer zone of the Class III stream.	 commencing work in any watercourse or at any stream crossing. These may include, but not be limited to the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement (LSAA) 1602 and Army Corps of Engineers (ACOE) 404 Permit. 	Obtain all necessary agreements and permits prior to	• After upgrading of the stream crossings, monitor and perform adequate maintenance to prevent or minimize erosion following appropriate BMPs
	Complete/ Ongoing		Complete	Complete		/Proposed Spring 2020	Incomplete			
	Continuous gauge meters on Spring (POD) and irrigation tanks have been installed.	Bladder has been discontinued. Float values on storage tanks have been installed.	Pending approval of isolated spring claim, the cultivator will abide by the SIUR limitations established by the SWRCB division of water rights in terms of amount approved (0.77 acres feet of storage and not to exceed 42,000 gallons per day) and 'ok to divert' days during wet season.	Septic testing has been performed and septic is planned.	cultivation will be relocated to an environmentally superior site on the parcel and the environmentally sensitive areas will be restored. See Appendix D, Relocation Report for this parcel.	The cultivation that occurs within the riparian setbacks to the Class III stream (and pond) will be removed to comply with the SWRCB. The removed	Note: the hoop house (HH) #5 refers to the greenhouse (GH) identified as #7 on NRM maps and subsequent PWA maps (See Appendix F for PWA WRPP Map).			Work will begin in the dry season and only after receiving both the Final 1600 LSAA and the 401

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. APN: 210-191-059 Apps # 11207

Cultivator describes tarps over beds in HHs/GHs with all pots pulled inside of greenhouses and tarped. Tarps on spoils pile and all other bare soil revegetated.	Complete	 Implement appropriate erosion control and containment BMPs at HH #5 to prevent nutrient delivery to surface waters in the event of excessive irrigation or runoff during the wet season. 	6-Irrigation Runoff
The Final LSAA, no. 1600-2018-0814-R1, includes pond water extraction and seasonal spring diversion.	Complete	•Obtain a Lake and Streambed Alteration Agreement (LSAA) from CDFW for the surface water diversion	
The cultivator will continue to comply with all county permitting requirements.		• Obtain all necessary permits prior to commencement of construction activities if estimated fill volumes will exceed 50 cubic yards. Retroactive permitting may be required by Humboldt County for the water bladder pad, containment berm, and any other graded areas.	
The cultivator's 401 NOA that describes the plan for the pond and spillway has yet to be approved.	Incomplete Fall 2020	• Monitor the containment berm and drainage ditch for signs of instability or potential erosion and implement appropriate BMPs to mitigate sediment delivery where needed.	
The Cultivator's Final LSAA from CDFW approved the replacement of the water bladder with a pond of 200,000 gallons with an improved spillway (including widening and soil stabilization plans).		• Have the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments.	
The cultivator feels that the water budget described in this document is adequate. The water budget will be adjusted as new irrigation technologies are installed.	Ongoing	• Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided	
The cultivator did not cultivate during the 2019 growing season.	Complete/	• Cultivator should measure and record average water use on a per plan basis (noting type of cycle, where/how it is planted, etc.) to develop and refine a water budget.	
CDFW, in the cultivator's Final LSAA, approved the proposal to replace the water bladder with a pond of 200,000 gallons with an improved spillway.	Complete	• Replace water bladder with rigid water tanks and/or off-stream, rainwater fed pond sufficient for your dry season needs.	
Plan described in the Relocation and Restoration Report (Appendix D).	Fall <u>2020</u>	Rainwater harvesting during wet season should be considered.	
Cultivator will install new drip irrigation line for all planted areas upon receiving final approval from	Incomplete	• Increase use of water saving strategies, such as drip irrigation system, irrigation scheduling, and more.	

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to the SE of the processing area and does not also contain fertilizers or pesticides/herbicides.	Ongoing	 Do not store petroleum products and/or chemicals with fertilizers, soil amendments and/or pesticides/herbicides. 	Other Chemicals
Petroleum products (gasoline and tools that store/use gasoline) will be stored in a locked shed in/on	Complete/	• Place all small fuel cans, generators, pumps and other gas powered garden equipment in adequate secondary containment basins and store in a safe and secure location out of the elements.	9-Petroleum
(N of processing area) in/on impermeable polyethylene totes. See Figure 2 for locations.		• Keep track and record the type, timing and volume of pesticides, herbicides and related chemicals that are applied your operations.	
Fertilizer and pesticides will be stored in locked shed	Complete/ Ongoing	• When present, these chemicals should be stored within enclosed buildings in such a way they cannot enter or be released into surface or ground waters.	8-Pesticides and Herbicides
The cultivator will track, and report fertilizer use as per the SWRCB requirements.	•	• All pesticides, herbicides and related materials (e.g., fungicides) must be used and applied consistent with product labeling.	
nutrient mobilization over the wet season.		• Tarp or plant cover crops in spent pots, planting holes and potting soil piles lock up nutrients over the wet season.	
season. The cultivator will plant all exposed growing medium/soil with clover ad mulch the areas to prevent	Ongoing	mobilization or leaching of nutrients.	
There was no cultivation during the 2019 growing	Complete/	• To prevent nutrient mobilization, you should: 1) keep new or spent potting soils and amendments inside or under a roof or 2) tarp any soils or	
season. The cultivator will track, and report fertilizer use as per the SWRCB requirements.	Ongoing	• Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided.	Amendment Use
There was no cultivation during the 2019 growing	Complete/	• Keep detailed records of the type, timing and volume of fertilizers and/or other soil amendments you use in your operations	7-Fertilizer and
for comparison). Winterization			
HH #4 refers to the GH identified as #6 on NRM maps(See Appendix F for WRPP map and Figure 3	Complete	 Install straw wattles or implement other appropriate BMPs where necessary to contain any mobilized nutrients at the locations listed above. 	
subsequent PWA maps; CA#1 refers to the main Cultivation Area with GHs #1-5 on NRM maps and		planted to prevent nutrient mobilization over the wet season.	
Note: The hoop house (HH) #5 refers to the greenhouse (GH) identified as #7 on NRM maps and		 Potting soil and soil amendments stored at CA #1, HH #4 and #5, and at any other locations on the Project Site, should be tarped or have cover crops 	

Human Waste	11- Refuse and	
 PWA recommends using portable toilets on the Project Site until the permitted OWTS can be installed; these portable toilets should be serviced by a rental company and the records of servicing kept onsite. Discontinue usage of the two (2) outhouses and both should be fully decommissioned by filling in the pit and removing toilet infrastructure. 	• PWA recommends conducting wet weather testing and onsite investigations to site, design and install a permitted Onsite Wastewater Treatment System (OWTS) for the Project Site. The system must be designed to serve the number of residents and workers that will be present on the Project Site when your cultivation-related operations are at their peak.	• Obtain and make available one or more spill prevention cleanup kits to clean up small spills. Spill kits should be located where fuel is stored and refueling occurs.
Complete	Complete	Complete
Portable toilet for use while septic is in planning stages is located near processing building. Toilet is maintained by Six Rivers B&B.	In December 2018, DTN Engineering was contracted by the cultivator to conduct a Site Septic Suitability Analysis for Tree Pharm, LLC. Septic is in planning stages.	Located in locked shed that stores gasoline cans.

The Water Resources Protection Plan (WRPP) from PWA identifies key water quality components of which several are still pending (summarized from Table 3 in the list below). All other components identified in the WRPP have been completed.

- 1. An environmentally superior cultivation site has been located and described in the Relocation Report attached to this document. This Relocation Report, when approved, will allow the cultivator to move cultivation area away from sensitive environments (off of the slopes impacting class III and class II streams) and onto a stable area (<15% slope) that is removed from impacts to the nearby water resources.
- 2. The 1600 LSAA permit from CDFW includes proposed improvements to stream crossings, the pond outlet and a review of the onsite spring as a Point of Diversion. The Appendix D (401 permit) from the State Water Board will confirm improvements to stream crossings and pond outlet and use.
 - Stream Crossings

The proposed improvements to the three stream crossing on the site will be completed in the 2-3 days during Spring/Summer 2021 (when both LSAA and NOA from the SWRCB are in hand).

- Pond

The proposed 200,000 gallon pond will replace a water bladder that occupies the space. The bladder was approximately 175,000 gallons and had additional containment area. In order to become a pond, it was determined that an improved spillway (improved channel with geo textiles and rock armor) would eliminate the potential for sediment mobilization in the event that the pond overflows. This spillway improvement was submitted to Greg O'Connell at CDFW and to the NCRWQCB in August 2019 as a revised LSAA . The Final LSAA (no. 1600-2018-0814-R1) confirms that the pond is approved for water diversion and storage with the condition that the cultivator have an engineer inspect the pond and the berm and provide a stability report. The plan also includes a request for a Water Management Plan and requires annual surveys (approximately three (3)) to determine the presence of bullfrogs and a plan for eradication if bullfrogs appear onsite. The engineer's report and the Water Management Plan are forthcoming.

3. The grading and other road improvements are scheduled for the dry season in 2021. The SR36 is wrapping up significant rerouting at the northern boundary of the cultivated parcel and is not expected to cause prohibitive interference with the cultivator's own road improvements. The cultivator will coordinate with Caltrans before work on the driveway at the intersection with SR 36 is attempted.

Power

The project utilizes energy from one primary source, PG&E. The project has PG&E power from above ground poles that provide the north half of the parcel with electrical power. The cultivator uses power in the propagation (mixed light) and processing areas and to move water. Seasonally, the project will use propane for heating. The cultivator uses portable greenhouse heaters that run on propane for heating the propagation areas. The propane and heaters (when not in use) will be stored in the locked shed east of the processing area.

The project will also keep five to ten gallons of gasoline on hand to power maintenance tools. One (1) to two (2) 5 gallon gasoline containers are stored in the shed in polyethylene totes. These cans are used to fuel

maintenance related equipment (rototiller and string trimmer). The tools and the gasoline will be stored in the locked shed north of the processing area.

Employees

The site expects to have two (2) employees (ideal number) onsite from 5-7 days a week during the growing and harvesting season. The employees will work from Spring through Fall only and only during daylight hours. These employees will travel daily to the site in personal vehicles and park in the parking area off of the main access road near the processing building. The parking area will be graveled and should accommodate up to 4 vehicles (19ft x 8 ft wide spaces on a preexisting flat). The employees will move from garden to garden in one vehicle or on foot. The employees are expected to come from nearby communities and/or nearby residences.

Compost

The plants will be harvested, dried, and processed on site. The root balls, stems and trimmings from the harvests (2) will be taken to the compost pile on the north side of the processing area. The compost area will be protected from the elements and will be located on a non-permeable surface. The project is exempt from the SWRCB general order concerning composting operations (WQ 2015-0120-DWQ) because the project handles only 100% agricultural materials derived from an agricultural site with the end product returning to the soil onsite and the composting operation is not expected to exceed 500 cubic yards of materials at any one time.

Solid waste

In the Spring of 2020 or 2021, pending County approval, at the beginning of the dry weather season, the cultivator will begin to implement the plan described in the Relocation and Restoration Report (Appendix D), install the septic system and restroom, as well as begin all recommended road improvements as well as any approved 1600 and 401 projects. Time and finances permitting, the cultivator will also begin the installation of the drip irrigation system that is planned.

The Relocation Plan specifies that the sensitive environmental areas will be cleared of all waste that is occupying the space. The moving of several greenhouses is likely to also create new waste as old parts/coverings, planting pots and trellis are replaced (jute or other biodegradable fiber must replace plastic trellis in 2020 per the SWRCB order WQ-2019-0001-DWQ). There will also be irrigation tubing waste as the project transitions to a new drip system. All of the project refuse will be moved to the transfer station before the onset of Winter (Nov 1) and the end of the growing season.

After the initial removal of refuse to the transfer station, the project will produce a minimal amount of garbage. The garbage produced by the site during normal project operations will be primarily generated by employees (plastic packaging of food and paper) and plastic packaging from nutrients and pesticides, some of which will be recyclable. The garbage and rinsed recyclable containers will be collected in cans with lids that will be located inside of or just outside of the locked shed to the north of the processing area. If located outside of the shed, the area will be protected from the elements and contained so that neither rain nor wind will impact the waste storage. The garbage and recyclables will be removed by an employee two (2) times per month or more frequently as needed to the Eel River Transfer Station in Fortuna.

Wastewater

Two pit toilets on site have been decommissioned. The cultivator has brought in a temporary portable toilet that is serviced by Six Rivers B&B. The cultivator has had a Site Septic Suitability Analysis conducted by DTN Engineering for the planned ADA compliant restroom facility (with sink, toilet and shower) that will be installed in the processing area. The analysis identified two sites with 'Zone 2' Sandy Loam and Sandy Clay Loam soils that can accommodate a conventional onsite wastewater system with no further testing required (i.e.: wet weather percolation testing). See Appendix G.

Fire Safe Standards

The cultivated parcel is located in the State Responsibility Area (SRA) and therefore the project will comply will CalFire Fire Safe Regulations. To meet these regulations, the project will:

<u>Roads</u>

The cultivator will improve the project driveway and access roads per recommendations of David Nicolleti in the Roadway Evaluation (county files) Nicolleti recommends a paved approach from SR36 (Caltrans may have responsibility for this), as well as to grade and reshape the driveway.

Improvements to the access roads on property include grading for drainage improvement and widening to 12 feet. The addition of rolling dips will also be included, as they were described as treatments for drainage by both Nicolleti in the Roadway Evaluation and by PWA in the WRPP (Appendix F).

Roadway Turnouts

The driveway and the access roads have adequate turnouts. These are identified, with photos and map points, in the Roadway Evaluation.

Roadway Turnaround

The road evaluation also identified one area as a potential turnaround area for emergency vehicles (Figure 3). This is the area at the entrance to the parcel near the processing area where several access roads converge. A gravity fed fire hydrant will be located at this turnaround. This flat will be kept free of parked cars and cleared of debris.

Signage/ Addresses

The project will add signage in two places. At the intersection with State Route 36, the address will be posted on a post with other site address and be visible from both directions of traffic. The address numbers will be 4-inches high with a 1/2-inch stroke and reflectorized; the background color will be contrasting with the numbers to promote visibility.

The driveway is shared. Where the cultivator's driveway splits off of the shared driveway, the cultivator will also post the address numbers. These numbers will be visible (standards described above apply) and the cultivator's driveway clearly marked.

Emergency Water

The project will provide 2,500 gallons of water for emergencies in hard sided tank that will be available at all times. The water will be located at GH # 6 (Figures 2 and 3) and will remain full at all times. The tank

will be connected to a 3" pipe (capable of supplying 200gpm) that will travel (gravity flow system) approximately 300-feet downhill where it will terminate at hydrant. The hydrant will be 18-inches above grade, made of non-corrosive material (brass or equivalent) and have a 2-1/2 inch male thread with a cap. The hydrant will be located on the South edge of the turnaround area so that the emergency vehicle using the hydrant will not block the roadway. The hydrant will be located four (4) feet off of the roadway and the area around it (8-feet radius) will be cleared of flammable vegetation. The hydrant will be clearly marked with a sign ("Fire Water" with a 3" letter height, 3/8" stroke and against a contrasting background).

Fuel Modification

A minimum setback of 30-feet is observed by development on this parcel except for the area nearest the main cultivation at the southwestern edge of the parcel. Here, the cultivator has a setback waiver (on file with Humboldt County) signed by the neighboring property owner that permits cultivation up to the property line. The development on the parcel consist of pvc and plastic greenhouse material, fabric and plastic propagation and drying tents, fabric and steel carports, and steel shipping containers. These developments are flame resistant.

References

- DTN Engineering. 2018. Septic Site Suitability Analysis for Tree Pharm LLC. 41000 Highway 36, Bridgeville, CA 95526; APN 210-191-015.
- Lindberg Geologic Consulting. 2019. Engineering Geologic Review; Hydrologic Isolation of Existing Spring; APN 210-191-059, 41000 Highway 36, Dinsmore.
- National Integrated Drought Information Systems (NIDIS). 2019. Drought in California from 2000 to 2019. Available at https://www.drought.gov/drought/states/california. Retrieved October 2019.
- Nicoletti, D. 2018. Humboldt County Road Evaluation Form; Part A and Part B and Roadway Evaluation Report for APN 210-191-015, Apps 11207.

Pacific Watershed Associates. 2017. Water Resource Protection Plan (WRPP) for APN 210-191-015.

Appendix A

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207



COUNTY OF HUMBOLDT Planning and Building Department Cannabis Services Division

3015 H Street Eureka CA 95501 Fax: (707) 268-3792 Phone: (707)445-7541

May 29, 2019

Tree Pharm, LLC.

RE: Permit Application No. 11207

APN: 210-191-015

Dear: Mr. Simmons

Thank you for your submittal of the above referenced application for a commercial cannabis permit. Unfortunately, after reviewing the application submittal was found not to contain all of the required information and we are unable to move the permit forward at this time.

Below is listed the information we need to continue processing this permit application:

- 1. Even though, we have received the consent from the neighbors from APN 210-191-049, the property line on the eastside, will still need to be **surveyed by a qualified surveyor**.
- Please revise the Cultivation and Operations Plan to include replacement of the existing 175,000-gallon water bladder with hard tanks, a pond, or other authorized water storage facilities. It is noted that the Plot Plan shows the proposed pond is located on the site of the existing water bladder. Please add a discussion in the Cultivation and Operations Plan, if applicable, of all needed elements to install the pond (i.e. Bullfrog Management Plan, grading permits, agency coordination, etc.).
- 3. Please revise the **Cultivation and Operations Plan** regarding the status of obtaining the Initial Statement of Diversion and Use, Streambed Alteration Agreement, and other pertinent documents.
- 4. Per the letter from California Department of Forestry and Fire Protection (CAL FIRE) dates October 7, 2017, please revise the **Cultivation and Operations Plan** to discussion, and show on the Plot Plan (or show on a separate plan), where appropriate, the emergency access turnarounds; signing & building numbers; emergency water standards designated water for storage for fire; and fuel modification standards.
- 5. Please revise the **Cultivation and Operations Plan** to include a complete description of the month to month cultivation schedule. Please include a monthly accounting of projected water use in this section.
 - The Cultivation and Operations Plan mentions installation of water reduction irrigation systems. Please include a description of these measures, the plan for implementation (if applicable), and volume of water they are projected to save.
- 6. Please provide additional detail on how the employees will travel (i.e. individual vehicles, carpooling, etc.) to the site daily.
- 7. Please revise the **Plot Plan (**or show on a separate plan) the location of proposed parking (needed for all employees) and show connection of access road to named County/State roadway.
- 8. Please revise the Cultivation and Operations Plan to discuss the details of the Soil Management Plan.

Without this requested information the Department is unable to fully evaluate this project for compliance with the findings specified in Humboldt County Code Sections 312-1.1.2 and 312-17 et seq., and the California Environmental Quality Act (CEQA). Until this additional information is received we must suspend further evaluation of your project application.

We have limited this list to the information essential to our understanding of your project's compliance with the findings for permit approval. If you believe the information requested is not required, you may submit a letter indicating such and request that your project be taken to a Hearing Officer Zoning Administrator. However, going to hearing prior to having submitted documentation sufficient to show that all findings for permit approval can be made will result in a Department recommendation of denial for the project.

We understand that securing this documentation may require additional work by you or by others on your behalf. However, you must be diligent in your efforts to complete these items or the Department will have no option other than to schedule your project for a hearing and decision as described above.

When you have assembled all the requested material, submit these items with this letter as a package to the Cannabis Planner on Duty (CPOD) during regular business hours attn: Elizabeth Moreno. In order to devote our time to actively working on applications that are fully complete and ready to move forward, the county must strictly adhere to our policy of not accepting incomplete or individual submittals of required information. All required items must be submitted as a single package. In order to complete your application and restart the review process we will need for you to submit this deficiency letter with all required submittals as a package. Once the required information is received processing your application will promptly resume.

Please remember that the filing of a permit application does not authorize the applicant to engage in any new commercial marijuana cultivation, processing, manufacture or distribution activity. No such activity shall commence until the application has been processed to decision and all requisite clearances, permits and/or licenses have been secured. If you have questions about this letter, please contact Elizabeth Moreno at emoreno@co.humboldt.ca.us, or call at 707.445-7245.

Sincerely,

Elizabeth Moreno Planner,

Appendix B

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207 Operations Manual for Tree Pharm, LLC. Cultivation Project Updated:11/21/2017

Produced By: AggDynamix CONSULTING · MANAGEMENT · COMPLIANCE INCORPORATED 2015

732 5th St. Suite H & I, Eureka, CA, 95501°(707)798-6199°agdynamix.com

TREE PHARM II

41000 State Highway 36 Bridgeville, CA 95526

> Tree Pharm, LLC. PO Box 43 Bridgeville, CA 95526

> > Cody MacDonald (707) 497-8960

AgDynamix, LLC Teisha Mechetti 707-798-6199

APN

210-191-015

Existing Zoning Designation

FR-B-5 (20)

Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

Ag Dynamix CONSULTING - MANAGEMENT - COMPLIANCE

Project Sponsor

Project Location

Project Name

Sponsor Contact

Permitting Agency

Table of Contents

Industry Analysis	9
Summary	9
State Regulatory Framework	9
Local Regulatory Framework	11
Humboldt County	11
Executive Summary	
Project Timeline	
Phase 1 (2017)	
Phase 2 (2018)	12
Project Overview	13
Project Summary	13
Location Description	13
Zoning	13
Soil Ratings	13
Maps	14
Overview Map	14
Assessor's Parcel Map	15
Zoning Map	16
Jurisdictional Boundaries Map	17
Land Use (Critical Facilities) Map	
Streamside Management Areas Map	19
Flood Zones Map	20
Slope Map	21
Stability Map	22
Environmental Impacts & Standards	23
Summary	23
Background	23
Project-Specific Factors	25
Mandatory Compliance Factors	25





Water Sources	25
Initial Statement of Water Diversion & Use (ISWDU)	25
Small Domestic Use Registration (SDU)	25
Small Irrigation Use (SIU)	25
Lake and Streambed Alteration Agreements (LSAA-1600/1602)	25
Water Board Order: Waste Waiver Discharge (WWD)	25
Water Resource Protection Plan (WRPP)	26
Department of Pesticide Regulation Requirements (DPR)	26
Archaeological Inspections & Survey	26
Additional Compliance Factors	26
Bureau of Cannabis Control (BCC)	26
CalCannabis Cultivation Licensing	26
Office of Manufactured Cannabis Safety	26
Performance Standards	28
Setback Requirements	28
Nuisance Mitigation	28
Generator Use	28
Consent to Inspect	28
Summary	29
Cultivation Schedule	29
Winterization Plan	29
Water Resources	30
Irrigation Plan	30
Irrigation System	30
Emergency Water Plan	30
Site Drainage, Runoff, Erosion Control	30
Please refer to the Water Resource Protection Plan on pages 8-11 and 17-18	
Protection of Watershed and Nearby Habitat	30
Please refer to the Water Resource Protection Plan on pages 12-13	30
Operational Plan	31
Summary	31



Business Organization	
Management Team	31
Business Description	31
Mission	31
Vision	31
Values	31
Products	32
Sales & Marketing	32
Chain of Custody	32
Packaging	32
Distribution	32
Track and Trace Standards	32
Transportation	33
Processing Plan	35
Background	35
Summary	35
Administrative	35
Labor Management	35
Recording & Reporting	36
Quality Assurance & Control of Product	36
Chain of Custody	36
Monitoring	36
Harvesting	37
Testing Procedure	37
Drying/Curing	37
Grading/Sorting	37
Processing	37
Packaging	37
Health & Safety	37
Job Hazard Analysis	37
Injury Illness Prevention Plan	37



	Heat Illness Prevention Plan	
	Hazard Communication Policies	
	Emergency Procedures	
	Chemical Handling	
	Eye Washing Station	
	Employee Accident Policies	
	Personal Protective Equipment Policies	
C	Occupancy & Structural Guidelines	40
	Project Processing Environment	40
	Housing	40
	Notification of Occupancy & Terms	40
	Maintenance of Sanitary Facility	41
	Dust Control Measures	41
	Water Access & Facilities	41
Cor	ntingency Plan	42
S	Summary	42
Ρ	Project Waste Management	42
	Project Specific Details	42
	Onsite Wastewater/Hazardous Wastes	42
	Project Equipment Inventory	43
	Project Product Inventory	43
	Waste Management Standards	43
	Solid Waste Removal/Recycling	44
	Water Production/Well Construction	44
	Hazardous Materials Handling	44
	Hazardous Material Standards	44
	Agricultural Product Storage	45
	Chemical Spill Procedure/Handling	45
Sec	urity Plan	46
S	Summary	46
Ν	Neasures of Security	46



Points of Security	46
Inventory Management	47
Prevention of Diversion	47
Appendices	48
Source Guide for Federal & State Requirements for Employee & Migrant Housing	48
Housing Standards/Requirements for Employee/Migrant Housing Caretakers	48
Sources of Additional California Regulatory Information	49
Federal Governing Bodies & Regulatory Framework	49
Summary of Employment Requirements for California Agricultural Employers	50
Table of Contents	50
Cal/OSHA	50
Definitions	50
Heat-Illness Prevention	50
Emergency Action Plan	50
Hazard Communication Program	51
Injury and Illness Prevention Program	51
Pesticides	51
Pesticide Postings	51
Wage-and-Hour Requirements	52
Federal & State Wage Provisions	52
Federal Provisions & California Provisions	52
Definitions	54
Additional Definition of Terms	55
General	55
Summary of Employment Requirements for California Agricultural Employers Transportation of Interstate Commerce Act (ICA) Regulations	57
Housing	57
Definitions	58
U.S Department of Labor	59
Summary of Employment Requirements for California Agricultural Employers	61
Glossary of Abbreviations & Definitions	62



Other Relevant Sources	. 6	6
------------------------	-----	---



Industry Analysis

Industry regulations have been enacted at the State, County, local and—in some instances—municipal levels. The proposed Project will adhere to all applicable regulations.

Summary

A complex framework of regulatory laws influences cannabis cultivation regulations pertaining to the proposed Project, including Proposition 215, the Compassionate Use Act, Senate Bill 420, and the Medical Cannabis Regulation and Safety Act (MCRSA), and Proposition 65 (Prop 64) or the Adult Use Marijuana Act (AUMA), and most recently the Medical Adult Use Cannabis Regulation Safety Act (MAUCRSA).

Local permitting must be obtained before seeking licensure at the State level (which becomes effective January 2018). Some local jurisdictions in California, to date, have established and implemented regulations to per miss, permit, and/or license cannabis business operations.

In November 2016, the AUMA legalized "recreational" cannabis possession, consumption, and personal indoor cultivation, but had no effect on medical marijuana permitting or licensing.

On June 27^{th,} Senate Bill 94, otherwise known as, the Medical Adult Use Cannabis Regulation and Safety Act (MAUCRSA) by Governor Jerry Brown in efforts to consolidate the two legislative pieces put in effect to govern commercial medical and recreational cannabis activities, otherwise known as the consolidation of the MCRSA and AUMA. The merge of these two legislative pieces features changes to the licensing scheme that we were working within prior to its effect.

State Regulatory Framework

With the passage of the Compassionate Use Act (Proposition 215) in 1996 and the Medical Marijuana Program Act (MMPA) in 2003 (Senate Bill 420), California created a system of possession and cultivation limits, a voluntary identification program, and assurance of a non-diversionary system of medical cannabis cultivation and dispensation. The intent of these legislative efforts was to clarify the scope of application, prevent arrest and prosecution, promote uniform application, increase accessibility of product, and address issues within the act to promote fair and orderly implementation.

In September 2015, the California State legislature enacted three bills under the MCRSA, consisting of AB-243, AB-266, and SB-643. Each bill addresses various issues pertaining to licensing and regulatory requirements involving medical cannabis cultivation, manufacturing, transportation, distribution, sales, and testing. These bills became effectual January 1, 2016, with State licensing to open on January 1, 2018.

The MCRSA establishes a multiagency framework to regulate commercial cannabis. The foundation of MCRSA is: "No person shall engage in commercial cannabis activity without possessing both a State license and a local permit, license, or other authorization." This legislation provides for the licensure of commercial cannabis activity in California, strengthens environmental protections, and creates licensing opportunities for small and specialty cultivators.


Assembly Bill 243 (AB-243) requires the CDFA, CDFW, and State Water Resources Control Board (SWRCB) to promulgate regulations and standards pertaining to medical cannabis cultivation efforts, mitigate impacts on environments, and coordinate enforcement efforts with State agencies.

Assembly Bill 266 (AB-266) addresses the licensure and regulation of medical marijuana for which the framework is primarily the responsibility of the Bureau of Cannabis Control (BCC) to enforce under the Department of Consumer Affairs' (DCA) and the Bureau of Medical Cannabis Regulation. Collaboratively, the Board of Equalization (BOE) and the CDFA are responsible for tracking and reporting the movement of cannabis goods throughout the State.

Senate Bill 643 (SB-643) addresses the setting of standards on behalf of physicians and surgeons prescribing medical cannabis and requires the Medical Board of California (MBC) to implement investigations of physicians who repeatedly or excessively prescribe medical cannabis to patients without good faith exemption. This bill requires the BMCR to gather fingerprints to conduct criminal history background checks.

This Act also grants the DCA sole authority to implement and govern the system for creation, issuance, renewal, discipline, suspension, or revocation of such licensure under the Bureau of Cannabis Control program. Additionally, the CDFA is responsible for administering provisions of the act related to or associated with cultivation and transportation of medical cannabis. This bill also authorizes counties and municipalities to propose and implement taxation on medical cannabis activity.

In addition to the initial framework developed to support local regulations and State licensing, there has been a broad legislative effort to institute clean-up bills to further clarify the scope and definitions under the MCRSA.

The Adult Use of Marijuana Act (AUMA), which passed in November 2016, has legalized adult use ("recreational") cannabis possession, consumption, and limited personal indoor cultivation. Because the AUMA legislation addresses only recreational cannabis issues, it currently has no effect on medical marijuana permitting or licensing.

On June 27^{th,} Senate Bill 94, also known as, the Medical Adult Use Cannabis Regulation and Safety Act (MAUCRSA) signed by, Governor Jerry Brown, in efforts to develop a single regulatory structure that governs commercial medical and recreational cannabis activities, collectively known as MCRSA and AUMA. The merge of these two legislative pieces features changes to the licensing scheme that were in effect prior to the implementation of MAUCRSA.

The creation of MAUCRSA prompted 23 license type activities varying from Cultivation, Processing, Manufacturing, Packaging, Infusion, Testing, Retail, Distribution, and Microbusiness licenses. License types 5-5B will not be available until 2023. Across the license types they will be assigned either an "A" for Adult Use or "M" for Medical operations. The introduction of new license types Type 5-5B Cultivation, Processing, Manufacturer I and II, Packaging, Infusion, and Microbusinesses was an introduction of license types carried from the AUMA. The MAUCRSA also now excludes transportation as a license type. Furthermore, clarification of the fact, points concerning that event licenses are not prohibited under this framework were also clarified. The local authority could issue event permits for "onsite cannabis sales to, and consumption by, persons 21 years of age or older at a County Fair or District Agricultural Association Event".



According to this legislation, an applicant may now pursue a State license without local approval, however, may not conduct activities until local approval is met, otherwise could prompt a violation that would make the State license applicant ineligible to hold the license.

Local Regulatory Framework

Under State legislation, MCRSA, municipalities possess the authority to set their own regulations pertaining to land use and commercial cannabis business activities. Local permitting must be obtained before seeking licensure at the State level (which becomes effective January 2018).

Humboldt County

In October 2015, Humboldt County began its review process of the Commercial Medical Cannabis Land Use Ordinance (CMCLUO). This legislation governs commercial medical cannabis activities within the authority of the County of Humboldt and establishes zoning regulations, performance standards, and environmental compliance—as well as requiring proof of documentation. The ordinance went into effect February 26, 2016. The deadline for applicants was December 31, 2016.

On September 13, 2016 Humboldt County issued a correcting and clarifying document to address the elements of the CMCLUO that were not clear under the initial Ordinance No. 2544 and the implementation of the program.

An Environmental Impact Report is underway to assess the overall impacts of this program which could significantly affect the Commercial Cannabis Land Use Ordinance, once the results of the study have been considered.



Executive Summary

Tree Pharm, LLC is a sole member, for profit, entity designed to conduct agricultural activities within the State of California.

The Project Sponsor is proposing 24,000 sq. ft. of cultivation in the form of four (4) cultivation areas comprised of seven (7) greenhouses and 12,996 sq. ft. of outdoor located on Parcel No. 210-191-015 totaling 28.75 GIS acres. The Project site currently features a 900-sq. ft. nursery area and a 990-sq. ft. fabric house that will be used dually as a nursery and for drying purposes. There are two 160 sq. ft. shipping containers that will also be used as a nursery. There is a proposed 1200 sq. ft. building that will be used for processing. The site will also be equipped with adequate equipment, fertilizer, and fuel storage space, designated areas for human refuse and compost, and easement roads to access site facilities. PG&E will support site activities.

Water to support site cultivation will be sourced from one (1) unnamed, isolated spring and one (1) proposed 175,000-gallon pond that is currently a 175,000-gallon water bladder. Water drawn from the spring will be stored in two (2) 2,500-gallon onsite tanks, two (2) 500-gallon onsite tanks, one (1) water bladder that holds 175,000 gallons.

The Sponsor has initiated the Waste Waiver Discharge (WWD) enrollments to facilitate compliance with the North Coast Regional Water Quality Control Board (NCRWQCB). The Initial Statement of Water Diversion and Use (ISWDU) has been filed to support the applicant's rights to water diversion/use. No other environmental filings are known to be required at this time.

Project Timeline

Phase 1 (2017)

- Obtain Land Use Approval.
- Obtain Building and Grading Permits.

Phase 2 (2018)

- Develop and Implement New Infrastructure.
- Retrofit Existing Infrastructure.
- Remove Water Bladder & Develop Pond.



Project Overview

The Project concerns Parcel No. 210-191-015 in Bridgeville, California that is seeking provisional permitting for outdoor commercial cannabis cultivation with consideration of the phased approach to development. The Project features four (4) cultivation areas totaling just under 24,000 sq. ft. Cultivation and processing activities would occur on the central and eastern portion of the Parcel.

Project Summary

The Project parcel is zoned FR-B-5 (20), which falls within the allowable zoning specified by the local authority. The Sponsor seeks permit approval for 24,000 sq. ft. of outdoor cultivation that is pre-existing, is supported by evidence, and involves natural light.

Location Description

The proposed Project would occur on legal Parcel No. 210-191-015 in Bridgeville, in the southwest quarter of the northwest quarter of Section 8, Township 1 North, Range 5 East, Humboldt Meridian. The Project features four (4) cultivation areas comprised of four (4) structures designated for nursery operations, seven (7) greenhouses, and one (1) outdoor area. Please refer to the plot plan.

Zoning

The property features zoning FR and the following characteristics:

- <u>GIS acres</u>: 28.76.
- <u>Coastal Zone</u>: Outside.
- <u>100 Year Flood Zone</u>: Outside.
- <u>Alquist-Priolo Fault Hazard Zone</u>: Outside.
- FEMA FIRM Flood Rating & Panel Number: Not Applicable.
- <u>Slope</u>: <15% in cultivation areas.
- <u>Relative Slope Stability (Per General Plan Geologic maps)</u>: High Instability.

Soil Ratings

As per Humboldt County's Ordinance No. 2544, because the project is pre-existing, no prime agricultural soil rating requirement pertains.



Maps

Overview Map





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Assessor's Parcel Map



Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017) ${f A} \mathop{g} \mathop{D} \mathop{y} \mathop{n} \mathop{a} \mathop{m} \mathop{i} \mathop{x} \mathop{s} \mathop{max} \mathop{s} \mathop{max} \mathop{max}$

INCORPORATED 2015

Zoning Map



Jurisdictional Boundaries Map



Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

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17

Land Use (Critical Facilities) Map



Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

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▲ CAMPGROUND



Streamside Management Areas Map





Flood Zones Map



Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

SUBTRACT



20

Slope Map



Agdynamix Consulting - Management - Compliance

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Printed: December 7, 2018

Humboldt County Planning and Building Department

21

Stability Map





Environmental Impacts & Standards

Environmental impacts and standards include a comprehensive summary of all environmental elements related to the proposed Project. Impacts could include land use, development, pollutants, nuisances, and related environmental concerns. Federal and State standards have been set—with oversight from the United States Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA)— regarding potential environmental impacts caused by general industry applications.

Mitigation measures that can be employed for cultivation activities to prevent environmental detriment often feature the implementation of Best Management Practices (BMPs) suggested by the State Water Resources Control Board (SWRCB) under the Water Board Order and enrollment/compliance with the Waste Waiver Discharge (WWD) program through the North Coast Regional Water Quality Control Board (NCRWQCB). This can include the potential requirement for a Water Resource Protection Plan (WRPP). Additional conformance may be required with the California Department of Fish & Wildlife (CDFW) (formerly Fish & Game) under a Lake and Streambed Alteration Agreement (LSA-1600/1602).

All projects must also adhere to standards and maintain compliance with regulations set forth by the Division of Environmental Health (DEH) through a Contingency Plan (see *Contingency Plan* below) regarding all wastes (known as a Waste Management Plan). Applicants must also abide by regulations set forth by the Department of Pesticide Regulations (DPR) and the Tribal Historical Preservation Office (THPO) for archaeological preservation.

Often it is found, during the review of the Project, that there may be additional requirements and/or specific needs to support a sound environmental action or mitigative plan to adhere to the standards set under additional agency authority.

Summary

Potential Project impacts could include biological resources, land use/planning, transportation/traffic, agriculture and forestry, hazards and hazardous materials, public services, utilities/service systems, geology/soils, and hydrology/water quality.

Development impacts could include those regarding landscapes, infrastructure, roadways, and other environmental ramifications resulting from the Project.

Nuisance mitigation would include prevention of environmental impacts such as through odors, lights, and sounds that could potentially adversely affect neighboring properties or habitats. The proposed Project area would be required to meet all setback standards required by all agencies within the State of California and the local authority.

Background

On January 1, 1970, President Nixon signed the National Environmental Policy Act (NEPA). California Governor Reagan followed suit by signing the California Environmental Quality Act (CEQA) into law on September 18 of the same year. These laws required the incorporation of environmental values into governmental decision making. These statues require Federal, State, and local agencies to analyze and disclose the potential environmental impacts of their decisions, and—in the case of CEQA—to minimize significant adverse effects to the extent feasible.



NEPA was codified under Title 42 of United States Code § 4331 et seq. (42 U.S.C. 4331 et seq.). Under NEPA, Congress established the White House Council on Environmental Quality (CEQ) to ensure that Federal agencies meet their obligations under the Act. CEQ's Regulations for Implementing the Procedural Provisions of NEPA are found in Title 40 of the Code of Federal Regulations, § 1500 et seq. (40 CFR 1500 et seq.). In California, CEQA was codified under Division 13 of California's Public Resources Code (CPRC), section 21000 et. seq. (Cal. Pub. Res. Code § 21000 et seq.). The Guidelines for Implementation of the CEQA regulations are in Title 14 of the California's Code of Regulations (CCR), § 15000 et seq. (14 CCR § 1500 et seq.).

NEPA and CEQA are similar, both in intent and in their respective review processes (analysis, public engagement, and document preparation) that they dictate. Importantly, both statutes encourage a joint Federal and State review for projects that require both Federal and State approvals. In such cases, a joint review process can avoid redundancy, improve efficiency and interagency cooperation, and be easier for applicants and citizens to navigate. Despite the similarities between NEPA and CEQA, there are several differences that require careful coordination between the Federal and State agencies responsible for complying with the statutes. Conflict arising from those differences can create unnecessary delay, confusion, and legal vulnerability.

Federal, State, and local agencies have cooperated in the environmental review of projects ranging from infrastructural development to renewable energy permitting. As State and Federal governments continue to pursue shared goals, there will be a continued need for an efficient and transparent environmental review processes that meets the requirements of both statutes.

Recognizing the importance of implementing NEPA and CEQA efficiently and effectively, the CEQ and the California Governor's Office of Planning and Research (OPR) developed a handbook regarding conducting joint NEPA and CEQA review processes. The CEQ oversees Federal agency implementation of NEPA, which includes writing the CEQ NEPA regulations and preparing guidance and handbooks for Federal agencies.

OPR plays several roles in the administration of CEQA, including development of CEQA Guidelines in coordination with the California Natural Resources Agency, providing technical assistance to State and local agencies, and coordinating State-level review of CEQA documents. Agencies conducting an environmental review must also consider any additional requirements or deadlines established in the individual agency's administrative regulations or procedures that implement NEPA and CEQA. These requirements could prescribe additional or more stringent requirements than the CEQ regulations and CEQA guidelines.

The NEPA and CEQA handbook provides practitioners with an overview of the NEPA and CEQA processes and practical suggestions for developing a single environmental review process that can meet the requirements of both statutes. The handbook contains three main elements. First is a "Question and Answer" section that addresses the key similarities and differences between NEPA and CEQA. This section compares each law's requirements or common practices and identifies possible strategies for meeting the requirements of both laws. These strategies are not meant to prescribe methods that agencies must use; rather, the handbook provides suggestions that help agencies identify and analyze potential issues.



Project-Specific Factors

The following table details any potential effects to environmental elements related to the Project:

	Aesthetics	\boxtimes	Agriculture and Forestry		Air Quality
\boxtimes	Biological Resources	\boxtimes	Cultural Resources	\boxtimes	Geology/Soils
	Greenhouse Gas Emissions	\boxtimes	Hazards and Hazardous Materials	\boxtimes	Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing	\boxtimes	Public Services		Recreation
	Transportation/Traffic	\boxtimes	Utilities/Service Systems		Mandatory Findings of Significance

Mandatory Compliance Factors

In accordance with the State of California, it is a requirement that agricultural operations obtain the appropriate environmental filings to support land alterations, diversions, and discharges of affluent.

Water Sources

A proposed pond of a total volume of 175,000-gallons and an unnamed, isolated spring supports the project.

Initial Statement of Water Diversion & Use (ISWDU)

An ISWDU has been filed for the unnamed, isolated spring.

Small Domestic Use Registration (SDU)

Not Applicable.

Small Irrigation Use (SIU)

Not Applicable.

Lake and Streambed Alteration Agreements (LSAA-1600/1602)

It was determined that a LSAA-1600/1602 is required for this Project due to project activities. A third-party agent may conduct periodic inspections, Pacific Watershed Associates (PWA), or CDFW to determine the need and application for filing.

Water Board Order: Waste Waiver Discharge (WWD)

Initial inspections by Pacific Watershed Associates regarding water usage and discharges have been conducted. The initial notice of intent and monitoring/reporting forms, under the WWD, have been filed with the North Coast Regional Water Quality Control Board (NCRWQCB). A reporting/recording system



would be developed, monitored, and reported to comply with annual renewal requirements under this order.

Additional inspections (post enrollment) would be conducted by PWA, with no current confirmation of when this inspection would occur. The proposed Project falls into Tier 2 due to the pre-existing cultivation site, canopy size, and water uses. The Project does not pose a notable threat to the environment due to several conditions that are documented in the WRPP.

Water Resource Protection Plan (WRPP)

A WRPP will be generated by the designated agency, PWA. This document is held by the third-party agent and applicant which maintained onsite to satisfy any request by the NCRWQCB. This ensures protection of nearby habitats via management of spoils, management of runoff/discharges, use of DPR-approved inputs, correct use of fertilizer, and proper storage of fungicides, pesticides, and fuels.

Department of Pesticide Regulation Requirements (DPR)

The Project would adhere to DPR requirements and limitations regarding pesticide, fungicide, and rodenticide inputs for cannabis cultivation and management of pests and/or disease. Quality and consumer-safe production requires medical cannabis cultivation inputs that are approved as environmentally sound and deemed safe for medical consumption.

Archaeological Inspections & Survey

There is no current archaeological inspection on file of which the permitting agent is aware. However, records may be accessible through Sonoma State University's Northwest Information Center (NWIC) and the local THPO.

Additional Compliance Factors

Bureau of Cannabis Control (BCC)

In 2015, the Legislature passed and the Governor signed into law three bills (Assembly Bills 243 and 266, and Senate Bill 643) that create a licensing and regulatory framework for medical cannabis through the Medical Cannabis Regulation and Safety Act. Later this was updated through the MAUCRSA, Senate Bill 94. This legislation created the Bureau Cannabis Control within the Department of Consumer Affairs. It also divided the responsibility for state licensing between three state entities – the CA Department of Food and Agriculture, the CA Department of Public Health, and the Bureau of Medical Cannabis Regulation, with the Bureau designated as the lead agency in regulating the cannabis industry in California. This agency is responsible for licensing concerning testing, retail, distribution, and microbusinesses.

CalCannabis Cultivation Licensing

As directed by the Medical Cannabis Regulation and Safety Act and the Adult Use of Marijuana Act, the California Department of Food and Agriculture (CDFA) has written the proposed regulations to establish cannabis cultivation and processing licensing and a track-and-trace system, collectively referred to as CalCannabis Cultivation Licensing.

Office of Manufactured Cannabis Safety



OMCS was established in the Center for Environmental Health of the California Department of Public Health (CDPH) after the Governor signed into law the Medical Cannabis Regulation and Safety Act in 2015. The Act established a licensing and regulatory framework for the manufacturing, packaging, and infusion of medical cannabis in California.

The Medical Cannabis Regulation and Safety Act created the Bureau of Medical Cannabis Regulation in the Department of Consumer Affairs, and tasked the following Departments to establish regulations for the medical cannabis industry:

CA Department of Consumer Affairs (Bureau of Cannabis Control): to license transporters, distributors, dispensaries, and testing laboratories.

CA Department of Food and Agriculture (Cal-Cannabis Cultivation Licensing): to license cultivators and will also be responsible for implementing the Track-and-Trace System for plants from cultivation to sale.

CA Department of Public Health (Office of Manufactured Cannabis Safety: to license manufacturers of cannabis.



Performance Standards

Performance standards include nuisance mitigation (for noise, odors, light, and other potential hazards of the Project), setback requirements, and a consent to inspect.

Setback Requirements

The proposed Project area meets all setbacks required by the local authority and adheres to all other setbacks from neighboring parcels and property boundaries.

Nearby parcel residences are more than 300' from the proposed cultivation space (applicable only to parcels of five (5) acres or less). There are no known schools, school bus stops, public parks, places of religious worship, or Tribal cultural resources that are known within 600' to 1,320' of the cultivation area. Additionally, a 30' setback from the PG&E pole and 12' of overhead lines is satisfied. Property boundary setbacks do not conform to the 30' setback, therefore a setback waiver was provided in this application.

Setbacks from nearby waterways adhere to the NCRWQCB and the CDFW's setback requirements. It is deemed that Environmentally Sensitive Habitat areas will not be impacted by the proposed Project.

Nuisance Mitigation

The Project would mitigate the potential for existing nuisances, including odors, lights, sounds, and other nuisances that extend beyond the boundaries of an adjacent property, with adherence to State and local (County and/or municipality) regulations pertinent to this Project.

Best mitigation efforts:

- <u>Odor</u>: Scrubbers.
- <u>Light</u>: Escape shielding.
- <u>Sound</u>: Buffering.

Generator Use

Not Applicable.

Consent to Inspect

This section hereby grants to the relevant authority an authorization to conduct an annual compliance inspection with a minimum notice of 24 hours. The inspection would be conducted by officials during regular business hours (Monday-Friday, 9:00 am-5:00 pm), excluding holidays.

Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

28

Ag Dynamix consulting - Management - Compliance

Cultivation Plan

The Cultivation Plan adheres to robust standards promulgated under the DPR and regulated under the CDFA, and in accordance with DCA's consumer standards maintained by the Department of Public Health (DPH).

In preparation for future certification related to organically produced product, the Cultivation Plan also follows National Organic Program (NOP) standards. The input guidelines established by the DPR are in accordance with certification regarding organically produced product requirements and follow a whole-farm BMP plan for management of land, crops, and end products.

Summary

The Project proposes 24,000 sq. ft. of Type 3 pre-existing outdoor cultivation in the form of four (4) cultivation areas on 28.75 acres of FR-B-5 (20) zoning that would be serviced entirely by natural light.

Water for the Project would be sourced from four (4) onsite tanks and one (1) water bladder that are fed by POD #1, an unnamed, isolated spring. Please refer to the WRPP for further information regarding site-specific conditions, mitigation measures, and remediation efforts.

Cultivation Schedule

The following table details the annual cultivation schedule, comprised of three (3) harvests per year, with breakdown by area. Water figures are indicated in gallons.

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Greenhouse 1	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 2	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 3	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 4	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 5	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 6	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Greenhouse 7	Cover	Cover	Cover	Cover	Veg	Veg/Blm	Blm	Veg/Blm	Blm	Blm	Cover	Cover
Water	1860	1680	2460	2400	21860	21800	26800	31860	31800	1860	1800	1860

*Water use as reported in the self-reporting attachment Appendix C or Monitoring & Reporting Form (MRP) of the WWD Enrollment.

Winterization Plan

During the fallow months, exposed ground would be cropped with green cover and native vegetation seed to protect against erosion and denitrification of the soil. Green manures would be incorporated into the native soils to enhance productivity during the forthcoming planting season.



Water Resources

Water for the proposed cultivation Project would be sourced from two (2) 2,500-gallon onsite tanks, two (2) 500-gallon onsite tanks, one (1) water bladder that holds 175,000 gallons that would become a proposed pond. POD #1, an isolated spring, feeds the cultivation site.

To mitigate runoff from cultivation activities, high-retention soil mediums and special irrigation techniques would be employed.

Irrigation Plan

For most of the season, crop production would be directly irrigated from four (4) onsite tanks and the one (1) water bladder. If approved, the Project has plans for water reduction irrigation systems.

Irrigation System

Applicant is using a direct feed system and would consider design and implementation of a water conservation irrigation methodology.

Emergency Water Plan

In the event of a water emergency, the proposed Project currently features adequate water storage to supply the cultivation activities from the 175,000-gallon water bladder and proposed pond. Existing and future water tank development is noted on the site plan (see *Site Plan/WRPP Map*).

Site Drainage, Runoff, Erosion Control

Please refer to the Water Resource Protection Plan on pages 8-11 and 17-18.

Protection of Watershed and Nearby Habitat

Please refer to the Water Resource Protection Plan on pages 12-13.





Operational Plan

The Operational Plan covers many aspects of the business, including location, organization, and a description of the Project's business sponsor that includes its mission, vision, and values. It also includes a description of what is produced by the Project, including sales and marketing efforts.

Summary

The Operational Plan details use of the organization's resources in pursuit of the strategic plan. It prescribes specific activities and events to be undertaken to implement strategies. It is a plan for the day-to-day management of the organization (encompassing a one-year period). An operational plan should not be formulated without reference to a strategic plan. Operational plans may evolve from year to year with business growth. The chief executive, lead staff, and third parties of or for the organization often produce the Operational Plan.

The products produced by the Project would have the primary designated use of the treatment of patients with varying ailments. Medical cannabis products would be distributed to qualified medical cannabis consumers via wholesale outlets and retail dispensary locations.

Business Organization

Tree Pharm, LLC. is a multiple member Limited Liability Company (LLC) operating under entity number 201629510378 that features one member-manager. The member-manager is responsible for delegating primary activities pertinent to the organization's daily and future management.

Management Team

Cody MacDonald - Manager

Business Description

The primary goal of Tree Pharm, LLC. is, within the State of California, to conduct agricultural activities and produce specialty agricultural products.

Mission

Tree Pharm, LLC. is a for-profit entity with the mission of producing high-grade specialty cannabis agricultural products to support the medical cannabis supply chain for California-based wholesale and retail dispensary outlets.

Vision

Tree Pharm, LLC. adheres to a sustainable and integrative farming model that includes standards related to organically produced crops and onsite agricultural resource sustenance. The company's model integrates sustainable living and production principles with cannabis cultivation.

Values

Tree Pharm, LLC. values the need for prudent land management strategy, social equity, and the quality production of cannabis to supply medical consumers and the treatment of their conditions. The company is committed to operating within full compliance of local, County, and State regulations.



Products

Tree Pharm, LLC. would produce specialty agricultural cannabis and nursery stock to support the onsite cultivation of high-grade organically produced cannabis flower products that are tested and assured for quality. Cultivation byproducts of additional value would be sold to permitted manufacturers (for the processing of extracts, concentrates, and topical products).

The primary designated use of the raw medical cannabis (flower) produced would be the treatment of patients with varying ailments. Premium-grade medical cannabis can be consumed via multiple methods, including inhalation, ingestion, and dermal (topical) applications. Cannabis has proven to deliver positive efficacy for myriad ailments, conditions, and symptoms. Research is underway regarding additional benefits of medical cannabis.

Sales & Marketing

Tree Pharm, LLC.'s product would be distributed to medical cannabis consumers via wholesale outlets and retail dispensary locations and ancillary marketplaces. The quality, testing thresholds, and branding would target consumers who lead a Lifestyle of Health and Sustainability (LOHAS) and who prefer premium organically produced medicine.

Chain of Custody

Tree Pharm, LLC. adheres to a robust system of chain of custody for recordkeeping and sourcing potential contamination of seed/nursery product, flower product, trim, or value-added byproducts. This system would serve to verify responsibility for and liability of products during cultivation, processing, distribution, and wholesale/retail sales.

Packaging

After testing and processing, products would be packaged per quality control standards and in tamperproof packaging that does not appeal to minors. Products packaged in larger volumes would be distributed directly to consumers and retail outlets. Individual consumer labelling may be applied at the distributor or retailer level, after transfer of ownership in the chain of custody. If the business chooses to protect its branding through the Agricultural Commissioner, products would be individually packaged and labelled within the County of origin.

Distribution

Tree Pharm, LLC. will secure trading outlets for its products through existing local distribution networks. These distribution networks service retail dispensary outlets that seek licensure within their respective jurisdictions, as well as the State licensing platform under the CDFA. The established patient base has created a demand and fulfills the need for many medical cannabis products from multiple licensed suppliers within the State of California.

Track and Trace Standards

As per the Track and Trace provisions as of June 27th, 2017 under the Medical Adult Use Cannabis Regulation and Safety Act (MAUCRSA), Senate Bill 94.

Chapter 6.5. Unique Identifiers and Track and Trace



26067. (a) The department, in consultation with the bureau, shall establish a track and trace program for reporting the movement of cannabis and cannabis products throughout the distribution chain that utilizes a unique identifier pursuant to Section 26069, secure packaging, and can provide information that captures, at a minimum, all the following:

(1) The licensee receiving the product.

(2) The transaction dates.

(3) The cultivator from which the product originates, including the associated unique identifier pursuant to Section 26069.

(b) (1) The department, in consultation with the State Board of Equalization, shall create an electronic database containing the electronic shipping manifests to facilitate the administration of the track and trace program, which shall include, but not be limited to, the following information:

(A) The variety and quantity or weight of products shipped.

- (B) The estimated times of departure and arrival.
- (C) The variety and quantity or weight of products received.
- (D) The actual time of departure and arrival.
- (E) A categorization of the product.

(F) The license number and the unique identifier pursuant to Section 26069 issued by the licensing authority for all licensees involved in the shipping process, including, but not limited to, cultivators, manufacturers, distributors, and dispensaries.

Transportation

All products would be transported through either the permitted cultivator to processing or distribution and/or via a licensed transporter to trading partners that are authorized to distribute cannabis products to end consumers (when applicable). These transporters would be responsible for adhering to guidelines that involve (but are not limited to) permitting, weights and measures, packaging/packing/labeling, verification of packing and freight volumes, and liability insurance that covers product loss resulting from unintentional diversion or emergency.

Transporters would be responsible for fulfilling contractual deadlines and ensuring delivery of products in a timely fashion to maintain positive standing with trading partners and protect the quality of a product that features a limited shelf life.

SB-643, Chapter 719, § 19302.1 (d): "The DCA shall have the sole authority to create, issue, renew, discipline, suspend, or revoke licenses for the transportation, storage unrelated to manufacturing activities, distribution, and sale of medical marijuana within the State and to collect fees in connection



with activities the BMCR regulates. The bureau may create licenses in addition to those identified in this chapter that the bureau deems necessary to effectuate its duties under this chapter."



Processing Plan

The Processing Plan covers many aspects of the end stage cultivation workflow employed by the business to harvest, dry, trim, cure, package, and assure the quality of medical cannabis products. Quality assurance efforts include sanitation, dust control, and environmental standards necessary for optimal processing.

Background

As promulgated under various regulatory agencies, including but not limited to the Labor Commissioner (LC) and Wage and Hour Division (WHD), Employment Development Department (EDD), the Agricultural Labor Relations Board (ALRB), United States Department of Agriculture (USDA), the Food and Drug Administration (FDA), California Department of Food and Agriculture (CDFA), and are responsible for varying aspects of government labor laws, quality control, minimum wage and hours laws, administrative responsibilities, and health and safety regulations that govern processing and day labor activities related to Agricultural industries.

Summary

Tree Pharm, LLC. proposes to build a 20' x 60' processing facility.

Cultivation activities undergo a common process flow that involves cultivation, to harvest, drying, to testing, grading/sorting, curing, to testing, packaging, to testing again (distributor level), and end sales. This is in efforts to ensure robust quality control; the business would employ stringent grading and sorting of medical cannabis product during harvest to eliminate any contaminated product from end supply.

Administrative

Administrative elements of the Project include payroll, recording and reporting, chain of custody, safety procedures and protocols, product safety materials, labor and subcontractor issues, and quality assurance/control of product.

Labor Management

The primary organization currently responsible for the recordkeeping of employees (both seasonal and permanent) would be Tree Pharm, LLC. All records maintained by Tree Pharm, LLC. would be made available upon request.

The organization has considered payroll options for peak times of the season during which employment periods would be up to several months in duration (particularly during the harvesting, processing, and packaging stages of cultivation). An outside entity may be responsible for soliciting, recruiting, and hiring employees.

The designated entity is responsible for ensuring property, business, and workplace compliance under the guidelines of the following departments:

- Bureau of Medical Marijuana Regulation (BMCR).
- California Department of Food & Agriculture (CDFA).
- County Agriculture Commissioner (CAC).
- County Planning Department (CPD)/Community Planning (CP)/Development Department (DD).



- Department of Industrial Relations (DIR).
- Department of Labor, Wage, and Hour Division (DL-WHD).
- Department of Pesticide Regulation (DPR).
- National & California Agricultural Labor Relations Board (NALRB/CALRB).
- Occupational Safety and Health Administration (OSHA).
- U.S. Department of Labor (US-DOL).

Recording & Reporting

All employee records for hours worked and reported would be kept onsite or via a payroll recordkeeping center and submitted to the managing payroll department to ensure timely reporting. Requests for review of payroll records would be the sole responsibility of the managing human resources agent (upon request and under certain lawful circumstances).

Quality Assurance & Control of Product

Quality assurance efforts encompass sanitation, climate control, dust control, and a variety of environmental standards. Quality control measures include monitoring, testing, harvesting, drying, curing, grading, sorting, packaging, secure storage, and distribution procedures.

In 2011, the Food and Drug Administration tasked the U.S. Department of Agriculture (USDA) to co-create with the U.S. Department of Health and Human Services (USDHHS) and the Center for Food Safety and Applied Nutrition (CFSAN) a program to implement Good Agricultural Practices (GAPs) and Good Handling Practices (GHPs). The goal was to mitigate food safety hazards and set standards and management regulations for processing facilities to ensure quality and consumer safety of agricultural products when handled in processing environments.

Found in the April 2011 *Guide to Minimize Microbial Food and Safety Hazards for Fresh Fruit and Vegetables* (authored by the USDA, USDHHS, and CFSAN) is discussion about the fundamental procedures that should be developed and implemented. This document features a list of principles applied to the workplace in efforts to meet these standards and is as follows:

- Accountability for product quality.
- Controls for workplace sanitation.
- Employee hygiene.
- Minimization of microbial exposures.
- Operating procedures.
- Packaging procedures and protocols.

Chain of Custody

Agricultural businesses must adhere to a rigorous chain of custody system for product management and the identification of contamination in all raw and finished products.

Monitoring

Pre/post-harvest workflow would be monitored on a predetermined schedule and involve documentation of the condition of the product during its active stage of monitoring.



Harvesting

During harvest, a labor crew would be required to assist with light physical labor, including walking, crouching, lifting, and some climbing.

Testing Procedure

All product testing would be conducted by an approved (certified) third-party laboratory. This would encompass testing for potency and purity, including the presence of pesticides, fungicides, and harmful micro biologics.

Drying/Curing

Product would be harvested at maturity and dried and cured in a climate-controlled environment. The primary equipment used would include dehumidifiers, fans, and heaters.

Grading/Sorting

Products would be graded based on testing results, maturity, and specific intended use (flower, manufacturing of extracts, concentrates, topical products, etc.)

Processing

Product would be harvested, trimmed, dried, and cured in a manner best suited to the specific environmental factors of the crop. This would include both visual inspections by master cultivators and data collection and analysis (via automated sensors).

Packaging

Packaging would adhere to the guidelines for package type, quantity/weights, warning labels, and stamping procedures.

Health & Safety

The first response emergency contact phone number is 9-1-1. Hospitals are Redwood Memorial Hospital 707-725-3361 (Arcata) and St. Joseph Hospital at 707-445-8121 (Eureka). The American Association of Poison Control Centers (AAPCC) can be reached at 800-222-1222.

Job Hazard Analysis

Labor duties would vary throughout the harvesting, drying, processing, and packaging stages of the operation. With each task, an analysis would be conducted to identify potential hazards associated with a task, including weather conditions, the physical aptitude of employees, tools utilized, and potential exposure to chemicals and other substances. Identification of these hazards is intended to mitigate potential job hazards and help ensure employee adherence to safety practices.

Injury Illness Prevention Plan

It is required by the DIR that every employer shall establish, implement, and maintain an effective Injury and Illness Prevention Plan (IIPP).

Components of an IIPP include:

• Employee compliance with safe and healthy work practices.



- Investigation of injuries and/or illnesses.
- Procedures for correction of unsafe/unhealthy conditions, work practices, and/or procedures.
- Procedures to identify and evaluate workplace hazards.
- Responsible person(s) and contact information.
- Safety training.
- System for communication with employees.
- Thorough safety program recordkeeping and document retention practices.

Heat Illness Prevention Plan

Written protocols regarding heat illness prevention would be available to employers, managers, supervisors, and employees regarding how to prevent and handle heat illness incidents.

To prevent heat illness to employees in the field, several factors must be considered:

- Ambient temperature (measured via thermometer or weather report).
- Crew size.
- Excessive clothing.
- Other relevant exposures.
- Presence of personal protective equipment or additional sources of heat.
- Work shift duration.

The following heat illness factors would be considered:

- Accessibility of drinking water.
- Accessibility of shade (via protective structures).
- Periodic rest breaks.
- Reminders to employees to remain hydrated.

Hazard Communication Policies

Hazard communication is important to ensure the safety of all onsite employees, contractors, and subcontractors. Potential and known hazards would be made clear prior to conducting tasks and activities. Implementing this procedure is important to ensure that employees, contractors, and subcontractors are informed about the relevant risks associated with certain onsite tasks and the reduction of liabilities against the employer for improper use of equipment, machinery, and tools.

Emergency Procedures

Emergency procedures include the availability of eye washing stations and detailed procedures for dealing with chemical spills. In the event of an emergency, certain protocols would be developed and followed regarding fire evacuation plans, earthquake safety, and other emergency scenarios.

Chemical Handling

Any input products used onsite would be accompanied by MSDS and Chemical Inventory Lists that would be available to inspectors and employees and maintained onsite.



In the event of emergency spills, call 9-1-1 and then report to the Office of Environmental Safety (OES) and California State Warning Center (CSWC) at 800-852-7550 or 916-845-8911 and identify proper steps to isolate the incident and cleanup.

Eye Washing Station

Often, chemicals used onsite provide MSDS sheets that indicate the need for applicators to utilize an eye washing station after exposure. The eye washing station must be positioned within 200' of the cultivation area and any areas where chemicals, fertilizers, or pesticides would be used or administered for various applications.

Employee Accident Policies

An investigation would be conducted to determine next steps.

The company adheres to protocols for employee accident reporting. The manager is responsible for documenting any onsite incidents using *Form 5020*, including:

- Address of accident/event site.
- Description of accident/event and if the accident scene/instrumentation has been altered.
- Employer's name, address, and telephone number.
- Law enforcement agencies present at the accident/event site.
- Location of medical treatment.
- Name and address of injured employee(s).
- Name and job title of reporting party.
- Name of contact person at accident/event site.
- Nature of injuries.
- Time and date of accident/event.

Accidents need to be reported immediately to Cal/OSHA in Redding at 530-224-4743.

Contact the business' medical provider, the employee's designated medical provider, or 9-1-1, depending on the severity of the incident. Follow up with contact to the California Division of Workers' Compensation (CDWC).

Personal Protective Equipment Policies

Application of pesticides and fungicides requires personal protective equipment, including respirators, Tyvek suits, and gloves. It is the applicator's responsibility to ensure safety in the field. The farm manager is responsible for furnishing, applying, and informing of the appropriate uses associated with such products.

Applicators are required to acquire an Operator ID through the Agriculture Commissioner via the Pesticide Handling Training Program (PHTP). This would involve training applicators about labels, cautions, and recommended Personal Protective Equipment (PPE). Pesticide PPE would be stored onsite and separately from fertilizers, pesticides, and fungicides. Restricted Entry Intervals (REI) would be imposed and posted after application of chemicals to prevent exposures.

Additional PPE provided onsite for any processing labor would include access to gloves and dust masks by employees during drying, processing, and packaging.



It is the responsibility of managers/supervisors to ensure that PPE policies are followed during appropriate working conditions. In the event of product application by an employee, the applicator must be designated an operator ID and is required to employ the proper PPE during application, as well as abide by label warnings in the event of exposure, poisoning, or a spill.

State law may require processors to employ PPE equipment for the duration of their shifts to ensure no exposure to and/or contamination from a product.

All laborers must be made aware of REI and tangible notification of the recommended REI after the application of pesticides, fungicides, and other chemical applications.

Occupancy & Structural Guidelines

The general environments in which laborers would work include the field and within the proposed processing building. The environments in which any agricultural activity would occur would follow all guidelines (per agricultural and labor oversight agencies). The facility would need to meet commercial building standards in accordance with California Building Codes and would be made compliant with the American with Disabilities Act (ADA) and Architectural Barriers Act (ABA).

Any housings, buildings, and structures would be subject to California Building Code (CBC), including possible permitting requirements, inspections, and certificate(s) of occupancy. Additionally, specific exemptions exist that pertain to agricultural standards under the Occupational Safety and Health Administration (OSHA) and in conformance with the Occupational Safety and Health Guidelines (OSHG) (unless the Project meets certain exemptions, such as being a family-owned and operated business, does not offer temporary labor housing, or employs fewer than 10 employees at any given time). In other such cases, the site would need to comply with OSHA Guidelines pertaining to agricultural employment.

Project Processing Environment

Tree Pharm, LLC. proposes to build a (20' x 60'), 1,200 sq. ft. processing facility.

The Site Plan includes two travel trailers that are not extended to employees. There is a fabric house onsite that is furnished to support trimming, drying, curing, grading, sorting, and storage activities. It is expected that structures for this project would support a maximum of five (5) people during peak processing activities. Applicant may propose additional structural development to accommodate enhanced operational needs.

Housing

Housing will not be provided to employees.

Any housing provided to employees for this Project will be subject to CCR regulations found in the *Source Guide for Federal & State Requirement for Employees and Migrant Housing*.

Notification of Occupancy & Terms

As per the DIR and the US-DOL, all notices and labor postings would be provided and visible to all onsite employees. Any notification of occupancy status and terms of employee occupancy would be posted in compliance with all local, State, and Federal laws governing agricultural employers under the following regulatory bodies and regulations:



- California Agricultural Labor Relations Act (CALRA).
- California Occupational Safety & Health Administration (Cal/OSHA).
- Department of Industrial Relations (DIR).
- State and National Agricultural Labor Relations Board (CLRB & NLRB).
- U.S. Department of Labor (US-DOL).

Maintenance of Sanitary Facility

To help ensure the quality of finished product, a clean working environment would be maintained during the drying, curing, processing, and packaging stages of cultivation. Among other benefits, this would prevent potential contamination between crop batches. All product would be batch tested prior to processing. In the event of a recall, it would be assured that each batch or variety has not become contaminated during these stages within the processing facility.

Dust Control Measures

In the event of high dust levels, all processing environments would maintain clean working areas to prevent potential dust exposure to employees.

To ensure product quality and to prevent potential contamination of processing environments, certain dust control measures would be implemented. These measures would include maintenance of sanitary working environments and possible implementation of air filtration systems.

Water Access & Facilities

The Project site would provide employees with access to the following facilities/resources within reasonable proximity to work areas:

- Handwashing facilities (processing area).
- Onsite potable water (work areas).
- Restroom facilities (processing area).



Contingency Plan

In accordance with specifications provided by the DEH and the California Unified Program Act (CUPA)—to meet the business plan criteria required to ensure compliance with regulations that are intended to protect public health and the environment—this section addresses water production (including well construction) and the handling of onsite wastewater, solid waste, and hazardous materials.

Summary

The Contingency Plan addresses onsite wastewater and hazardous wastes, solid waste removal and recycling, water production and well construction, hazardous materials handling, agricultural product storage, and chemical spill procedures and handling guidelines.

Material Safety Data Sheets (MSDS) for all fertilizers, soil amendments, and pesticides would be made available onsite. If requested, all equipment maintenance performed onsite would be listed/described. Per California Department of Food and Agriculture (CDFA) regulations, chemicals would be stored separately from fuels, oils, and similar products. Fertilizers and pesticides, specifically, would be stored in locked containment within an outdoor structure.

Chemical spills would be handled and reported per directions in the Project's Chemical Spill Procedure.

Common waste products that would be used or generated onsite include:

- Fertilizers.
- Fuels.
- Household chemicals.
- Human refuse.
- Human waste.
- Pesticides/herbicides/fungicides.

To ensure mitigation of potential pollution of grounds, nearby waterways, and ecological habitats, the proper treatment, storage, removal, and overall security of potentially polluting products would be ensured via use of dedicated areas and containers that are covered and watertight.

Project Waste Management

The sections below address the Project-specific details, impacts, and procedures for handling waste products.

Project Specific Details

Two travel trailers and auxiliary agricultural structures support the site. The site also features two shipping containers that support the propagation of nursery stock. PG&E supports the facilities.

Onsite Wastewater/Hazardous Wastes

The proposed Project location is not equipped with a septic system. Employees would utilize the B&B Portable Toilet for regular uses.

Prepared for Tree Pharm, LLC by AgDynamix, LLC (Nov. 2017)

INCORPORATED 2015



The Sponsor has identified that the operation requires five (5) employees during peak staffing to perform seasonal work activities. It is estimated that peak staffing would occur for a duration of approximately two (2) to four (4) months (cumulative) throughout the active working parts of the season.

Project Equipment Inventory

- Weed Eater
- Roto-tiller

Maintenance

Onsite.

Project Product Inventory

Household Chemicals (Locked Storage Shed)

- Bleach
- Alcohol
- Hydrogen Peroxide

Fuels/Oils (Locked Storage Shed)

- Propane
- Gasoline
- Motor Oil

Fertilizers/Pesticides/Fungicides/Rodenticides (Locked Storage Shed)

- Azomite (100 lbs.)
- Fish Bone Meal (40 lbs.)
- Worm Castings (2,000 lbs.)
- Feather Meal (40 lbs.)
- Glacial Rock Dust (320 lbs.)
- Kelp Meal (75 lbs.)
- Oyster Shell (35 lbs.)
- Chicken Manure (200 lbs.)

Waste Management Standards

As per the CCR, Title 8, § 3457, which addresses field sanitation standards, the cultivation site is required to provide access to waste facilities within one-quarter (1/4) mile or a five (5) minute walk, whichever is shorter.

If the primary septic system is not within this accessibility threshold, a portable facility or pit privy may be provided in lieu of septic to support waste activities. The standards for portable waste facilities are as follow:

• <u>Toilet facilities</u>: Shall be always operational, maintained in a clean and sanitary condition, and kept in good repair. Records of service and maintenance shall be retained for two years.



- <u>Chemical toilet wastewater tank</u>: Shall be constructed of durable, easily cleanable material and have a minimum tank capacity of forty (40) gallons. Construction shall prevent splashing on the occupant, field, or road.
- <u>Chemical tanks</u>: Contents shall be disposed of by draining or pumping into a sanitary sewer, an approved septic tank of sufficient capacity, a suitably sized and constructed holding tank approved by the local health department, or any other method approved by the local health department.
- <u>Privies</u>: Shall be moved to a new site or taken out of service when the pit is filled within two (2) feet of the adjacent ground surface. When the privy is moved, the pit contents will be covered with at least two (2) feet of well-compacted dirt.

Solid Waste Removal/Recycling

All garbage will be contained within a holding structure and is to be removed no less than once per week. A permitted solid waste/recycling facility will process all waste and/or recycling materials. The facility designated to receive waste products for this project is Eel River Resource Recovery in Fortuna, CA.

Water Production/Well Construction

The Project is supported by an isolated spring, Pod #1 (see site plan for location). The isolated spring currently supports all cultivation uses.

Approximated water use for activities are denoted within the *Cultivation Schedule* under the Cultivation Plan below. Monthly monitoring and annual reporting must be implemented to identify actual total uses for domestic and cultivation activities.

Hazardous Materials Handling

The Project is supported by PG&E utilities and does not require fuels to supply the domestic energy needs of the structures or cultivation activities. Other fuels may be used for small equipment and machinery and may include gasoline, oils, and diesel. All fuels used for equipment would be stored per the (CUPA) fuel and chemical storage guidelines.

To meet environmental health standards, applicants must maintain a list of and describe all compressed gases, cleaners, and sanitizers (including, but not limited to, household chemicals, bleach, and alcohol) and document quantities stored onsite. Fuels, pesticides, and other agricultural/household chemicals are required to be stored in locked containment, separate from other input products. Any substance in use shall be accompanied by a posted notification that clearly identifies its nature. To prevent spills onto ground surfaces, any motors, fuel containers, etc. would be stored in drop pans and within an enclosed area.

Hazardous Material Standards

Quantities that trigger disclosure are based on the maximum amount onsite at any one time, as follows:

- 55 gallons, 500 pounds, or 200 cubic feet (for 30 days or more at any time during a year).
- Any amount of hazardous waste.
- Category I or II pesticides.
- Explosives.
- Extremely hazardous substances (above the planning threshold).



MSDS for all fertilizers, soil amendments, and pesticides (including organically produced examples) would be furnished and made available onsite. Compressed gases, cleaners, and sanitizers are stored on the premises in the quantities outlined in the *Gases and Cleaners* inventory list that is maintained onsite.

Applicants are required under CUPA guidelines to list/describe all equipment maintenance performed onsite (including changing oil, antifreeze, etc.). Upon request, applicant will furnish information regarding ongoing maintenance of small machinery and equipment that is necessary to support cultivation activities.

Agricultural Product Storage

As per the DPR (enforced by CDFA or the local Agriculture Commissioner), Projects that utilize pesticides and fertilizers must meet guidelines pursuant to CCR, § 6670, Title 3, Division 6, *Pesticide, and Pesticide Control Operations*. General guidelines dictate that chemicals are to be stored separately from fuels, oils, and similar products. Fertilizers and pesticides would be stored in locked containment within an enclosed outdoor structure.

Chemical Spill Procedure/Handling

In the event of emergency spills, the incident would be reported to the Cal OES State Warning Center at 800-852-7550 or 916-845-8911. The California Highway Patrol must be notified via 9-1-1 of spills occurring on highways in the State. The *Chemical Spill Procedure* would be followed, and emergency services also contacted via 9-1-1. The procedure would follow the California Office of Emergency Services (Cal OES) *California Hazardous Materials Spill/Release Notification Guidance* (February 2014) and the (EPA) (Pacific Southwest, Region 9) *Chemical Spills Prevention and Preparedness* webpage.

In the State of California, many statutes require emergency notification of a hazardous chemical release, including:

- California Labor Code § 6409.1 (b).
- Government Code § 51018, 8670.25.5 (a).
- Health and Safety Code § 25270.8, § 25510.
- Public Utilities Code § 7673 (General Orders #22-B, 161).
- Title 42, U.S. Code § 9603, 11004.
- Vehicle Code § 23112.5.
- Water Code § 13271, § 13272.

In addition to statutes, several agencies have notification or reporting regulations:

- Title 8, CCR, § 342.
- Title 13, CCR, § 1166.
- Title 14, CCR, § 1722 (h).
- Title 17, CCR, § 30295.
- Title 19, CCR, § 2703, 2705.
- Title 22, CCR, § 66265.56 (j), § 66265.196 (e).
- Title 23, CCR, § 2230, 2250, 2251, 2260.
- Title 40, CFR, § 263 esp. § 263.30.
- Title 49, CFR, § 171.16.


Security Plan

The Project's *Security Plan* includes product security, inventory management, and diversion prevention. Pertinent regulatory language includes the following:

Assembly Bill 604 (AB-604), Article 3, Mandatory Commercial Registration, § 26040 (5): "Security requirements, including, but not limited to, procedures for limiting access to facilities and for the screening of employees. The department shall require all registrants to maintain an accurate roster of any employee's name, date of birth, and relevant identifying information, which shall be available for inspection by the department or State or local law enforcement upon demand."

AB-604, Article 3, Mandatory Commercial Registration, § 26046 (a)(3): "Operating and inventory control procedures to ensure security and prevent diversion."

AB-604, Article 3, Mandatory Commercial Registration, § 26046 (a)(4): "Detailed operating procedures for the proposed facility, which shall include, but not be limited to, provisions for facility and operational security, prevention of diversion, employee screening, storage of medical cannabis, personnel policies, and recordkeeping procedures."

Summary

The Security Plan details efforts to prevent loss and diversion of medical cannabis product at all stages of its cultivation and processing, including drying, trimming, curing, processing, and packaging. Robust recordkeeping would be implemented and maintained for quality assurance, inventory management, and prevention of diversion.

Measures of Security

Several security measures would be involved in the comprehensive protection of medical cannabis product during the cultivation and processing lifecycles. These include exterior lighting, alarms, cameras and video capture, and the hardening of doors, windows, and fencing.

Security measures for this project would encompass, at a minimum:

- Locked containment for product processing and storage (to be developed).
- Multiple locked gates at all cultivation areas and processing buildings (see site plan).
- Surveillance and monitoring systems (to be developed as per the State's requirements).
- Alarm System

Points of Security

- Main gate at the entrance.
- Locked Buildings.
- Property wide surveillance and monitoring systems in all cultivation areas.
- Solar Motion Lights.



Inventory Management

A rigorous system of recordkeeping and reporting would be facilitated to adhere to the State's Track and Trace requirements of all cannabis products. This would include (but not be limited to) flower, trim, and stem to ensure zero diversion of product throughout processing.

To prevent loss and diversion, all cannabis products would be stored under locked containment during the drying, curing, and packaging phases of processing. Products would also be subject to conformance with a checks and balances system to ensure the prevention of unintentional diversion.

Prevention of Diversion

The most vulnerable stage of product security is transit to retail outlets. The best way to ensure product safety and prevention of diversion and loss is to maintain adequate chain of custody records via the Agricultural Commissioner.

This would occur under the oversight of the CDFA, in congruence with SICPA's Track and Trace Program. Additionally, retail outlets would be informed of expected delivery quantities. This would include packing slips, tamper-evident seals, verification of credibility, liability coverage, and manifests provided by licensed transporters.



Appendices

The following regulatory information sources contributed to the development of this narrative.

Source Guide for Federal & State Requirements for Employee & Migrant Housing

Housing Standards/Requirements for Employee/Migrant Housing Caretakers

Health & Safety

- First Aid.
- Communicable Diseases.
- Hand Washing, Bathing, and Laundry.
- Cooking, Kitchen, and Mess Halls.
- Garbage and Refuse.
- Insects and Rodents.

Occupancy & Structural Guidelines

- Housing Site.
- Housing Structure.
- Postings of Required Information.
- Permit to Operate Housing.
- Mobile Homes, Recreational Vehicles, and Commercial Modular.
- Tents.
- Construction and Repair.
- Fire Safety.
- Electrical.
- Lighting.
- Heating.
- Liquid Propane (LP) Gas.

Waste Management

- Toilets.
- Water Supply.
- Screens.
- Sewage.

Enforcement

- Enforcement and Penalties.
- Remediation and Mitigation.



Sources of Additional California Regulatory Information

SOURCES OF ADDIT	IONAL INFORMAT	ION	Sacramento	San Benito	San Joaquin
More specific information can be obtained by:		Environmental Health 8475 Jackson Road, 240 Sacramento, CA. 95826 (916) 875-8484	Building and Safety 3224 Southside Roa Hollister, CA 95023 (831) 637-5313	Public Health Services d 304 E. Weber Ave. Stockton, CA 95202 (209) 468-3426	
 Review of the following reference documents at law and public libraries: California Health and Safety Code, Division 13, Part 1, beginning with Section 17000. California Code of Regulations, Title 25, Chapter 1, beginning with Section 600. California Code of Regulations, Title 25, California State Building Code. Federal Migrant and Seasonal Agricultural Worker Protection Act Code of Federal Regulations, Title 29, Parts 500 through 500.270. Code of Federal Regulations, Title 29, Part 1910.142 (OSHA Reg.) Obtaining or purchasing copies of documents as follows: CALIFORNIA HEALTH AND SAFETY CODE, DIVISION 13, PART 1 (Employee Housing Act) can be purchased from: 		San Mateo Health Services Agency 455 County Center, 4 th Fl. Redwood City, CA 94063 (650) 363-4305 Stanislaus Environmental Res. 3800 Cornucopia Way, Ste Modesto, CA 95358-9492 (209) 525-6700	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Santa Cruz Health Services Agency 701 Ocean Street, Rm 312 Santa Cruz, CA 95060 (831) 454-2022 Fulare tesource Management Agency 961 S. Mooney Blvd /isalia, CA 93277-939 -800-228-6133 DNL4	
West Publishing C CALIFORNIA CODE	Company, PO Box 64526, St. F	Paul, MN; telephone 800-328-4880.	S1 DEPARTMENT	ATE OF CALIFO	RNIA ND COMMUNITY
and the CALIFORNIA	CODE OF REGULATIONS,	<u>FITLE 24.</u>	DEFARIMENT	DEVELOPMEN	Т
Can be purchased from:			DIVISION	OF CODES AND	STANDARDS
 Barclays Law Publishers, Attention: CCR/Agency Services Representative 400 Oyster Point Blvd., PO Box 3006, South San Francisco, CA. 94083 800-888-3600 or on the internet at http://www.leginfo.ca.gov/calaw.html MIGRANT AND SEASONAL AGRICULTURAL WORKERS PROTECTION ACT and OSHA REGULATION 1910.142. Can be obtained by contacting the Wage and Hour Division of the U.S. Department of Labor offices as shown on this program or an text. 		NORTHERN CALIFORY (North of Fresno County) 9342 Tech Center Dr #550 Sacramento, Ca. 95826 (916) 255-2501	<u>NIA: S</u>	OUTHERN CALIFORNIA (South of Madera County) 3737 Main Street, Ste 400 Riverside, CA 92501 (951) 782-4420	
http://www.dol.gov/esa	/whd/mspa/index.htm		U.S. DEPARTMENT OF LABOR		
3. Contacting the appropriate government offices listed below:			WAGE & HOUR DIVISION		
If the housing is located in one o	f the following counties conts	oct the county office listed below:			
Fresno Environmental Health Systems 1221 Fulton Mall, 3 RD Floor Fresno, CA 93775-1867 (559) 445-3391	Kern Environmental Health 2700 M. Street, Suite 300 Bakersfield, CA 93301 (661) 862-8700	Merced Environmental Health 777 W. 22 ND St. Merced, CA 95340 (209) 381-1100	LOS ANGELES 300 South Glendale Ave., 4 Glendale, CA. 91205-1752 (818) 240-5274/75	400 45 Sa (4	AN FRANCISCO 55 Market St., 800 an Francisco, CA. 94105 15) 744-5590
Monterey Environmental Health 1270 Natividad Road Salinas, CA 93906 (831) 755-4500	Napa Environmental Health 1195 Third Street, 101 Napa, CA 94559 (707) 253-4471	Orange Environmental Health Div. 2009 E. Edinger Avenue Santa Ana, CA 92705 (714) 667-3600	WEST COVINA 100 North Barranca St., 850 West Covina, CA. 91791 (626) 966-0478 SAN DIEGO 5675 Ruffin Rd, 320 San Diego, CA. 92123-136 (619) 557-5606	0 28 Se 2	NONCOMPENIE 000 Cottage Way, Rm. W-1836 orramento, CA. 95825-1886 016) 978-6123

Federal Governing Bodies & Regulatory Framework

- U.S. Department of Agriculture.
- U.S. Environmental Protection Agency.
- Farm Labor Standards Act.
- Farm Bill 2014.
- Clean Water Act (CWA)/Safe Drinking Water Act (SDWA).
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- Resource Conservation & Recovery Act (RCRA).
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA/Superfund).
- Clean Air Act (CAA).
- Emergency Planning & Community Right to Know Act (EPCRA).



Summary of Employment Requirements for California Agricultural Employers

Table of Contents

- Introduction.
- New and Updated Materials.

Cal/OSHA

- Cal/OSHA Safety and Health Requirements.
- Cal/OSHA Consultation Services.
- Injury and Illness Reporting.
- Injury and Illness Prevention Program.
- Field Sanitation.

Definitions

- Alternative Compliance.
- Drinking Water Requirements.
- Toilet and Handwashing Facilities.
- Location.
- Maintenance Standards.
- Handwashing Facilities.
- Notice to Employees.
- Required Reports.
- Recordkeeping.
- Weeding, Thinning, and Hot-Capping.

Heat-Illness Prevention

- Personal Protective Equipment (PPE).
- Tree Work Maintenance or Removal.
- Personal Protective Equipment Checklist.
- First Aid and CPR.
- Cleaning, Repairing, Servicing, and Adjusting Machinery and Equipment.
- Operation of Agricultural Equipment.
- Transporting of Employees.
- Manual Lifting and Carrying.
- Tools.
- Working at Heights.
- Mounted Air Compressors and Air Tanks.

Emergency Action Plan

- Fire Prevention Plan.
- Access to Medical and Exposure Information.



Hazard Communication Program

- Respiratory Protection.
- Storage of Hazardous Substances.
- Top 10 Cal/OSHA Violations in Agricultural Operations.
- Other Safety Issues.
- Safety Training.
- Specific Training Requirements.
- Hearing Conservation.
- Ergonomics standard.
- Tractor Roll Over Protection.

Injury and Illness Prevention Program

- Formula for Improved Injury Prevention.
- Steps to Successful Compliance.
- Responsibilities of the Safety Coordinator.
- Include a system for ensuring that employees comply.
- Summary of Employment Requirements for California Agricultural Employers Training.
- Discipline.
- Recognition.
- Safety Compliance Program.
- Communicating with Employees.
- Identifying and Evaluating Workplace Hazards.
- Safety Incident Investigation.
- Training and Instruction.
- Safety Program Records.
- Other Safety Records.

Pesticides

- Pesticide Safety Regulations.
- Employer/Employee Responsibilities.
- Hazard Communication.
- Training.
- Labels and Other Warnings.
- Emergency Medical Care.
- Restricted Entry Interval.
- Early Entry Requirements.
- Respiratory Protection.

Pesticide Postings

• I-8 and I-9



Wage-and-Hour Requirements

- Minimum Wage.
- State Exceptions.
- Credits Against Minimum Wage for Meals and Lodging.
- Piece Rates.
- Travel Time.
- Waiting Time.
- Preparation Time.
- Overtime.

Federal & State Wage Provisions

- IWC Order No. 4.
- IWC Order No. 8.
- IWC Order No. 13.
- IWC Order No. 14.
- Overtime Rules under Order No. 14.
- Overtime Rules under Order Nos. 4, 8, and 13.
- Which IWC Order Applies?
- Working Under Two IWC Orders.
- Federal Complication.
- Winery Employment.
- Cold-Storage Activities.
- Figuring Overtime Pay.
- Workweek Defined.
- Workday Defined.
- Overtime Exemptions State.
- Executive, Administrative, or Professional Employees.
- Executive Exemption.
- Administrative Exemption.
- Professional Exemption.
- Outside Salespersons.
- Commissioned Inside Salespersons.
- Truck Drivers.
- Parents, Spouse, or Children.
- Irrigators.
- Part-Time Employees.
- Make-Up Time.
- Summary of Employment Requirements for California Agricultural Employers.
- Truck Drivers.

Federal Provisions & California Provisions

• Weekend or Holiday Overtime.



- Other Wage-Hour Issues.
- Split-Shift Premium Pay.
- Piece Rates and Commissions.
- Bonuses' Effect on Overtime Pay.
- Group Rate for Piecework.
- Non-Piece-Producing Work Time of Piece-Rate Employees.
- Exempt Salaried Employees Salary Deductions.
- Summary of Allowed Salary Deductions.
- Summary of Illegal Salary Deductions.
- Non-Exempt Salaried Employees.
- Clerical and Office Staff.
- Mechanics.
- Housing Employees.
- Workers' Compensation Premiums.
- Taxes.
- Workday and Workweek.
- Paid Time Off and Hours Worked.
- Paydays.
- Workers Employed by Farm Labor Contractors.
- Employees Boarded and Lodged.
- All Other Agricultural Employees.
- Executive, Administrative, and Professional employees.
- Payroll Deductions and Offsets Against Wages.
- Lawful Deductions.
- Garnishment of Wages.
- Employer May Not Collect or Receive Wages Paid Employee.
- Self-Help by Employers to Recover Unliquidated Sums.
- Losses Resulting from Simple Negligence.
- Discipline as an Alternative.
- Loss Suffered from an Employee's Dishonest or Willful Act or Gross Negligence.
- Deductions for Loans Made to Employees.
- Any Deduction Must be for Direct Benefit of Employee.
- Specific Deductions.
- Deductions Allowed by IWC Orders Caveat.
- Deduction for Tardiness.
- Final Pay.
- Discharged or Laid Off.
- Quitting Employee.
- Waiting-Time Penalty.
- Working Conditions.
- Rest Periods.
- Meal Periods.



- Day's Rest.
- Accommodation.
- Reporting-to-Work Pay.
- Tools.
- Uniforms.
- Personal Protective Equipment Indemnification.
- Vacations.
- Holidays.
- Sick Pay.
- Severance Pay.
- Pension Plans.
- Health Insurance.
- Summary of Employment Requirements vi for California Agricultural Employers Different Health Insurance for Different Employees.
- Discontinuance of Health Insurance During Workers' Compensation Disability.
- Leaves of Absence Time Off from Work.
- Pregnancy-Disability Leave.
- Family and Medical Leave Act and California Family Rights Act.
- Court Duty.
- Time Off for Crime Victims.
- Emergency Duty as a Volunteer Firefighter.
- Time Off to Participate in a Child's Daycare Facility or School Activities.
- Time Off to Appear at School at School's Request.
- Time Off to Vote.
- Drug and/or Alcohol Rehabilitation.
- Literacy Assistance.
- Temporary Military and/or Reserve Duty Leave.
- Military-Spouse Leave.
- Mass Layoff/Plant Closure (WARN Act).
- Federal WARN Act.

Definitions

- California WARN Act.
- Farm Labor Contractors.
- Responsibilities of a Grower Using a Farm Labor Contractor (FLC).
- Independent Contractor Reporting.
- Land-Management Services.
- Migrant and Seasonal Agricultural Worker Protection Act (MSPA).
- Coverage Under the MSPA.
- Employer Coverage.
- Farm Labor Contractor Coverage.
- Employee Coverage Migrant or Seasonal Agricultural Workers.



Additional Definition of Terms

- Migrant Agricultural Worker Exemption.
- Seasonal or Another Temporary Basis Defined.
- Field Work Defined.
- Overview of MSPA Requirements.
- Joint Employer Relationship.
- MSPA Requirements for All Entities.
- MSPA Requirements for Farm Labor Contractors.
- Contracts for Labor or Services.
- Penalties.
- Private Right of Action.
- Specific Requirements for Farm Labor Contractors.
- Checklist of Farm Labor Contractor (FLC) Requirements.
- Employer Tax Registration Requirements.
- California Employer Identification Number.
- California Franchise Tax Board.
- Internal Revenue Service (IRS).
- Insurance and Bonding Requirements.
- Workers' Compensation Insurance Coverage.
- Vehicle Liability Insurance.
- Farm Labor Contractor Bonding.
- Farm Labor Contractor Registration and License Requirements.

General

- Federal Registration.
- State Farm Labor Contractor License Requirements.
- State License.
- Responsibilities of a Grower or FLC Using an FLC.
- Application.
- Summary of Employment Requirements for California Agricultural Employers.
- Farm Labor Contractor Examination.
- Continuing Education.
- Laws Relating to Farm Labor Contractor Employment of Employees.
- FLC Supervisors.
- Worker Recruitment.
- Statement of Unpaid Wage Judgments.
- Grounds for Losing a Farm Labor Contractor License.
- Penalties.
- Penalties for Failures to Pay Wages.
- County Agricultural Commissioner Registration.
- Workers' Compensation.
- Premiums.



- Coverage.
- Employee Exclusions.
- Responsibilities of Employers.
- Reportable Injury.
- Notice of Injury by Employee.
- Employee Claim Form.
- Physician or Chiropractor Designation.
- Disability Benefit Payments.
- Medical Treatment.
- Premium Calculations.
- Traveling to or From Work.
- Exclusive Remedy; Exceptions.
- Serious and Willful Misconduct.
- Illegally Employed Minors.
- Discrimination Labor Code Section 132a.
- Penalties.
- Postings.
- Employment Insurance.
- Unemployment Insurance.
- Covered Employers.
- Experience Rating.
- Employer Account Number.
- Required Records.
- Time Limits of Records.
- Posting and Notice Requirements.
- Written Notice to Employee.
- Penalties.
- Disability Insurance and Paid Family Leave.
- Benefits of California SDI Coverage.
- Paid Family Leave Program.
- Child Labor.
- Work Permits.
- Agricultural Zone of Danger.
- Child Labor Summary.
- Exemption for One's Own Children.
- Minimum Age Standards General.
- Permits to Work and to Employ.
- Recordkeeping.
- Hours of Work.
- Spread of Hours.
- Restricted and Hazardous Occupations.
- Posting of Notice.



- Wages.
- Citations and Penalties.
- Posting Requirement.
- Transportation.

Summary of Employment Requirements for

California Agricultural Employers Transportation of Interstate Commerce Act (ICA) Regulations

- Migrant and Seasonal Agricultural Worker Protection Act (MSPA).
- FLC Transportation of Worker.
- Vehicles Covered Under Regulations Developed by DOL.
- Exempt Vehicles.
- Rules Which Apply to All Vehicles.
- Vehicle Insurance Requirements.
- Vehicle Safety Regulations Developed by the DOL.
- State Statutes and Regulations.
- Farm Labor Vehicles.
- Vehicle Inspections.
- Vehicle Drivers.
- Farm Labor Vehicles.
- Farm Labor Vehicle Equipment.
- Pickup, Flatbed, and Dump Trucks.
- Trucks.
- Carrier or Employer Responsibility.
- Cal/OSHA.
- Liabilities Relative to Transportation.
- Tractor-Driver Licensing Requirements.
- Transporting Employees.
- Operation on Public Highways.
- Transportation Provided by Supervisors.

Housing

- State Coverage.
- Cal/OSHA Requirement.
- Fees for Permits and Inspections.
- Prohibitions.
- Federal Coverage.
- Penalties.
- Credits Against Minimum Wage for Meals and Lodging.
- Impact of Housing Employees.
- Evictions; Housing Agreements.
- Agricultural Labor Relations Act (ALRA).



- Agricultural Labor Relations Board (ALRB).
- Coverage under the ALRA.

Definitions

- Agricultural Employer.
- Farm Labor Contractor.
- Supervisor.
- Agricultural Employees.
- Union.
- Concerted Activities.
- Unfair Labor Practice.
- Union Elections and Collective Bargaining.
- Mandatory Mediation Order.
- Union Access.
- Unfair Labor Practices.
- Strikes, Picketing and Economic Boycotts.
- Remedies for Unfair Labor Practices.
- ALRB Remedies.
- Discrimination.
- Discrimination General Background.
- Federal.
- California.
- Other Laws.
- Protected Categories and Definitions.
- Summary of Employment Requirements for California Agricultural Employers.
- Ancestry, Race, Color, and National Origin.
- Sex Discrimination.
- Supervisor Harassment Training.
- Sexual Orientation.
- Gender Identity Discrimination and Harassment.
- Pregnancy, Childbirth, and Related Medical Conditions.
- Marital Status.
- Age Discrimination.
- Disabilities.
- Reasonable Accommodation.
- Pre-Job-Offer Inquiries.
- Post-Job-Offer, Pre-Employment Medical Examinations.
- Employee Examinations.
- Alcohol and Other Drugs.
- Religious Discrimination.
- Discrimination Other Laws.
- Privacy in Employment.



- Employee's Off-Work Activities.
- Garnishments.
- Return to Work Due to Medical Absence.
- Employers with one or more employees.
- Employers regularly employing five or more employees.
- Pregnancy Disability.
- Reporting Requirements EEO-1.
- Applicant Identification Records.
- Harassment.
- Types of Sexual Harassment.
- Quid Pro Quo.
- Hostile or Offensive Work Environment.
- Duty to Prevent Sexual Harassment by Non-Employees.
- Notices, Posters, Disclosures and Records.
- Notices and Disclosures.

U.S Department of Labor

- Wages and Hours Federal.
- Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA).
- Patient Protection and Affordable Care Act.
- Wage and Hour Regulation State IWC Orders.
- Industrial Welfare Commission (IWC).
- Payday Notice.
- Statement of Wages.
- Compensation Notice.
- Farm Labor Contractor Rate of Compensation.
- Commissioned Employee Written Contract Requirement.
- Migrant and Seasonal Agricultural Worker Protection Act (MSPA).
- General MSPA Poster.
- Worker Information.
- Housing Terms and Conditions.
- National Labor Relations Act (NLRA) Employee Rights.
- Employment of Minors.
- Employment Development Department (EDD).
- Equal Employment Opportunity is the Law.
- Equal Employment Opportunity is the Law.
- Age Discrimination is Against the Law.
- Family and Medical Leave Act (FMLA).
- California Fair Employment and Housing Commission (FEHC).
- Pregnancy-Disability Leave.
- California Family Rights Act (CFRA).
- Discrimination in Employment is Prohibited by Law.



- Summary of Employment Requirements for California Agricultural Employers.
- Time Off to Vote.
- Housing and Meals.
- Operators of Labor Camps.
- Amounts Charged for Meals and Lodging.
- Fair Housing is the Law.
- Cal/OSHA.
- Safety and Health Protection on the Job.
- Cal/OSHA Form 300A.
- Field Sanitation Facilities.
- Access to Medical and Exposure Records.
- Agricultural Industrial Tractors.
- Operating Rules for Industrial Trucks.
- Handwashing Water.
- California Safe Drinking Water and Toxic Enforcement Act.
- Pesticide Postings.
- Posting of Pesticide Storage Areas.
- Emergency Medical Care.
- Emergency Medical Services.
- Field Postings.
- Irrigation.
- Fumigants.
- Application-Specific Information for Field Workers.
- Pesticide Safety Information Series A-8.
- Pesticide Safety Information Series A-9.
- Workers' Compensation.
- Notice of Compensation Carrier.
- Medical Provider Network Information.
- Off-Duty Recreation.
- Written Notice to New Employees.
- Employee Polygraph Protection Act.
- Whistleblower Hotline.
- Uniformed Services Employment and Reemployment Rights Act (USERRA).
- Mass Layoff/Plant Closure (WARN).
- Human Trafficking/Slavery Notice.
- Recordkeeping and Reports.
- Cal/OSHA.
- Field Sanitation Report.
- Recordkeeping.
- GISO § 3203.
- Department of Pesticide Regulation.
- Employment Development Department.



- Wages and Payroll.
- Statement of Wages.
- Recording Hours Worked.
- Payroll and Related Records.
- Workday and Workweek.
- Personnel Records.
- Job Applications; Personnel Records.
- Records That Must be Kept.
- Immigration.
- CIS Form I-9.
- Farm Labor Contractor (FLC).
- FLC License.
- FLC Payroll Records.
- Leave of Absence.
- Family and Medical Leave Act.
- California Family Rights Act.
- Discrimination.

Summary of Employment Requirements for California Agricultural Employers

- Applicant Identification Records.
- EEOC EEO-1 Report.
- Recordkeeping and Inspection Requirements.
- Inspection and Copying of Personnel Files.
- Inspection and Copying of Payroll Records.
- Workers' Compensation.
- Employee Claim Form.
- Form to Indicate Physician or Chiropractor.
- Child Labor.
- Permit to Employ and Work Permit.
- Date of Birth.
- Checklist of Forms and Reports.



Glossary of Abbreviations & Definitions

- AAPCC: American Association of Poison Control Centers
- AB: Assembly Bill
- ABA: Architectural Barriers Act
- ADA: Americans with Disabilities Act
- ALRA: Agricultural Labor Relations Act
- ALRB: Agricultural Labor Relations Board
- APN: Assessor's Parcel Number
- AUMA: Adult Use Marijuana Act (Prop 64)
- BCC: Bureau of Cannabis Control
- BMCR: Bureau of Medical Cannabis Regulation
- **BMP:** Best Management Practices
- **BOE:** Board of Equalization
- CAC: County Agricultural Commissioner
- Cal OES: California Office of Emergency Services (See also OES)
- CALRA: California Agricultural Labor Relations Act
- CALRB: California Agricultural Labor Relations Board
- **CBC:** California Building Code
- CBO: Cannabis Board Order
- CCR: California Code of Regulations (also Cal. Code Regs.)
- CDFA: California Department of Food and Agriculture
- CDFFP: California Department of Forestry and Fire Protection (CAL FIRE)
- **CDF:** California Department of Fire
- CDFW: California Department of Fish and Wildlife
- CDIR: Also see DIR: California Department of Industrial Relations
- **CD**: Community Development
- **CDPH:** California Department of Public Health
- CDWC: California Division of Worker's Compensation
- **CEH:** Center for Environmental Health



- **CEQ:** Council on Environmental Quality
- **CEQA:** California Environmental Quality Act
- **CFR:** Code of Federal Regulations
- **CFSAN:** Center for Food Safety and Applied Nutrition
- **CLRB:** California Labor Relations Board
- CSLB: California State Licensing Board
- **CMCLUO:** Commercial Medical Cannabis Land Use Ordinance
- **CP:** Community Planning
- **CPD:** County Planning Department
- CPRC: California Public Resources Code
- CSWC: California State Warning Center
- **CUPA:** California Unified Program Act
- DCA: Department of Consumer Affairs
- **DD:** Development Department
- **DEH:** Division of Environmental Health
- DFEH: Department of Fair Employment and Housing
- DHHS: Department of Health and Human Services
- **DIR:** Department of Industrial Relations
- DLSE: Department of Labor Standards Enforcement
- DL-WHD: Department of Labor, Wage and Hour Division
- **DOL:** Department of Labor
- **DPH:** Department of Public Health
- **DPR:** Department of Pesticide Regulation
- DWC: Division of Workers' Compensation
- DWR: Division of Water Rights
- **EEOC:** Equal Employment Opportunity Commission
- EIR: Environmental Impact Report
- **EPA:** Environmental Protection Agency
- FLC: Farm Labor Contractor
- FLSA: Fair Labor Standards Act
- **GAP:** Good Agricultural Practices



- **GHP:** Good Handling Practices
- **GP:** General Plan
- HIPP: Heat Injury Prevention Plan
- HSC: Health and Safety Code
- HUC: Hydrologic Unit Code
- **IIPP:** Injury and Illness Prevention Program
- **IPM:** Integrated Pest Management
- ISWDU: Initial Statement of Diversion and Use
- **LLC:** Limited Liability Company
- LRDP: Long Range Development Plan
- LSA: Lake and Streambed Alteration
- LSAA-1600/1602: Lake and Streambed Alteration Agreement
- LC: Labor Commissioner
- MBC: Medical Board of California
- MCRSA: Medical Cannabis Regulation and Safety Act
- **MND:** Mitigated Negative Declaration
- **MOU:** Memorandum of Understanding
- MRP: Monitoring and Reporting Program
- MSDS: Material Safety Data Sheet
- **MSPA:** Migrant Seasonal Protection Act
- NCRWQCB: North Coast Regional Water Quality Control Board
- **ND:** Negative Declaration
- **NEPA:** National Environmental Policy Act
- NLRB: National Labor Relations Board
- NMBC: Non-Profit Mutual Benefit Corporation
- **NOE:** Notice of Enrollment
- NOI: Notice of Intent
- NOP: National Organic Program
- NRCS: Natural Resources Conservation Service
- **NWIC:** Northwest Information Center
- **OES:** Office of Emergency Services



- **OMCS:** Office of Manufactured Cannabis Safety
- **OMRI:** Organic Materials Review Institute
- **OPR:** Office of Planning and Research
- **OSHA:** Occupational Safety and Health Administration
- **OSHG:** Occupational Health and Safety Guidelines
- **OSHT:** Occupational Safety and Health Technician
- PG&E: Pacific Gas and Electric
- PHTP: Pesticide Handling Training Program
- **PPE:** Personal Protective Equipment
- **REI:** Restricted Entry Interval
- SB: Senate Bill
- **SDS:** Safety Data Sheets (See also MSDS)
- SDU: Small Domestic Use
- SIU: Small Irrigation Use
- **SOP:** Standard Operating Procedures
- SWRCB: State Water Resources Control Board
- THPO: Tribal Historical Preservation Office
- USC: United States Code
- USCB: United State Census Bureau
- **USDA:** United States Department of Agriculture
- **US-DOL:** United States Department of Labor
- **USDHHS:** United States Department of Health and Human Services
- WBO: Water Board Order
- WDID: Waste Discharge Identification
- WHD: Wage and Hour Division
- WRPP: Water Resource Protection Plan
- WWD: Waste Waiver Discharge Program



Other Relevant Sources

- Adult Use of Marijuana Act (AUMA), <u>http://bit.ly/2hTHGHw</u>.
- Agricultural Operations, Field Sanitation, California Code of Regulations, Title 8, § 3457, <u>http://bit.ly/2jDeHrW</u>.
- Best Management Practices (SWRCB), <u>http://bit.ly/2ji6JEK</u>.
- Bureau of Medical Cannabis Regulation, or Bureau of Marijuana Control, http://bit.ly/2pb9Lkg
- CalCannabis, <u>http://bit.ly/2qHl43T</u>
- California Building Code (CBC), <u>http://bit.ly/2ji3wFb</u>.
- California Code of Regulations, § 51018, <u>http://bit.ly/2jq7azr</u>.
- California Environmental Quality Act (CEQA), <u>http://bit.ly/2jigkLE</u>.
- California Field Sanitation Standards, <u>http://bit.ly/2jDeHrW</u>.
- California Hazardous Materials Spill/Release Notification Guidance, <u>http://bit.ly/2jpUR6i</u>.
- California Health and Safety Code, § 25270.8, § 25510, http://bit.ly/2jtbkWX.
- California Labor Code, § 6409.1 (b), <u>http://bit.ly/2j26HjC</u>.
- California Public Utilities Code, § 7673, <u>http://bit.ly/2ivtkR7</u>.
- California Water Code, § 13271, <u>http://bit.ly/2jq3Ggp</u>.
- Characteristic Hazardous Wastes, 22 CCR § 66261.21-66261.24, <u>http://bit.ly/2jq7pKF</u>.
- Commercial Medical Cannabis Land Use Ordinance (CMCLUO), <u>http://bit.ly/2jDgM7e</u>.
- Compassionate Use Act, <u>http://bit.ly/2f2Koud</u>.
- Contingency Plan and Emergency Procedures, California Code of Regulations, Title 22, CCR, § 66265.56, <u>http://bit.ly/2jDoiyG</u>.
- Detailed Hazardous Materials Incident Reports, Code of Federal Regulations, Title 49, CFR, § 171.16, <u>http://bit.ly/2iAmDZh</u>.
- Driving Offenses, California Vehicle Code, § 23112.5, <u>http://bit.ly/2jqfgb5</u>.
- EPA, Pacific Southwest, Region 9, *Chemical Spills Prevention and Preparedness* webpage, <u>http://bit.ly/2ivmElX</u>.
- Farmers, CCR, Title 22, § 66262.70, http://bit.ly/2ivuufu.
- Guide for State and Federal Requirements for Employee/Migrant Housing, <u>http://bit.ly/2jYFimu</u>.
- Hazardous Material Release Reporting, California Code of Regulations, Title 19, CCR, § 2703, <u>http://bit.ly/2jigd2U</u>.
- Health and Safety Code (HSC), § 11362.777, <u>http://bit.ly/2ivoMdk</u>.
- Lake and Streambed Alteration Agreement (LSA-1600/1602), <u>http://bit.ly/2jS5NWV</u>.
- Medical Cannabis Regulation & Safety Act (MCRSA), <u>http://bit.ly/2j2mwqc</u>.
- National Environmental Policy Act (NEPA), <u>http://bit.ly/2fSvght</u>.
- NEPA CEQA Handbook, <u>http://bit.ly/2ivnyPq</u>.
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, <u>http://bit.ly/1AKXsYc</u>.
- Onshore Well Regulations, California Code of Regulations, Title 14, CCR, § 1722 (h), <u>http://bit.ly/2iAmbKi</u>.
- Office of Manufactured Cannabis Safety, <u>http://bit.ly/2qR3WoO</u>
- OSHA Guidelines, <u>http://bit.ly/Zhq1yc</u>.



- Pesticide and Pesticide Control Operations, California Code of Regulations, § 6670, Title 3, Division 6, , <u>http://bit.ly/2iFhG4K</u>.
- Pesticide and Pesticide Control Operations, California Code of Regulations, § 6670, Title 3, Division 6, <u>http://bit.ly/2ivveB5</u>.
- Regulations for Implementing the Procedural Provisions of NEPA, <u>http://bit.ly/2ivt84d</u>.
- Reporting of Incidents Involving Hazardous Materials or Hazardous Wastes, California Code of Regulations, Title 13, § 1166, <u>http://bit.ly/2jtcX6J</u>.
- Reporting Work-Connected Fatalities and Serious Injuries, California Code of Regulations, Title 8, § 342: <u>http://bit.ly/2jS4dUU</u>.
- SB-643, Chapter 719, § 19302.1 (d), <u>http://bit.ly/2iAePXp</u>.
- Senate Bill 420, <u>http://bit.ly/2fy0zBj</u>.
- Solid Waste Storage and Removal Standards, California Code of Regulations, Title 14, Chapter 3, Article 5, <u>http://bit.ly/2jS8BmV</u>.
- Standards Applicable to Transporters of Hazardous Waste, Code of Federal Regulations, Title 40, Chapter I, Subchapter I, Part 263, <u>http://bit.ly/2j27jpc</u>.
- Statements of Water Diversions and Use, California Code of Regulations, § 5101, <u>http://bit.ly/2jigDWU</u>.
- Summary of Employment Requirements for California Agricultural Employers, <u>http://bit.ly/2j7mxJy</u>.
- Toxics, California Code of Regulations, Title 17, CCR, § 30295, <u>http://bit.ly/2jt3sVh</u>.
- U.S. Code, Title 42, § 9603, <u>http://bit.ly/2iAp7Xj</u>.
- Unique Identifier and Track and Trace Program, Article 7.5, § 19335 (a), http://bit.ly/2jYFT7K.
- United States Code, Title 42, Sections 4331 et seq., <u>http://bit.ly/2iFqgjE</u>.
 Waste Discharge Reports and Requirements, California Code of Regulations, Title 23, CCR, § 2230, <u>http://bit.ly/2iFoWxe</u>.



Appendix C

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207



Appendix D

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207

Cannabis Relocation Report APN 210-191-059 Humboldt County Application #11207

Prepared By: Natural Resources Management Corporation 1434 3rd Street Eureka, CA 95501

February 20, 2020



Contents

Summary	.4
Environmental Context	.4
Existing Cultivation	.4
Relocation	. 8
Rationale	. 8
Summary of Area	.9
Site Summary	10
Restoration	12
Greenhouse #7	13
Outdoor 'A'	13
Outdoor 'C' and "F'	13
Restoration Success Criteria	13
Restoration Monitoring	13
References	14
Appendix A - Supporting Photos	15
Appendix B – Preliminary Grading, Drainage and Erosion Control Plan	19

Figures

6	
Figure 1. Project Vicinity	3
Figure 2. Location of preexisting cultivation areas (from County Certified Area Verification (CAV))	5
Figure 3. 210-191-059 (-015 old APN) Plot Plan: PWA, 2017	6
Figure 4. Site Overview	7
Figure 5. Site Overview, SWRCB setbacks; APN 210-191-059	8
Figure 6. Google Earth views and Humboldt Web GIS low slope area of proposed relocation area	10
Figure 7. Relocation Site Overview	11
Figure 8. Restoration Areas	12

Tables

Table 1. SWRCB Minimum Riparian Setbacks
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Appendixes

Appendix A -	Supporting Photos
Appendix B -	Preliminary Grading, Drainage and Erosion Control Plan; Omsberg and Preston,
	February 18, 2020



Figure 1. Project Vicinity

Summary

This is the Cannabis Relocation Report for Sunny Simmons (Humboldt County APN 210-191-059) at 41000 State Highway 36, Bridgeville, CA. This document describes the current conditions of the property, the cultivation history, the proposed relocation of the site features and details the environmental benefits of the proposed relocation.

Environmental Context

This site is located (Figure 1) in Humboldt County off of State Route 36 in the Van Duzen Planning Watershed. The parcel is approximately 20 acres in size with a landscape characterized by a mosaic of Bald Hills Prairie, Non-native Grassland, Mixed Evergreen Forest, and Oregon Oak Woodland (Holland 1986). The elevation at the top of the property is approximately 2900-feet; at the bottom of the property, near State Route 36, the elevation drops to 2,540-feet. The parcel has, on average, a Northern aspect as the parcel slopes toward the Van Duzen River. The western portion of the property is dense forest canopy that slopes into a swale on the property. The eastern half of the parcel is primarily open grasslands with a minor ridgeline that slopes downhill from the top of the parcel just inside the eastern boundary and provides additional west and east aspects. Two waterways were identified during previous surveys (Plot Plan, PWA, 2017) as present on the parcel; there is a class III that originates on the parcel and a class II that passes through the northeast corner of the parcel. The Van Duzen River is approximately 1,000-feet North of the project parcel and 340-feet below the lowest (most Northern) edge of the parcel boundary.

Existing Cultivation

There were six (6) pre-existing cultivation areas on the property (A-F; Figure 2) that amounted to 25,515 sq. ft. of total cultivation area. Of this original amount, Humboldt County awarded the cultivator 24,000 sq. ft. of outdoor cultivation in the interim permit. The most recent cultivation (Spring-Fall 2018) layout is shown in the Plot Plan from PWA (Figure 3). The cultivation is represented in the form of 7 hoop houses (numbered 1-7) in three locations, four propagation areas, and the remainder in full sun.

The PWA Plot Plan from 2017 (Figure 3) did not include the outdoor cultivation area (CAV area 'C') by the pond; nor did it include the outdoor cultivation area (CAV area 'F'). These outdoor areas were not included by PWA because the full sun outdoor had not been planted during the time that the map was created. Figure 4 integrates the onsite measurements from PWA (hoop house dimensions) and the Outdoor gardens from the Humboldt County CAV into a 'Site Overview' map that is a more accurate overview of the project's existing cultivation.



Figure 2. Location of preexisting cultivation areas (from County Certified Area Verification (CAV))



Figure 3. 210-191-059 (-015 old APN) Plot Plan: PWA, 2017



Figure 4. Site Overview

Relocation

Rationale

The State Water Resources and Control Board (SWRCB), with authority from the Clean Water Act, approved the Cannabis General Order, WQ-2017-0015-DWQ, amended by WQ-2019-0001-DWQ, to protect the waters of the state from adverse impacts due to cannabis cultivation. In this order, the SWRCB established minimum setbacks between disturbed areas and water resources.

The water resources on the project APN are: one Class II stream, one Class III stream, and one onstream pond. The SWRCB setback distances (See Table 1 below) are measured from top of bank or the bankful stage, whichever is more conservative*.

Water Resource	Class	Distance
Perennial watercourses, ponds	Ι	150-feet
Intermittent watercourses	II	100-feet
Ephemeral watercourses	III	50-feet

Table 1. SWRCB Minimum Riparian Setbacks

*The Humboldt County Streamside Management Area Ordinance (SMAO) also places restrictions on development within the riparian areas of streams and waterbodies; the setbacks are measured from the top of bank, or edge of riparian dripline. In this area, both the class III and class II intermittent streams receive a more limited setback under Humboldt's SMA than the setbacks defined by the SWRCB. The SWRCB setbacks, Table 1, are therefore the most conservative protection for the riparian habitats at this location.



Figure 5. Site Overview, SWRCB setbacks; APN 210-191-059

Two portions of the pre-existing cannabis cultivation areas on APN 210-191-059 are located within riparian buffers established by the SWRCB. The greenhouse to the northwest of the pond, Greenhouse #7, (Figure 5) has a portion of its area (288 sq. ft. out of 938 sq. ft. of existing GH) located within a class III buffer (50-foot buffer). The 2,217 sq. ft. of outdoor cultivation, established on the CAV as OD 'C' is entirely within the riparian setback of the onstream pond (Table 1 & Figure 5). Moving the cultivation out of the riparian setbacks is required by the SWRCB General Order.

The 553 sq. feet of outdoor cultivation, established on the CAV as OD 'F' is not within any riparian setbacks, but it is a steeply sloped site immediately above the Class II stream (50-feet from the setback). It is the opinion of NRM that as this area has successfully revegetated during the period of rest during the permitting process, the environmentally superior option is to relocate this cultivation area off of the slope and away from the Class II stream.

Lastly, the 4,669 sq. ft. of outdoor cultivation area, established on the CAV as OD 'A" will also be relocated. This area is one of the on the site that has electric power available (the other areas are the propagation and processing areas in the northeast corner of the property). This outdoor area was also not planted during the composition of the previous Plot Plan (PWA, 2017). This area has grid power and had been used in the past as an area for propagation. Currently, the area hosts a propagation facility (900 sq. ft.) and a storage/ processing tent that use the available grid power.

It is the opinion of NRM that the propagation facilities remain in areas where grid power is available and therefore eliminate the need for generator supplied electricity. The outdoor cultivation does not need electrical power and can be located anywhere on the property. To this end, the propagation facility will stay where it is currently located and the cultivation area that was attributed to OD 'A' will be relocated.

Summary of Area	
To Remain = 18,350 sq. ft.	
Greenhouse #6	750 sq. ft. (entire GH remains)
Greenhouse #7	570 sq. ft. (partial GH remains)
Greenhouse #1-5 & outdoor	17,000 sq. ft. (Figure 3; total area will remain, but will be reconfigured on engineered terraces; Figure 7).
To be Relocated = 5,650 sq. ft .	
Greenhouse #7	280 sq. ft. (partial GH)
OD 'C'	2, 217 sq. ft. (entire area)
OD 'F'	553 sq. ft. (entire area)
OD 'A'	4,669 sq. ft. (reduced to 2,630 sq. ft. to not exceed Humboldt
	County's final awarded amount of 24,000 sq. ft. of
	total outdoor cultivation)

Total Cultivation area = **24,000 square feet** of Outdoor.

Site Summary



Figure 6. Google Earth views and Humboldt Web GIS low slope area of proposed relocation area; retrieved Sept 2019

The relocation area (Figure 7) would encompass an established dirt road and disturbed open grassland that has been used as parking and a turnaround area in the past; the area will be integrated with the existing cultivation area. The relocation will result in a combined area (existing and relocated) of 22,680 square feet of total cultivation area on a series of engineered flats. The cultivation area will be composed of five greenhouses, each with 4,200 sq. ft. of cultivation space (21,000 sq. ft total) and one greenhouse that is 1,680 sq. ft. in size. The proposed graded flats will be just under 32,000 square feet total, including parking and turn around.

The designated relocation site was selected as a superior site due to several factors:

- 1. The site has established road access with proposed improvements (see Grading Plan (draft), Appendix B) and irrigation infrastructure.
- 2. According to Humboldt Web GIS and visits by site engineers at Omsberg and Preston, the site is dominated by slopes under 15% (Figure 6).
- 3. The relocation site is outside of riparian setbacks (Figure 7); relocation will minimize risk of mobilization and delivery of polluted waters to project waterways and the Van Duzen River
- 4. The site is already extensively used for driving and parking with the majority of the proposed relocation area already disturbed (Figure 2, Figure 6).
- 5. The relocation site will include improvements to and integration with an existing cultivation area.
 - engineered terracing of the entire planting area will provide slope stability and improved drainage (see Grading Plan (draft), Appendix B).



Figure 7. Relocation Site Overview
Restoration

All cultivation materials including but not limited to hoop houses, tarps, pots, soil, stakes, and other cultivation related wastes will be removed from decommissioned preexisting cultivation areas. Material will either be relocated to the relocation area or properly disposed of at a legal dump. Figure 8 shows existing cultivation areas that will be relocated and, where necessary, restored.



Figure 8. Restoration Areas

Cannabis Relocation Report APN 210-191-059

Greenhouse #7

Photo: 3 & 4

Approximately 280 sq. ft of the existing greenhouse #7 that is within the 50 foot setback of the Class III channel will be removed and all associated infrastructure and waste will be either re-used at the relocation site or removed to a legal transfer station. Because the greenhouse is primarily located on an established roadbed, most of the disturbed area to be restored is the fill slope of the roadbed. Once cultivation materials and waste are removed, the exposed and disturbed bare soil on the fill slope will be covered with a layer (2-inches thick) of weed free straw. If the bare dirt remains on the slopes at the beginning of the wet season (Oct 15), straw wattle will be installed perpendicular to the slope at the road fill slope break; the wattle will be secured with stakes.

This area will be checked the Spring following cultivation material removal to see if grasses are recolonizing the area. Any moderate or high listed invasive will be removed and properly disposed of (compost pile or green waste facility). If the area in not re-vegetating naturally all remaining bare dirt areas will be seeded with native grass seed.

Per the description in the associate Lake and Streambed Alteration Agreement (FINAL LSAA no. 1600-2018-0814-R1), the road to the east will no longer be used to access the remaining 658 sq. ft. of Greenhouse #7. The class III stream crossing and the road will be discontinued.

Outdoor 'A'

The area will continue to be used for propagation and storage/drying. The cultivator will replant, with native grass mix, disturbed, unused areas (parking, turnaround) that remain bare ground and keep them free of refuse.

Outdoor 'C' and "F'

OD 'C' and 'F' are clean of cultivation materials and heavily revegetated with grasses. No further work is required at these sites.

Restoration Success Criteria

For all restored areas, the restoration will be considered successful if after 2 years of monitoring the areas of bare dirt have 100% vegetative cover with less than 10% cover of invasive species listed at moderate or high on the Cal-IPC Inventory.

Restoration Monitoring

Grassland restoration will be monitored for two years. To ensure it meets the success criteria explained above.

During each monitoring visit a botanist will record the survival of planted grasses, assess the general condition of the site, and record the cover of invasive species. Adaptive management strategies for plant survival and invasive removal will be recommended as necessary. A yearly report will be filed with the county documenting native ground cover, invasive cover and adaptive management recommendations.

References

- Holland, R.F. Unpublished report 1986. *Preliminary Descriptions of the Terrestrial Plant Communities of California*. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, CA.
- Humboldt County. 2019. Humboldt County Web GIS. http://webgis.co.humboldt.ca.us/HCEGIS2.0/. Accessed September 2019

Pacific Watershed Associates. April 2017. Water Resources Protection Plan for APN 210-191-015.

Cannabis Relocation Report APN 210-191-059 Photo 1. From south looking north, northeast. Main cultivation area with some hoop houses and full sun outdoor. Photo from PWA WRPP, 2017.









Photo 3. People at head of class III; GH#7 in background; Jan 2019, NRM.

Photo 4. GH #7, Photo from PWA WRPP, 2017



18

Appendix B – Preliminary Grading, Drainage and Erosion Control Plan Omsberg and Preston, February 18, 2020

Cannabis Relocation Report APN 210-191-059





Appendix E

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207



STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

RIGHT TO DIVERT AND USE WATER

REGISTRATION H504729

CERTIFICATE H100420

Right Holder:

Cody MacDonald PO 43 Bridgeville, CA 95526

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from 12/13/2018. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated October 19, 2017.

The Deputy Director for Water Rights finds that this registration meets the requirements for registration of small irrigation use appropriation. (Wat. Code, § 1228 et seq.)

Right holder is hereby granted a right to divert and use water as follows:

1. Location of point(s) of diversion (Coordinates in WGS 84)

Name of Diversion	Source	Tributary To:	Thence	Latitude	Longitude	County	Assessor's Parcel Numbers (APN)
Isolated Spring	Unnamed Spring	Unnamed Stream	Van Duzen River	40.482764	-123.646811	Humboldt	210-191-015

2. Purpose of Use and 3. Place of Use

2 Purpose of Use	3. Place of Use					
	County	Assessor's Parcel Numbers (APN)	Acres			
Irrigation	Humboldt	210-191-015	0.55096			

Note: Assessor's Parcel Numbers provided are based on the user's entries in this portal on 01/24/2019. The place of use is shown on the map filed on 01/24/2019 with the State Water Board.

4. Quantity and Season:

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.614 **acre-feet per year** to be collected from 01/01 to 12/31 and as permitted in the diversion season specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive. The total storage capacity shall not exceed 0.77 acre-feet. The rate of diversion to storage shall not exceed 42,000 gallons per day (gpd) or the diversion rate specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive.

5. No water shall be diverted or used under this right unless the water right holder is in compliance with all applicable conditions, including the numeric and narrative instream flow requirements, of the current version of the State Water Board's Cannabis Policy, except as follows:

Right holders enrolled under Regional Water Quality Control Board Order R1-2015-0023 or Order R5-2015-0113 shall comply at all times with requirements related to flow, diversion, storage, and similar requirements of Attachment A of the Cannabis Policy identified by the Division of Water Rights below in this condition. This condition remains in effect until July 1, 2019, or when the right holder enrolls under the statewide Cannabis General Order, whichever comes first, at which time right holders shall comply with all applicable conditions and requirements of Attachment A of the Cannabis Policy.

- Section 1 Term Numbers 4, 15, 17, 24, 26, and 36.
- Section 2 Term Numbers 23, 63, 64, 66, 69 78, 82 94, 96, and 98 103.
- Section 3 All Instream Flow Requirements for Surface Water Diversions (Requirements 1 7) and the Gage Installation, Maintenance, and Operation Requirements.
- Section 4 All requirements and conditions.

The current version of the State Water Board's *Cannabis Policy* is available online at: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy.pdf.

- 6. No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies.
- 7. Diversion works shall be constructed and water applied to beneficial use with due diligence.
- 8. No water shall be diverted under this right unless right holder complies with all lawful conditions required by the California Department of Fish and Wildlife. (Wat. Code, § 1228.6, subd. (a)(2).)
- 9. No water shall be diverted under this right unless it is diverted in accordance with the information set forth in the completed registration form as to source, location of point of diversion, purpose of use, place of use, quantity, and season of diversion. This information is reproduced as conditions 1 through 4 of this certificate.
- 10. No water shall be diverted under this right unless right holder complies with all applicable state, city, county, and local laws, regulations, ordinances, permits, and license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building.
- 11. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.
- 12. The State Water Board reserves jurisdiction over this registration to change the season of diversion and rate of diversion based on later findings of the State Water Board concerning availability of water and the protection of beneficial uses. Any action to change the authorized season of diversion and rate of diversion will be taken only after notice to interested parties and opportunity for hearing.
- 13. Right holder shall grant, or secure authorization through right holder's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:
 - a. Entry upon property where water is being diverted, stored, or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this right;
 - b. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by the State Water Board;
 - c. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this right; and,
 - d. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by the State Water Board, or as otherwise authorized by the Water Code.
- 14. Diversion of water under this right is subject to prior rights. Right holder may be required to curtail diversion or release water stored during the most recent collection season should diversion under this right result in injury to holders of legal downstream senior rights. If a reservoir is involved, right holder may be required to bypass or release water through, over, or around the dam. If release of stored water would not effectively satisfy downstream prior storage rights, right holder may be required to otherwise compensate the holders of such rights for injury caused.
- 15. This right shall not be construed as conferring right of access to any lands or facilities not owned by right holder.

- 16. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.
- 17. If storage or diversion of water under this right is by means of a dam, right holder shall allow sufficient water at all times to pass through a fishway or, in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam; provided that, during a period of low flow in the stream, upon approval of the California Department of Fish and Wildlife, this requirement will be satisfied if sufficient water is passed through a culvert, waste gate, or over or around the dam to keep in good condition any fish that may be planted or exist below the dam; be planted or exist below the dam if it is impracticable or detrimental to pass the water through a fishway. In the case of a reservoir, this provision shall not require the passage or release of water at a greater rate than the unimpaired natural inflow into the reservoir. (Fish & G. Code, § 5937.)
- 18. The facilities for diversion under this right shall include satisfactory means of measuring and bypassing sufficient water to satisfy downstream prior rights and any requirements of the California Department of Fish and Wildlife and the State Water Board's Cannabis Policy.
- 19. This right does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code section 2050 et seq.) or the federal Endangered Species Act (16 U.S.C.A. section 1531 et seq.). If a "take" will result from any act authorized under this water right, the right holder shall obtain authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the state and Federal Endangered Species Acts for the project authorized under this right.
- 20. This right is subject to the submittal of an annual report of water use and satisfactory renewal, on forms to be furnished by the State Water Board, including payment of the then-current annual renewal fees. (Wat. Code, § 1228.5.)
- 21. This right shall be totally or partially forfeited for nonuse if the diversion is abandoned or if all or any part of the diversion is not beneficially used for a continuous period of five years.
- 22. This right is subject to enforcement, including but not limited to revocation, by the State Water Board if 1) the State Water Board finds that the right holder knowingly made any false statement, or knowingly concealed any material fact, in the right;
 2) the right is not renewed as required by the conditions of this certificate; or 3) the State Water Board finds that the right holder is in violation of the conditions of this right. (Wat. Code, § 1228.4 et seq.)
- 23. The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases, and streamflow in a standardized format if and when resources become available. Such real-time reporting will be required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this right.

STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS

This certificate was issued automatically as a result of the registrant self-certifying submittal of a water right registration filing in substantial compliance with Water Code §1228.3.

Dated: 01/24/2019 08:39:13

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Appendix F

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207



Water Resource Protection Plan (WRPP)

for

APN 210-191-015

Located at 41000 State Highway 36 Bridgeville, California

April, 2017



Prepared for: WD ID #1B16554CHUM PWA ID #180101050703-5175 41000 State Highway 36 Bridgeville, California

Prepared by: Jack Skeahan, Staff Geologist, jacks@pacificwatershed.com Courtney Sundberg, Staff Geologist, courtneys@pacificwatershed.com Pacific Watershed Associates Inc. P.O. Box 4433, Arcata, CA 95518 (707) 839-5130

TABLE OF CONTENTS

1.0	PROJECT SUMMARY	3
2.0	CERTIFICATIONS, LIMITATIONS AND CONDITIONS	3
3.0	INTRODUCTION	7
4.0	STANDARD CONDITIONS CHECKLIST FOR APN 210-191-015 AS OF 4/19/2016	7
4.1	STANDARD CONDITION #1. SITE MAINTENANCE, EROSION CONTROL AND DRAINAGE FEATURES	8
4.2	STANDARD CONDITION #2. STREAM CROSSING MAINTENANCE	10
4.3	STANDARD CONDITION #3. RIPARIAN AND WETLAND PROTECTION AND MANAGEMENT	12
4.4	STANDARD CONDITION #4. SPOILS MANAGEMENT	13
4.5	STANDARD CONDITION #5. WATER STORAGE AND USE	14
4.6	STANDARD CONDITION #6. IRRIGATION RUNOFF	17
4.7	STANDARD CONDITION #7. FERTILIZERS AND SOIL AMENDMENTS	18
4.8	STANDARD CONDITION #8. PESTICIDES/HERBICIDES	19
4.9	STANDARD CONDITION #9. PETROLEUM PRODUCTS AND OTHER CHEMICALS	20
4.1	0 STANDARD CONDITION #10. CULTIVATION-RELATED WASTES	22
4.1	1 Standard Condition #11. Refuse and Human Waste	23
4.1	2 STANDARD CONDITION #12. REMEDIATION/CLEANUP/RESTORATION	24
5.0 PI	RIORITIZED CORRECTIVE ACTIONS AND SCHEDULE TO REACH FULL COMPLIANCE	25
6.0 M	ONITORING AND INSPECTION PLAN	30
7.0 W	ATER USE PLAN	31
8.0 L	IST OF CHEMICALS	33
9.0 L	ANDOWNER/LESSEE CERTIFICATION/SIGNATURES	34

LIST OF FIGURES

Figure 1. General Location Map Figure 2. Site Map

LIST OF TABLES

Table 1. Features Needing Improvement or Action Items (Prioritized implementation schedule for corrective actions)

LIST OF APPENDICES

Appendix A. Best Management Practices (BMPs) – NCRWQCB
Appendix B. Monitoring Plan and Photo Logs
Appendix C. Photo Documentation of Monitoring Points
Appendix D1, D2, D3. Water Use Plan and Log Forms
Appendix E. Fertilizer and Amendment Use Plan and Log Forms
Appendix F. Pesticide, Herbicide, and Fungicide Use Plan and Log Forms
Appendix G. Hazardous Materials Storage Guidelines
Appendix H. PWA Typical Drawings

Water Resource Protection Plan (WRPP) APN 210-191-015 41400 State Highway 36 Bridgeville, California

1.0 PROJECT SUMMARY

This report documents Pacific Watershed Associate's (PWA)¹ Water Resource Protection Plan (WRPP) for APN 210-191-015 located at 41000 State Highway 36, Bridgeville, California as shown on Figure 1. This property is located approximately 8.0 miles east of Bridgeville, Humboldt County, CA, and hereinafter is referred to as the "Project Site." Based on either site conditions and/or total cultivation area, this Project Site falls within **Tier 2** of the North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023, Waiver of Waste Discharge and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects ("Order"). Properties that fall into Tier 2 of the Order are required to develop a WRPP. Therefore, as required, this WRPP has been developed for you based on site inspections made by PWA on your property. PWA's recommendations for any remediation or corrective actions are a result of water quality requirements under the Order, including Best Management Practices (BMPs) designed to meet those requirements (Appendix A). This WRPP documents the findings of a site visit conducted on April 19, 2016 by PWA Staff Geologists Courtney Sundberg and Jack Skeahan.

2.0 CERTIFICATIONS, LIMITATIONS AND CONDITIONS

This WRPP has been prepared by, and under the responsible charge of a California licensed geologist or certified licensed professional in erosion and sediment control at PWA and all information herein, including treatment recommendations, are based on observations, data and information collected by PWA staff.

This WRPP has been prepared to: 1) describe the general conditions of the property at the time of our inspection; 2) summarize the site conditions and how they relate to the NCRWQCB twelve (12) Standard Conditions of the Order; 3) provide recommendations for remediation and/or correction of existing or potential water quality threats or impacts; and 4) recommend work to be conducted on this property to meet the 12 Standard Conditions of the Order. The analysis and recommendations submitted in this WRPP are based on PWA's evaluation of the Project Site and your activities which fall under the Order.

In this WRPP we have described the current conditions of the property and any water resource and water quality risk factors we observed at the time of our site inspection. PWA is not responsible for problems or issues we did not observe on our site inspection, or for changes that have naturally occurred or been made to the property after our site review. The interpretations and conclusions presented in this WRPP are based on a reconnaissance level site investigation of inherently limited scope. Observations are qualitative, or semi-quantitative, and confined to surface expressions of limited extent and artificial exposures of subsurface materials. Interpretations of problematic

¹ PWA is an approved Third Party Program for the North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023, Waiver of Waste Discharge and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects ("Order").

geologic, geomorphic or hydrologic features such as unstable hillslopes, erosional processes and water quality threats are based on the information available at the time of our inspection and on the nature and distribution of existing features we observed on the property.

We have also included recommendations for remediation and/or correction that are based on these observations. The recommendations included in this WRPP are professional opinions derived in accordance with current standards of professional practice, and are valid as of the date of field inspection. No other warranty, expressed or implied, is made. Furthermore, to ensure proper applicability to existing conditions, the information and recommendations contained in this report shall be regularly reevaluated and it is the responsibility of the landowner and/or lessee operating under the Order to ensure that no recommendations are inappropriately applied to conditions on the property that have changed since the recommendations were developed.

If site conditions have changed for any reason, the site should be reevaluated and the WRPP revised and updated as required. These conditions include any changes in land management activities or property conditions that have occurred since our site visit (regardless of what they are, how they occurred or who performed them). Similarly, if the landowner/lessee uses portions of this property not identified or covered under the current WRPP, this WRPP will need to be updated with the new information, including possible additions or changes to the recommended remedial or corrective actions and BMPs (Appendix A).

If the property owner has enrolled their property under the Order, they are responsible for complying with all the requirements thereunder, regardless of who is operating or cultivating on that property. If the property is being formally or informally leased to an operator, and the lessee has enrolled under the Order, then the lessee is responsible for complying with the Order's requirements, including the WRPP and related recommendations and requirements. If the lease expires or the lessee is not otherwise available or does not respond to information requests by the NCRWQCB or PWA, then the landowner automatically assumes responsibility under the Order for the requirements therein and for all related penalties or actions brought by the NCRWQCB.

If at any time in the future the property is to transfer ownership, it is the responsibility of the current owner, or their representatives, to ensure that the information and recommendations contained herein are called to the attention of any future owner or agent for the property. Unless this WRPP is modified by the NCRWQCB, or another approved Third Party Program representative, the findings and recommendations contained in this WRPP shall be utilized as a tool while implementing the recommendations made within this WRPP. Necessary steps shall be taken to see that contractor(s) and subcontractor(s) carry out such recommendations in the field in accordance with the most current WRPP and BMP standards.

As a Third Party Program, PWA will be responsible for the data, interpretations and recommendations developed by PWA, but will not be responsible for the interpretation by others of that information, for implementation of corrective actions by others, or for additional or modified work arising out of those plans, interpretations and recommendations. PWA assumes no liability for the performance of other workers or suppliers while following PWA's recommendations in the WRPP, unless PWA is under contract to perform or oversee those activities. Additionally, PWA is not responsible for changes in applicable or appropriate standards beyond our control, such as those arising from changes in legislation or regulations, or the

broadening of knowledge which may invalidate or alter any of our findings or recommended actions.

Any WRPP plan review or construction management services that may be needed or identified in the recommendations sections of this report are separate tasks from the preparation of this WRPP, and are not a part of the contract under which this WRPP was prepared. If requested, additional PWA field inspections, surveys, WRPP revisions/updates, project layout, design, permitting, construction oversight/management, or other related services arising from tasks described and recommended in the WRPP may be performed under separate agreements requiring advance notice and contracting.

PWA's services consist of professional opinions and recommendations made in accordance with generally accepted principles and practices. No warranty, expressed or implied, or merchantability or fitness, is made or intended in connection with our work, by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings. If the client desires assurances against project failures, they shall obtain appropriate insurance through their own insurance broker or guarantor.

This WRPP is considered a living document and shall be updated at least annually, or sooner if conditions have changed or land management actions have been undertaken after our site inspection. As an official part of the Waiver Program, this WRPP (including all its text, appendices, maps and photos) shall remain onsite and available for NCRWQCB staff to inspect and review upon request.

Prepared by:

Coustney Sundberg

Courtney Sundberg Staff Geologist Pacific Watershed Associates, Inc. P.O. Box 4433, Arcata, California 95518



Bridgeville, Humboldt County, California.

P:\GIS\5175

3.0 INTRODUCTION

This Water Resource Protection Plan (WRPP) summarizes the results of Pacific Watershed Associate's (PWA) site visit and subsequent analysis and documentation of site conditions on APN 210-191-015 located at 41000 State Highway 36, Bridgeville, California, as shown on Figure 1 and hereinafter referred to as the "Project Site." The WRPP describes and addresses the required elements and compliance with the 12 Standard Conditions established by the North Coast Regional Water Quality Control Board's (NCRWQCB) Order No. 2015-0023 to protect water quality from cannabis cultivation and related activities (Order). PWA has identified certain areas where the Project Site does not fully meet all 12 of the Standard Conditions of the Order. Section 4, below, identifies and discusses each of the 12 Standard Conditions as related to your property with regard to compliance with the NCRWQCB's Order.

The WRPP contains the following required sections:

- 1. <u>Legible map (Figure 2) depicting the required site elements and features</u> associated with the 12 Standard Conditions of the Order;
- 2. <u>Description of current site conditions</u>, compliance with the 12 Standard Conditions, and prioritized remediation or corrective actions needed to bring the site into compliance with the requirements of the Order;
- 3. <u>A monitoring and inspection plan</u> to ensure BMPs used to protect and prevent impacts to water quality are being implemented as recommended by PWA (implementation monitoring), and that they are effective (effectiveness monitoring);
- 4. <u>A water use plan</u>, including water sources, water use and storage rights documentation, monthly water use documentation (quantity), and water conservation measures that are employed to prevent adverse impacts to water quality and water quantity in the watershed;
- 5. <u>List of fertilizers and chemicals stored and used onsite</u>, including a log of the frequency and quantity of these materials used.

4.0 STANDARD CONDITIONS CHECKLIST FOR APN 210-191-015 as of 4/19/2016

The NCRWQCB has developed a set of 12 Standard Conditions that shall be followed and implemented to protect and improve water quality as required under the NCRWQCB's Order. For a property to become compliant with the Order, all 12 Standard Conditions must be fully satisfied.

The following section details the specific requirements listed and described in the Order for each of the 12 Standard Conditions. Each Standard Condition has from 1 to 6 sub-requirements (*listed in italic type*), each of which must be satisfied to protect water quality and comply with the Order. The checklist developed by PWA for your property indicates: 1) whether the Standard Condition or Standard Condition sub-requirement was adequately met as of the date of PWA's field inspection, 2) PWA's observations and comments related to the Standard Condition or Standard Condition sub-requirement, 3) whether a relevant photo has been taken and included in the WRPP, and 4) recommended corrective or remedial actions that need additional work to meet the requirements of the Order.

In Section 5 of this WRPP, PWA has provided a summary prioritized list (Table 1) of the recommended treatments and actions to be implemented by you to meet the requirements of the Order. PWA will consult with you to review the WRPP document and findings, and to set a

preliminary schedule for implementation of the recommended measures for achieving compliance with the Order. Please note that some of the PWA recommended actions are based on regulatory requirements and deadlines, while others can be scheduled to fit the needs of both you and your property.

4.1 Standard Condition #1. Site Maintenance, Erosion Control and Drainage Features

a) Roads shall be maintained as appropriate (with adequate surfacing and drainage features) to avoid developing surface ruts, gullies, or surface erosion that results in sediment delivery to surface waters.

Meets condition? No

Observations/Comments: Roads on the Project Site have ruts and gullies due to road segments lacking appropriate drainage features such as adequate outsloping, rolling dips and ditch relief culverts (DRC). Access Road #7 has a section of road that concentrates runoff in the inboard ditch and on the road surface with sediment delivery to a Class III stream (Figure 2). A section of the Main Road near Greenhouse #1 concentrates runoff and delivers sediment to a Class III stream. Other roads on the Project Site exhibited minor surface erosion although sediment delivery to surface waters was not observed.

Photos: MP #1: Photo 1. MP #2: Photo 2.

<u>Corrective or remedial actions needed</u>: Access Road #7 requires the installation of a road drainage structure to disconnect surface runoff from the stream. Install a rolling dip on Access Road #7 approximately 75 feet to the right of Stream Crossing #3 (SC #3). A second rolling dip should be installed on Access Road #8 directly downslope of the rolling dip on Access Road #7. This rolling dip should be installed so as to convey the runoff collected by the rolling dip on Access Road #7 and disperse the flow onto the hillslope below where the potential for erosion and sediment delivery to surface waters does not exist.

Two rolling dips should be installed on the Main Road near Greenhouse #1. One rolling dip should be installed between Outhouse #2 and Storage Shed #2. The second rolling dip should be installed immediately east of the intersection of the Main Road and Access Road #8. See Figure 2 for proposed rolling dip locations.

The installation of these rolling dips is intended to disconnect concentrated road surface runoff that results in fine sediment delivery to surface waters. Ensure that the construction and outlet location of the rolling dips allows dispersal and infiltration of collected road runoff and fine sediment. Install additional rolling dips with adequate spacing intervals at any location where concentrated road runoff, rilling and/or gullying is observed. Typical drawings included in Appendix H will provide guidance for proper rolling dip construction.

b) Roads, driveways, trails, and other defined corridors for foot or vehicle traffic of any kind shall have adequate ditch relief drains or rolling dips and/or other measures to prevent or minimize erosion along the flow paths and at their respective outlets.

Meets condition? No

Observations: See 4.1a observations and comments, above.

<u>Photos</u>: See 4.1a Monitoring Points and photos, above. <u>Corrective or remedial actions needed</u>: See 4.1a corrective actions, above.

c) Roads and other features shall be maintained so that surface runoff drains away from potentially unstable slopes or earthen fills. Where road runoff cannot be drained away from an unstable feature, an engineered structure or system shall be installed to ensure that surface flows will not cause slope failure.

<u>Meets condition?</u> Yes <u>Observations/Comments</u>: Concentrated road surface runoff was not observed to drain toward any potentially unstable slopes or earthen fills. <u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

d) Roads, clearings, fill prisms, and terraced areas (cleared/developed areas with the potential for sediment erosion and transport) shall be maintained so that they are hydrologically disconnected, as feasible, from surface waters, including wetlands, ephemeral, intermittent and perennial streams.

Meets condition? No

Observations: The 175,000 gallon water bladder located on the Project Site has been placed within a slight depression with a secondary containment berm on the downslope edge. Although the secondary containment berm appeared stable at the time of the Project Site inspection, a drainage ditch had been installed on the northwest edge of the berm. This drainage ditch was installed to convey both spring and water bladder overflow. The construction of the ditch lacking any armor and the proximity of the ditch outlet to the headwaters of a Class III stream has resulted in sediment delivery to surface waters. Also see 4.1a observations and comments, above.

Photos: MP #1: Photo 1. MP #2: Photo 2. MP #3: Photo 3.

<u>Corrective or remedial actions needed</u>: Have the secondary containment berm inspected by a licensed engineer to determine its stability under fully containment conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. Bare soil areas should be mulched and seeded with an erosion control grass mix (preferably native species) to prevent surface erosion. This area should be monitored to ensure no additional sediment delivery is occurring. Also see 4.1a corrective actions, above. PWA recommends transitioning away from the use of water bladders towards rigid storage tanks and/or rainwater fed off-stream ponds over the next several years.

e) Ditch relief drains, rolling dip outlets, and road pad or terrace surfaces shall be maintained to promote infiltration/dispersal of outflows and have no apparent erosion or evidence of soil transport to receiving waters.

Meets condition? No

Observations/Comments: See 4.1a and 4.1d observations and comments, above. **Photos:** See 4.1a and 4.1d Monitoring Points and photos, above. **Corrective or remedial actions needed:** See 4.1a and 4.1d corrective actions, above.

f) Stockpiled construction materials are stored in a location and manner so as to prevent their transport to receiving waters.

Meets condition? Yes

Observations/Comments: No stockpiled construction materials were observed on the Project Site with delivery potential to receiving waters. **Photos:** No

Corrective or remedial actions needed: None

Standard Condition #1. - General comments and recommendations: Approximately 0.94 miles of road was inspected on the Project Site, comprised of a mid-slope main road and multiple access roads. All roads occupy a mid-watershed location and the main road and a majority of the access roads exhibit relatively minor surface erosion issues caused by a lack of road drainage structures to disperse surface runoff and infrequent maintenance.

4.2 Standard Condition #2. Stream Crossing Maintenance

a) Culverts and stream crossings shall be sized to pass the expected 100-year peak streamflow.

Meets condition? No

Observations/Comments: The three stream crossings on the Project Site have been constructed with culverts that are undersized to pass the expected 100-year peak streamflow (Figure 2). Based on drainage area calculations, all three stream crossings should be upgraded to 24-inch diameter culverts. Methods for determining culvert sizes to address the 100-year peak streamflow include the Rational Method, USGS Magnitude and Frequency Method and Flow Transference Method. All of the stream crossing upgrades will be constructed according to standards provided in the "Handbook for Forest, Ranch and Rural Roads," (Weaver, Weppner, and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver et al., 2006).

Photos: MP #4: Photo 4. MP #5: Photo 5. MP #6: Photo 6.

<u>Corrective or remedial actions needed</u>: Upgrade the stream crossings on the Project Site with culverts sized to pass the expected 100-year peak streamflow.

b) Culverts and stream crossings shall be designed and maintained to address debris associated with the expected 100-year peak streamflow.

Meets condition? No

Observations/Comments: The three stream crossings on the Project Site have been constructed with culverts that are undersized to address debris associated with the expected 100-year peak streamflow (Figure 2).

Photos: See 4.2a Monitoring Points and photos, above.

<u>Corrective or remedial actions needed</u>: Upgrade the stream crossings on the Project Site with culverts sized to address debris associated with the expected 100-year peak streamflow.

c) Culverts and stream crossings shall allow passage of all life stages of fish on fish-bearing or restorable streams, and allow passage of aquatic organisms on perennial or intermittent streams.

Meets condition? Yes

Observations/Comments: The three stream crossings on the Project Site have been installed on an ephemeral stream. **Photos:** No **Corrective or remedial actions needed:** None

d) Stream crossings shall be maintained so as to prevent or minimize erosion from exposed surfaces adjacent to, and in the channel and on the banks.

Meets condition? No

Observations/Comments: Erosion has been observed at all three stream crossing culvert outlets due to culverts being installed high in the road fill. It did not appear that adequate maintenance was being performed to prevent or minimize outlet erosion. **Photos:** See 4.2a Monitoring Points and photos, above.

<u>Corrective or remedial actions needed</u>: Upgrade the stream crossings on the Project Site with appropriately sized culverts and properly designed crossings. After upgrading of the stream crossings, monitor and perform adequate maintenance to prevent or minimize erosion following appropriate BMPs listed in Appendix A.

e) Culverts shall align with the stream grade and natural stream channel at the inlet and outlet where feasible.

Meets condition? No

Observations/Comments: The culverted stream crossings on the Project Site are not installed at grade but appear to be horizontally aligned with the natural stream channel. **Photos:** See 4.2a Monitoring Points and photos, above.

<u>Corrective or remedial actions needed</u>: Upgrade the stream crossings with culverts that are horizontally aligned with the natural stream channel and installed at the natural channel grade.

f) Stream crossings shall be maintained so as to prevent stream diversion in the event that the culvert/crossing is plugged, and critical dips shall be employed with all crossing installations where feasible.

Meets condition? No

Observations/Comments: Two of the three stream crossings on the Project Site (SC #1 and #2) have diversion potential down the right road approach. Stream Crossing #3 does not have diversion potential.

Photos: MP #4: No photo. MP #5: No photo.

Corrective or remedial actions needed: When the stream crossing culverts at SC #1 and #2 are upgraded install critical dips on the right hinge line of each crossing to prevent stream diversion in the event of a plugged culvert or exceptionally high flood flow. When any of the culverts on the Project Site are replaced, ensure that the design of the upgraded crossings does not create diversion potential.

Standard Condition #2. - General comments and recommendations: Obtain all necessary agreements and permits prior to commencing work in any watercourse or at any stream crossing. These may include, but not be limited to: California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement (LSAA) 1602 and Army Corps of Engineers (ACOE) 404 Permit.

4.3 Standard Condition #3. Riparian and Wetland Protection and Management

a) For Tier 1 Dischargers, cultivation areas or associated facilities shall not be located within 200 feet of surface waters. While 200 foot buffers are preferred for Tier 2 sites, at a minimum, cultivation areas and associated facilities shall not be located or occur within 100 feet of any Class 1 or 2 watercourse or within 50 feet of any Class 3 water course or wetlands.

Meets condition? No

Observations/Comments: Hoop house #5 (HH #5) is located within the 50-foot riparian setback required for a Class III stream (Figure 2). Hoop house #5 currently occupies part of an existing road bed and minimal riparian vegetation, other than grasses, exist in most of the surrounding area. Irrigation runoff from this cultivation area was not observed at the time of the Project Site inspection. Evidence of a springy cutbank upslope of HH #5 was observed to drain towards the Class III stream. Aside from nutrient mobilization resulting from overwatering or uncovered potting soil over the wet season, minimal impacts to water quality are expected. Appropriate BMPs can be implemented at this location to mitigate potential threats to surface waters from both the cultivation area and the springy cutbank and road bed. Outhouse #2 is approximately 50 feet away from a Class III stream. PWA did not observe any other impacts to riparian areas as part of cultivation activities on this parcel. **Photos:** MP #7: Photo 7. MP #9: Photo 9b.

Corrective or remedial actions needed: PWA recommends either (1) procure a variance from the NCRWQCB to allow for HH #5 to be within the 50-foot setback requirement, or (2) relocate HH #5 outside of the 50-foot riparian buffer zone of the Class III stream. It is PWA's opinion, based on the landscape management, watering techniques, and small scale at this location that the cultivation area mentioned above does not currently threaten water quality. Appropriate BMPs should be implemented to mitigate any potential threats to surface waters at this location regardless of whether relocation activities occur. Straw wattles, straw bale barriers or silt fences should be placed around the downslope perimeter of HH #5 to prevent nutrient mobilization and surface runoff either during the winter wet season or during the cultivation period. Accumulated winter runoff should be released away from the stream and onto a protected slope so erosion does deliver sediment into the stream. Straw mulch and native seed should be applied to any bare soil areas closest to the Class III stream and where the potential for sediment delivery exists. Outhouse #2 is located approximately 50 feet away from a Class III stream and although not directly impacting the riparian buffer zone, PWA recommends immediately discontinuing use and fully decommissioning the outhouse to prevent potential impacts to water quality. Also see 4.11a corrective or remedial actions, below, related to the outhouse and required wastewater treatment facilities.

b) Buffers shall be maintained at natural slope with native vegetation.

Meets condition? Yes

Observations/Comments: Hoop house #5 occupies a previously constructed road bed and cultivation activities at this location required no additional grading of the native hillslope by the client and have minimally impacted native vegetation. **Photos:** MP #7: Photo 7.

<u>Corrective or remedial actions needed</u>: If relocation of HH #5 is required, PWA recommends removing all cultivation-related materials from the disturbed area, and restoring the site using seeding and mulching to prevent erosion.

c) Buffers shall be of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams, drainage ditches, or other conveyances.

<u>Meets condition?</u> No <u>Observations/Comments:</u> See 4.3a and 4.3b comments, above. <u>Photos</u>: MP #7: Photo 7. <u>Corrective or remedial actions needed</u>: See 4.3a and 4.3b corrective actions, above.

d) Riparian and wetland areas shall be protected in a manner that maintains their essential functions, including temperature and microclimate control, filtration of sediment and other pollutants, nutrient cycling, woody debris recruitment, groundwater recharge, streambank stabilization, and flood peak attenuation and flood water storage.

<u>Meets condition?</u> No <u>Observations/Comments:</u> See 4.3a and 4.3b comments, above. <u>Photos</u>: MP #7: Photo 7. <u>Corrective or remedial actions needed</u>: See 4.3a and 4.3b corrective actions, above.

4.4 Standard Condition #4. Spoils Management

a) Spoils shall not be stored or placed in or where they can enter any surface water.

<u>Meets condition</u>? Yes <u>Observations/Comments</u>: Potting soil on the Project Site is amended and reused and no waste spoil materials were observed with the potential to impact surface waters. <u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

<u>Corrective or remediat actions needed</u>. None

b) Spoils shall be adequately contained or stabilized to prevent sediment delivery to surface waters.

<u>Meets condition</u>? Yes <u>Observations/Comments</u>: See 4.4a comment, above. <u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

c) Spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.

Meets condition? Yes

Observations/Comments: No spoils generated through development or maintenance of roads with the potential for delivery to surface waters were observed on the Project Site.

<u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

4.5 Standard Condition #5. Water Storage and Use

a) Size and scope of an operation shall be such that the amount of water used shall not adversely impact water quality and/or beneficial uses, including and in consideration with other water use operations, instream flow requirements and/or needs in the watershed, defined at the scale of a HUC 12 watershed or at a smaller hydrologic watershed as determined necessary by the Regional Water Board Executive Officer.

Meets condition? Unknown

Observations/Comments: The client diverts surface water from one point of diversion (POD) located on an isolated spring (POD, Figure 2). Based on the 5,056 ft² cultivation area and the amount of water storage currently available (178,500 gallons) in water tanks and one water bladder, it appears that water storage generated during the rainy season may be sufficient for the landowner to forbear (not divert) during the dry season. However due to a lack of water use data it is not definitively known if the operation impacts downstream beneficial uses and water quality. A Water Budget needs to be developed and refined by water monitoring to determine if additional water storage is needed.

Photos: No

<u>Corrective or remedial actions needed</u>: A Water Budget should be developed to determine if sufficient water storage volumes are currently available on the Project Site for cultivation and other uses during low flow periods from May 15th through October 31st. A Water Monitoring Plan will also need to be implemented (see comments below) in which surface water diversion, storage and use for irrigation and other purposes is closely monitored and recorded. This water data will help you refine the water budget and the data will be reported annually to the NCRWQCB no later than March 31st for the preceding calendar year. We recommend you transition away from the use of the large water bladder and replace that water storage with additional rigid water tanks and/or an off-stream, rainwater-fed pond on the Project Site.

b) Water conservation measures shall be implemented. Examples include use of rainwater catchment systems or watering plants with a drip irrigation system rather than with a hose or sprinkler system.

Meets condition? No

Observations/Comments: The water bladder is not equipped with a float shut off valve or similar device to prevent overflow once maximum capacity is obtained. Controlled hand watering is used on the Project Site for water conservation. **Photos:** MP #3: Photo 3.

<u>Corrective or remedial actions needed</u>: Install a float shut off valve or similar device on the water bladder, and any other water storage vessels that do not have automatic shut off valves, to prevent overflow and improve water conservation. Additional water conservation measures should continue to be investigated and employed to minimize surface water diversion and use. These include timed or volume-limited drip irrigation systems, irrigation scheduling (watering during the early morning and early evening), incorporating water holding amendments and native soil during the initial soil preparation at the start of the season, surface mulching or planting in beds to minimize evaporation, and planting plants in the ground instead of above ground pots. Rainwater harvesting during the wet season should be evaluated and employed to limit or completely eliminate surface water diversions during the dry season.

c) For Tier 2 Dischargers, if possible, develop off-stream storage facilities to minimize surface water diversion during low flow periods.

Meets condition? Yes

Observations/Comments: Based on the total size of the cultivation area and existing off-stream water storage, it appears that adequate storage may exist onsite to minimize or eliminate surface water diversions during the dry season. The need for additional water storage will be determined after the Water Budget has been developed and refined. PWA recommends you discontinue the use of the large water bladder. They are prone to rupture and the large release of stored water can easily cause hillslope and stream channel impacts downslope, especially since this bladder is located just upslope from the head of a Class III watercourse.

Photos: No

<u>Corrective or remedial actions needed</u>: Develop a Water Budget to verify that adequate off-stream storage exists on the Project Site to eliminate surface water diversion during the dry season. PWA recommends discontinuing the use of the large water bladder and replacing that storage with rigid water tanks and/or an off-stream, rainwater-fed pond.

d) Water is applied using no more than agronomic rates.

Meets condition? Unknown

Observations/Comments: According to the cultivator, water is applied sparingly due to water scarcity, though application was not observed due to the early inspection date. **Photos:** No

<u>Corrective or remedial actions needed</u>: To verify conformance with this Standard Condition, start measuring and recording your water usage using flow meters on a per plant basis, based on type and size of plant pot, full term versus short season (light deprivation) plant, and type of irrigation. Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided. This data will help you refine a Water Budget for your operation and determine agronomic rates of watering.

e) Diversion and/or storage of water from a stream should be conducted pursuant to a valid water right and in compliance with reporting requirements under Water Code section 5101.

Meets condition? Yes

Observations/Comments: The water used for irrigation on the Project Site is sourced from an isolated, non-jurisdictional spring (POD #1, Figure 2). A Small Domestic Use (SDU) registration and an Initial Statement of Diversion and Use (ISDU) application for the POD is not required to be submitted to the State Water Board for non-jurisdictional water sources.

Photos: No

Corrective or remedial actions needed: None

f) Water storage features, such as ponds, tanks, and other vessels shall be selected, sited, designed, and maintained so as to insure integrity and to prevent release into waters of the state in the event of a containment failure.

Meets condition? No

Observations/Comments: A large water bladder has been placed within a slight depression with a secondary containment berm on the downslope edge. The secondary containment berm appeared stable at the time of the Project Site inspection however a drainage ditch has been installed on the northwest edge. This ditch is meant to drain spring flow and any overflow from the water bladder but discharges directly upslope of the headwaters of a Class III stream. In the event of a water bladder containment failure the existence of the drainage ditch will allow discharge into waters of the state and significant erosion and sediment delivery. The water storage tanks located on this Project Site are sited on stable slopes far from any streams making it unlikely that water storage structure failures could result in delivery of runoff and eroded sediment to the stream network.

Photos: MP #3: Photo 3.

<u>Corrective or remedial actions needed</u>: PWA recommends having the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. Obtain all necessary permits prior to commencement of construction activities if estimated fill volumes will exceed 50 cubic yards. Retroactive permitting may be required by Humboldt County for the water bladder pad, containment berm, and any other graded areas. Monitor the secondary containment berm and drainage ditch for signs of instability or potential future erosion and implement appropriate BMPs to mitigate sediment delivery where needed.

Standard Condition #5 - General comments and recommendations: Currently, the only source of water for irrigation use is located on a spring (POD #1, Figure 2). There is 178,500 gallons of water storage capacity in hard plastic tanks and a large water bladder. At this time it appears that the water storage capacity contained within this Project Site may satisfy the irrigation demand that would be expected from the cultivation area (~5,056 ft²) during the dry season (May 15th through October 31st). A Water Budget will be developed and refined by water monitoring to verify that existing water storage is adequate for the operation. If water storage is not sufficient for current operations and needs, then additional storage will need to be added so the diverter can completely forbear (not divert) during the dry season. In this way, as per the Order, it can then be assumed that water use will not impact downstream water quality or beneficial uses. The stability of the secondary containment berm is not known at this time and PWA recommends having the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. The drainage ditch should be monitored and appropriate BMPs implemented to ensure no future erosion is occurring.

A Lake and Streambed Alteration Agreement (LSAA) will need to be obtained from CDFW for the surface water diversion and prior to any stream crossing upgrade work.

Lake and Streambed Alteration Agreement (LSAA). https://www.wildlife.ca.gov/Conservation/LSA

PWA highly recommends, and state agencies may require, that you install flow meters on your surface water diversions, water tanks, and/or on your distribution lines, to accurately document the timing and volume of your water diversion and use.

Under the Order, you are l need to document the amount of water that is diverted from the spring, stored in tanks and the water bladder, and used for irrigation through time. PWA has created a simple log sheet to help you monitor your water usage (see Appendix D).

4.6 Standard Condition #6. Irrigation Runoff

a) Implementing water conservation measures, irrigating at agronomic rates, applying fertilizers at agronomic rates and applying chemicals according to the label specifications, and maintaining stable soil and growth media should serve to minimize the amount of runoff and the concentration of chemicals in that water. In the event that irrigation runoff occurs, measures shall be in place to treat/control/contain the runoff to minimize the pollutant loads in the discharge. Irrigation runoff shall be managed so that any entrained constituents, such as fertilizers, fine sediment and suspended organic particles, and other oxygen consuming materials are not discharged to nearby watercourses. Management practices include, but are not limited to, modifications to irrigation systems that reuse tailwater by constructing off-stream retention basins, and active (pumping) and or passive (gravity) tailwater recapture/redistribution systems. Care shall be taken to ensure that irrigation tailwater is not discharged towards or impounded over unstable features or landslides.

Meets condition? Yes

Observations/Comments: No evidence of irrigation runoff exhibiting active delivery to nearby watercourses was observed on the Project Site. Hoop house #5 is located within the riparian buffer zone of a Class III stream and has the potential to deliver nutrients to the stream in the event of overwatering. PWA recommends implementing BMPs described in Standard Condition 4.3a, above, to ensure nutrient mobilization and delivery do not occur in the event of excessive irrigation or runoff during the wet season. Because irrigation is limited to precise hand watering, there is a high degree of control. Winter (off-season) runoff could occur. With the exception of the area mentioned above at HH #5, the remaining cultivation areas are located greater than 100 feet away from the nearest stream. Any runoff that theoretically may occur at these locations could not travel far due to the low gradient topography and adequate vegetative buffer.

Photos: MP #7: Photo 7.

<u>Corrective or remedial actions needed</u>: Implement appropriate BMPs at HH #5 to prevent nutrient delivery to surface waters in the event of excessive irrigation or runoff during the wet season. See also Corrective Actions 4.3a, and 4.4a, above.

<u>Standard Condition #6 - General comments and recommendations</u>: According to the Order, irrigation and fertilization shall occur at agronomic rates and chemicals shall be

applied according to the label instructions and specifications. Agronomic rates are those rates of application of water, fertilizers and other amendments that are sufficient for utilization by the crop being grown, but not at a rate that would result in surface runoff or infiltration below the root zone of the crop being grown.

In the event that irrigation runoff occurs or could occur, you shall ensure that contaminated runoff does not enter nearby watercourses. This can be accomplished by constructing or designing containment measures, including sediment basins, berms, infiltration ditches and/or other Best Management Practices (BMPs), as needed, to contain and control surface runoff (see Appendix A).

4.7 Standard Condition #7. Fertilizers and Soil Amendments

a) Fertilizers, potting soils, compost, and other soils and soil amendments shall be stored in locations and in a manner in which they cannot enter or be transported into surface waters and such that nutrients or other pollutants cannot be leached into groundwater.

Meets condition? No

Observations/Comments: Potting soil is stored at multiple locations on the Project Site with the potential for transport to surface waters or leaching into groundwater if left uncovered over the wet season. The majority of fertilizers and amendments are stored inside storage sheds or tarped during the wet season.

Photos: MP #7: Photo 7. MP #8: Photo 8a and 8b.

<u>Corrective or remedial actions needed</u>: Potting soil and soil amendments stored at Cultivation Area #1 (CA #1), HH #4 and #5, and at any other locations on the Project Site, should be tarped or have cover crops planted to prevent nutrient mobilization over the wet season. Install straw wattles or implement other appropriate BMPs where necessary to contain any mobilized nutrients at the locations listed above. Any fertilizers, potting soils and soil amendments on the Project Site shall continue to be stored under a roof or tarped during the wet season and equipped with adequate secondary containment where applicable.

b) Fertilizers and soil amendments shall be applied and used per packaging instructions and/or at proper agronomic rates.

Meets condition? Unknown

Observations/Comments: Based on verbal communication with the cultivator, the recommended application rates are being followed. **Photos:** No

Corrective or remedial actions needed: To confirm compliance with this Standard Condition, you need to keep detailed records of the timing and volume of any fertilizers and/or other soil amendments you use in your operations. They can be recorded on log sheets such as those provided in Appendix E or by using another accurate record keeping method. Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided.

c) Cultivation areas shall be maintained so as to prevent nutrients from leaving the site during the growing season and post-harvest.

Meets condition? No

Observations/Comments: See 4.7a observations and comments, above. **Photos:** See 4.7a Monitoring Points and photos, above.

Corrective or remedial actions needed: To prevent nutrient mobilization, you should: 1) keep new or spent potting soils and amendments inside or under a roof or 2) tarp any soils or amendments that are kept outside over the wet season to prevent mobilization or leaching of nutrients. You should also tarp or plant cover crops in spent pots, planting holes and potting soil piles to enrich soil and lock up nutrients over the wet season. Also see 4.7a corrective actions, above.

Standard Condition #7 - General comments and recommendations: Most of the

fertilizers and soil amendments on the Project Site were observed to be either stored indoors or covered when stored outdoors. Potting soil in above ground pots and piled on the ground surface was observed to have potential for mobilization or leaching of nutrients if not covered over the wet season. Fertilizers and amendments were applied according to packaging instructions, and usage is diminished or eliminated toward the end of the growing season.

Under the Order, you are required to keep track of the timing and volume of fertilizers and other soil amendments that are applied. This can be done using a simple log form we have provided in Appendix E.

Plant cover crops in spent pots and holes to enrich soil and lock up nutrients. If you plan to burn the plant stalks, you'll first need to obtain burn permits from CAL FIRE and the North Coast Unified Air Quality Management District (or relevant jurisdiction for your area). You can then incorporate the ash into the pots or planting holes prior to planting the cover crop to add minerals and recycle the ash.

Do not store fertilizers and/or soil amendments with petroleum products. See guidelines for hazardous material storage in Appendix G.

4.8 Standard Condition #8. Pesticides/Herbicides

a) At the present time, there are no pesticides or herbicides registered specifically for use directly on cannabis and the use of pesticides on cannabis plants has not been reviewed for safety, human health effects, or environmental impacts. Under California law, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is exempt from residue tolerance requirements and either registered and labeled for a broad enough use to include use on cannabis or exempt from registration requirements as a minimum risk pesticide under FIFRA section 25(b) and California Code of Regulations, title 3, section 6147. For the purpose of compliance with conditions of this Order, any uses of pesticide products shall be consistent with product labelling and any products on the site shall be placed, used, and stored in a manner that ensures that they will not enter or be released into surface or ground waters.

Meets condition? Unknown

Observations/Comments: Pesticides and/or herbicides were not observed on the Project Site at the time of our inspection.

Photos: No

<u>Corrective or remedial actions needed</u>: All pesticides, herbicides and related materials (e.g., fungicides) must be used and applied consistent with product labeling. When present, these chemicals should be stored within enclosed buildings in such a way they cannot enter or be released into surface or ground waters.

To verify conformance with this Standard Condition, you are required to keep track of the type, timing and volume of pesticides, herbicides and related chemicals that are applied your operations. This can be done using a simple log form, such as the one included in Appendix F.

Additionally, for any pesticide use you must comply with any <u>Pesticide Registration</u> <u>Requirements</u>. See Appendix E2 included in the NCRWQCB Order, or on their web site at:

http://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/1 50728 Appendix E2 DPR MJ%20Pesticide%20Handout.pdf

Standard Condition #8 - General comments and recommendations: For the health of the environment and your workers, you are encouraged to utilize organic or biologic controls, rather than highly toxic petro-chemicals, to prevent pest and mildew problems. Several safe alternatives are available. Please ask about our cultivators BMP handbook.

All pesticides, herbicides and related materials (e.g., fungicides) must be used and applied consistent with product labeling. When present, these chemicals should be stored within enclosed buildings in such a way they cannot enter or be released into surface or ground waters.

Do not store pesticides/herbicides with petroleum products. See guidelines for hazardous material storage in Appendix G.

4.9 Standard Condition #9. Petroleum Products and other Chemicals

a) Petroleum products and other liquid chemicals, including but not limited to diesel, biodiesel, gasoline, and oils shall be stored so as to prevent their spillage, discharge, or seepage into receiving waters. Storage tanks and containers must be of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as pressure and temperature.

Meets condition? No

Observations/Comments: There are multiple small fuel cans and generators on the Project Site that are stored in sheds but lack adequate secondary containment. Note that when petroleum products are onsite they will need to be stored under cover, off the ground and in a secondary containment basin (tote, tub, impervious concrete floor, etc.) capable of containing the entire stored volume.

<u>Photos</u>: No

<u>Corrective or remedial actions needed</u>: Place all small fuel cans and generators in adequate secondary containment basins and store in a safe and secure location out of the elements protected from rainfall and runoff.

b) Above ground storage tanks and containers shall be provided with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation.

<u>Meets condition</u>? No <u>Observations/Comments</u>: No above ground storage tanks aside from the items mentioned in Standard Condition 4.9a, above, were observed on the Project Site, <u>Photos</u>: No

<u>Corrective or remedial actions needed</u>: See 4.9a, above, for containment requirements.

c) Dischargers shall ensure that diked areas are sufficiently impervious to contain discharged chemicals.

<u>Meets condition</u>? Not applicable <u>Observations/Comments</u>: No diked areas were observed on the Project Site. <u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

d) Discharger(s) shall implement spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

Meets condition? No

Observations/Comments: No spill prevention cleanup kit is kept onsite to help clean up small spills.

Photos: No

Corrective or remedial actions needed: Obtain one or more spill prevention cleanup kits and keep readily available to clean up small spills. Spill kits should be located where fuel is stored and refueling occurs.

e) Underground storage tanks 110 gallons and larger shall be registered with the appropriate County Health Department and comply with State and local requirements for leak detection, spill overflow, corrosion protection, and insurance coverage.

Meets condition? Not applicable

Observations/Comments: No underground storage tanks were observed on the Project Site.

<u>Photos</u>: No <u>Corrective or remedial actions needed</u>: None

<u>Standard Condition #9 - General comments and recommendations</u>: Place all fuel cans, generators, diesel tanks, gasoline powered garden equipment and any other items containing petroleum products under cover, off the ground and in a secondary containment basin (tote, tub, tray, etc.) capable of storing the contained volume.
The State of California requires an owner or operator of a facility to complete and submit a Hazardous Material Business Plan (HMBP) if the facility handles a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to or greater than: 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet for compressed gas (propane) used for the cultivation operations. If at any time during the year your operations exceed any one of these quantities, you need to prepare and file a HMBP for your operation. Information regarding HMBPs can be found at http://ca-humboldtcounty.civicplus.com/DocumentCenter/Home/View/3224.

Additionally, while it is not explicitly stated in the Order, please note that the Humboldt County Division of Environmental Health (HCDEH) also requires that anyone that has over 55 gallons or more of any petroleum liquid at any time of the year, including fuels and waste oil, develop a HMBP.

Do not store petroleum products and/or chemicals with fertilizers, soil amendments and/or pesticides/herbicides. See guidelines for hazardous material storage in Appendix G.

4.10 Standard Condition #10. Cultivation-Related Wastes

a) Cultivation-related wastes including, but not limited to, empty soil/soil amendment/ fertilizer/pesticide bags and containers, empty plant pots or containers, dead or harvested plant waste, and spent growth medium shall, for as long as they remain on the site, be stored at locations where they will not enter or be blown into surface waters, and in a manner that ensures that residues and pollutants within those materials do not migrate or leach into surface water or groundwater.

Meets condition? Yes

Observations/Comments: Plant waste from cultivation activities is composted or burned on the Project Site.

Photos: No

<u>Corrective or remedial actions needed</u>: Properly store all future cultivation-related waste material located on the Project Site and dispose of appropriately by either burning, shredding, composting or taking material to an appropriate waste disposal facility.

Standard Condition #10 - General comments and recommendations: We encourage you to chip or shred your plant stalks and compost them after harvest. If you burn the stalks, you must first obtain berm permits from CAL FIRE and the North Coast Unified Air Quality Management District (or other relevant jurisdiction for your area). You can then recycle the ash and add minerals to the soil by mixing the ash into your spent pots and plant holes prior to planting a cover crop at the end of the season. Any additional cultivation-related waste can be easily contained by keeping soils and garbage greater than 200 feet from drainage areas and on gentle slopes, tarping or otherwise covering soil piles, and/or by placing straw waddles or other containment structures around the perimeter of spoil piles.

4.11 Standard Condition #11. Refuse and Human Waste

a) Disposal of domestic sewage shall meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy, and shall not represent a threat to surface water or groundwater.

Meets condition? No

Observations/Comments: There are two unpermitted outhouses on the Project Site, one of which (Outhouse #2) is within the 50-foot setback of a Class III watercourse (Figure 2). The location of this outhouse does not meet applicable standards required by HCDEH.

Photos: MP #9: Photo 9a and 9b.

Corrective or remedial actions needed: PWA recommends conducting wet weather testing and onsite investigations to site, design and install a permitted Onsite Wastewater Treatment System (OWTS) for the Project Site. The system must be designed to serve the number of residents and workers that will be present on the Project Site when your cultivation-related operations are at their peak. PWA recommends using portable toilets on the Project Site until the permitted OWTS can be installed, that future use of the outhouses is discontinued and that both outhouses are fully decommissioned by filling in the pit and removing toilet infrastructure.

b) Refuse and garbage shall be stored in a location and manner that prevents its discharge to receiving waters and prevents any leachate or contact water from entering or percolating to receiving waters.

Meets condition? Yes

Observations/Comments: Garbage and refuse was observed to be stored properly and securely at the time of the Project Site inspection.

Photos: No

<u>Corrective or remedial actions needed</u>: Store all garbage and refuse in lidded cans at a safe and secure location where the threat to waters of the state is eliminated.

c) Garbage and refuse shall be disposed of at an appropriate waste disposal location.

Meets condition? Yes

Observations/Comments: According to the client the garbage and refuse generated onsite is disposed of at an appropriate waste disposal location. **Photos:** No

Corrective or remedial actions needed: PWA recommends that the client continue to dispose of existing garbage and refuse in a timely manner and at an approved waste disposal facility.

Standard Condition #11 - General comments and recommendations: At the current time there is no permitted OWTS on the Project Site. Two outhouses are in use and should be replaced with portable toilets until a permitted OWTS is installed. Conduct wet weather testing and site investigations to site, design and install a permitted system. Fully decommission the outhouse by filling in the pit and removing toilet infrastructure. Continue to store garbage and refuse in lidded cans at a safe and secure location and dispose of in a timely manner at an approved waste disposal facility.

4.12 Standard Condition #12. Remediation/Cleanup/Restoration

a) Remediation/cleanup/restoration activities may include, but are not limited to, removal of fill from watercourses, stream restoration, riparian vegetation planting and maintenance, soil stabilization, erosion control, upgrading stream crossings, road outsloping and rolling dip installation where safe and suitable, installing ditch relief culverts and overside drains, removing berms, stabilizing unstable areas, reshaping cutbanks, and rocking native-surfaced roads. Restoration and cleanup conditions and provisions generally apply to Tier 3 sites, however owners/operators of Tier 1 or 2 sites may identify or propose water resource improvement or enhancement projects such as stream restoration or riparian planting with native vegetation and, for such projects, these conditions apply similarly.

Appendix A accompanying the NCRWQCB Order, (and Appendix A in your WRPP), includes environmental protection and mitigation measures that apply to cleanup activities such as: temporal limitations on construction; limitations on earthmoving and construction equipment; guidelines for removal of plants and revegetation; conditions for erosion control, limitations on work in streams, riparian and wetland areas; and other measures.

These protection and mitigation measures have been developed to prevent or reduce the environmental impacts and represent minimum, enforceable standards by which cleanup activities shall be conducted under this Order.

<u>Meets condition</u>? Yes <u>Observations/Comments</u>: See general comments below. <u>Photos</u>: No Corrective or remedial actions needed: None

Standard Condition #12 - General comments and recommendations: It is PWA's opinion that the Project Site is currently compliant with this condition. All needed corrective actions are addressed in Standard Conditions 1 through 11.

WRPP - APN 210-191-015 PWA ID #180101050703-5175

5.0 PRIORITIZED CORRECTIVE ACTIONS AND SCHEDULE TO REACH FULL COMPLIANCE

requirements. recommendations above for a more complete description of the problems and the needed corrective actions and monitoring The following check list should be followed to become fully compliant with the Order. Please see the detailed comments and

Table 1. Featu	ires Nee	ding Impro	vement or	Action Items (Prioritized implementation schedu	le for corrective	actions)	
Standard Cone Requiring Ac	dition tion	Treatment Priority	Schedule	Summary of Corrective Actions/Recommendations (see more detailed listing of corrective actions in Section 4, above)	Monitoring Point and Photo #	Estimated Cost	Date Completed
1 – Site Maintenance, Erosion Control	1a, b, d, e	Moderate	October 31, 2020	 Install rolling dip(s) on Access Road #7 approximately 75 feet to the right of Stream Crossing #3 (SC #3). Install a second rolling dip on Access Road #8 directly downslope of the rolling dip on Access Road #7 to convey and disperse road surface runoff onto the hillslope below and to disconnect concentrated surface runoff and sediment delivery to streams. Install 2 rolling dips on the Main Road near Greenhouse #1; one between Outhouse #2 and Storage Shed #2 and the second immediately east of the intersection of the Main Road and Access Road #8. See Figure 2 for proposed rolling dip locations. Install additional rolling dips with adequate spacing intervals at any location where concentrated road runoff, rilling and/or gullying is observed. Typical drawings included in Appendix H will provide guidance for proper rolling dip construction. 	MP #1, Photo 1 MP #2, Photo 2		
and Drainage Features	ld	High	October 31, 2020	 Have the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. Bare soil areas should be mulched and seeded with native erosion control vegetation (grass) to prevent surface erosion. This area should be monitored to ensure no additional sediment delivery is occurring. Also see 4.1a corrective actions, above. PWA recommends transitioning away from the use of water bladders towards rigid storage tanks and/or rainwater-fed off-stream ponds. 	MP #1, Photo 1 MP #2, Photo 2 MP #3, Photo 3		
2 – Stream Crossing Maintenance	2a, b, e, f	High	October 31, 2020	Upgrade the stream crossings on the Project Site with culverts sized to pass the expected 100-year peak streamflow, including debris in transport, and with culverts that are horizontally and vertically aligned with the natural stream channel. Based on drainage area calculations, all three stream crossings should be	MP #4, Photo 4 MP #5, Photo 5 MP #6, Photo 6		

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WRPP - APN 210-191-015 PWA ID #180101050703-5175

May 3, 2017 Page 27

Table 1. Features No	eeding Impro	vement or	Action Items (Prioritized implementation schedu	le for corrective	actions)	
Standard Condition Requiring Action	Treatment Priority	Schedule	Summary of Corrective Actions/Recommendations (see more detailed listing of corrective actions in Section 4, above)	Monitoring Point and Photo #	Estimated Cost	Date Completed
			- Under the Order, you are required to monitor and record the timing and volume of surface water diversion, water storage and water use using the log sheets provided in Appendix D.			
Sb	High	June 1, 2017	Install a float shut off valve or similar device on the water bladder, and any other water storage tanks, to prevent overflow and improve water conservation. - Install flow meters on your surface water diversions, water tanks, and on your distribution lines to accurately document the timing and volume of your water diversion and use.	MP #3, Photo 3		
S	Moderate	April 1, 2017 and then continuing	 Increase the use of water saving strategies, such as volume- limited drip irrigation systems, irrigation scheduling (watering during the early morning and early evening), incorporating water holding amendments and native soil during soil preparation, surface mulching or planting in beds to minimize evaporation, and planting plants in the ground instead of above ground pots. Rainwater harvesting during the wet season should be evaluated and employed to limit or completely eliminate surface water diversions during the dry season. 	I		
5c	Moderate	October 31, 2020	PWA recommends discontinuing the use of the large water bladder and replacing that storage with rigid water tanks and/or an off-stream, rainwater-fed pond sufficient for your dry season water needs.	1		
5d	Moderate	May 1, 2017 and then continuing	To verify conformance with this Standard Condition, start measuring and recording your average water usage on a per plant basis, based on type and size of plant pot, full term versus short season (light deprivation) plant, and type of irrigation, in order to develop and refine a Water Budget for your operation. - Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided.	1		
Sf	High	April 1, 2018 or sooner	 You should have the secondary containment berm inspected by a licensed engineer to determine its stability under peak storage (containment) conditions and to prescribe recommendations for correctly blocking off the drainage ditch, designing internal wet season drainage, and any other needed treatments. Obtain all necessary permits prior to commencement of construction activities if estimated fill volumes will exceed 50 cubic yards. Retroactive permitting may be required by Humboldt County for the water bladder pad, containment berm, and any other graded areas. 	MP #3, Photo 3		

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Table 1. Featu	res Nee	ding Impro	vement or	Action Items (Prioritized implementation schedu	le for corrective	actions)	
Standard Conc Requiring Ac	lition tion	Treatment Priority	Schedule	Summary of Corrective Actions/Recommendations (see more detailed listing of corrective actions in Section 4, above)	Monitoring Point and Photo #	Estimated Cost	Date Completed
				- Monitor the secondary containment berm and drainage ditch for signs of instability or potential future erosion and implement appropriate BMPs to mitigate sediment delivery where needed.			
	5	High	November 1, 2017	Obtain a Lake and Streambed Alteration Agreement (LSAA) from CDFW for the surface water diversion.	1		
6 – Irrigation Runoff	6	High	October 31, 2017	Implement appropriate erosion control and containment BMPs at HH #5 to prevent nutrient delivery to surface waters in the event of excessive irrigation or runoff during the wet season. See Corrective Actions 3a and 4a, above.	MP #7, Photo 7		
	7a	High	November 1, 2017 and then annually by Nov 1	 Potting soil and soil amendments stored at CA #1, HH #4 and #5, and at any other locations on the Project Site, should be tarped or have cover crops planted to prevent nutrient mobilization over the wet season. Install straw wattles or implement other appropriate BMPs where necessary to contain any mobilized nutrients at the locations listed above. 	MP #7, Photo 7 MP #8, Photo 8a, 8b		
7 - Fertilizer and Amendment Use	7ь	Moderate	April 1, 2017 and then continuing	 Keep detailed records of the type, timing and volume of fertilizers and/or other soil amendments you use in your operations on log sheets provided in Appendix E. Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided. 	ł		
	7c	Moderate	November 1, 2017 and then annually by Nov 1	 To prevent nutrient mobilization, you should: 1) keep new or spent potting soils and amendments inside or under a roof or 2) tarp any soils or amendments that are kept outside over the wet season to prevent mobilization or leaching of nutrients. You should also tarp or plant cover crops in spent pots, planting holes and potting soil piles lock up nutrients over the wet season. Also see 4.7a corrective actions, above. 	MP #7, Photo 7 MP #8, Photo 8a, 8b		
8 – Pesticides and Herbicides	×	Moderate	April 1, 2017 and then continuing	 All pesticides, herbicides and related materials (e.g., fungicides) must be used and applied consistent with product labeling. When present, these chemicals should be stored within enclosed buildings in such a way they cannot enter or be released into surface or ground waters. Keep track and record the type, timing and volume of pesticides, herbicides and related chemicals that are applied your operations. This can be done using a simple log form, such as the one included in Appendix F. 	ł		

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May 3, 2017 Page 28

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			WRPP - APN 210-191-015 PWA ID #180101050703-5175

Table 1. Featu	res Nee	ding Impro	vement or	Action Items (Prioritized implementation schedu	le for corrective	actions)	
Standard Cond Requiring Act	lition tion	Treatment Priority	Schedule	Summary of Corrective Actions/Recommendations (see more detailed listing of corrective actions in Section 4, above)	Monitoring Point and Photo #	Estimated Cost	Date Completed
9 – Petroleum Products and Other Chemicals	9a, b	High	May 1, 2017	 Place all small fuel cans, generators, pumps and other gas powered garden equipment in adequate secondary containment basins and store in a safe and secure location out of the elements. Do not store petroleum products and/or chemicals with fertilizers, soil amendments and/or pesticides/herbicides. See guidelines for hazardous material storage in Appendix G. 	:		
	9d	High	May 1, 2017	Obtain and make available one or more spill prevention cleanup kits to clean up small spills. Spill kits should be located where fuel is stored and refueling occurs.	1		
Defice and	11a	High	October 31, 2020	PWA recommends conducting wet weather testing and onsite investigations to site, design and install a permitted Onsite Wastewater Treatment System (OWTS) for the Project Site. The system must be designed to serve the number of residents and workers that will be present on the Project Site when your cultivation-related operations are at their peak.	MP #9, Photo 9a, 9b		
Human Waste	11a	High	May 15, 2017	 PWA recommends using portable toilets on the Project Site until the permitted OWTS can be installed; these portable toilets should be serviced by a rental company and the records of servicing kept onsite. Discontinue usage of the two (2) outhouses and both should be fully decommissioned by filling in the pit and removing toilet infrastructure. 	:		

6.0 MONITORING AND INSPECTION PLAN

Under the Order, sites are required to be monitored and inspected periodically to ensure conformance with the 12 Standard Conditions. In most cases, inspections and records of inspections identify conditions that have been corrected and are now in compliance; conditions that remain in compliance; and conditions that have changed and may no longer be in compliance with the Order. An inspection and monitoring plan is used to document these conditions, identify problems and make corrections using best management practices (BMPs) to protect water quality (Appendix A).

<u>Monitoring Plan</u> – Please refer to Appendix B and Figure 2 to review the monitoring plan and specific monitoring points for which you are responsible.

Monitoring guidelines and reporting standards have been created by the NCRWQCB as part of the Order. Monitoring of the Project Site includes <u>visual inspection and photographic documentation</u> <u>of each feature of interest listed on the Project Site map</u>, with new photographic documentation recorded with any notable changes to the feature of interest.

<u>Site inspection schedule</u> - According to the NCRWQCB, periodic inspections should include visual inspection of the site, including any management measures/practices, to ensure they are being implemented correctly and are functioning as expected. Inspections include photographic documentation of any controllable sediment discharge sites, as identified on the site map, and a visual inspection of those locations on the site where pollutants or wastes, if uncontained, could be transported into receiving waters, and those locations where runoff from roads or developed areas drains into or towards surface water.

At a minimum, sites shall be inspected at the following times to ensure timely identification of changed site conditions and to determine whether implementation of additional management measures is necessary to prevent or minimize discharges of waste or pollutants to surface water:

- 1) <u>Before and after any significant alteration or upgrade</u> to a given stream crossing, road segment, or other controllable sediment discharge site. Inspection should include photographic documentation, with photo records to be kept onsite.
- 2) <u>Prior to October 15th</u> to evaluate site preparedness for storm events and stormwater runoff.
- 3) Following the accumulation of 3 inches cumulative precipitation (starting September 1st) or by December 15th, whichever is sooner.
- 4) Following any rainfall event with an intensity of 3 inches precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service by entering the site zip code at <u>http://www.srh.noaa.gov/forecast</u>; Pick the nearest or most relevant zip code and then select the 3 day history that will also show precipitation totals.

<u>Inspection and Monitoring Checklist</u> – Appendix B contains a checklist data form that will be used by the landowner and/or operator to: 1) document inspection dates, 2) document visual and photographic inspection results, 3) describe remediation and management measures that are being applied, 4) identify new problems and their treatments, and 5) document the progress and effectiveness of implementing remedial and corrective measures that are needed to meet the 12 Standard Conditions, as outlined in this WRPP. Appendix C contains photo documentation of your monitoring points and will need to be updated as corrective treatments are implemented and treatments are monitored and evaluated over time.

<u>Annual Reporting</u> – An Annual Report is to be submitted directly to the NCRWQCB or to PWA (through our 3rd Party Program). The information in the annual reporting form must be submitted by March 31st of each year. The reported information is to be reflective of current site conditions, and includes monitoring data and tasks accomplished to protect water quality. Among other things, the report includes such items as the reporting of monthly monitoring data collected during the year (e.g., chemical use, water diversions, water storage, water use, etc.), management measures (BMPs) applied during the year and their effectiveness, and tasks accomplished during the year towards meeting each of the 12 Standard Conditions identified as deficient in this WRPP.

7.0 WATER USE PLAN

<u>Requirements</u> - According to the Order, a Water Use Plan (WUP) shall record water source, relevant water right documentation, and amount used monthly. All water sources shall be recorded, including alternative sources such as rain catchment and groundwater, and/or hauled water. Other elements of the WUP will include:

- Developing a Water Budget for determining the timing and volume of actual water use on the site. Water related data will be summarized monthly for the preceding month.
- Designing and implementing water conservation measures to reduce water diversion and water use.
- Calculating water storage requirements needed to support cultivation activities during the dry season, and implementing those required storage measures.

The Water Use Plan must also describe water conservation measures and document your approach to ensure that the quantity and timing of water use is not impacting water quality objectives and beneficial uses (including cumulative impacts based on other operations using water in the same watershed). Water use will <u>only</u> be presumed to not adversely impact water quality under one of the following scenarios:

- No surface water diversions occur from May 15th to October 31st.
- Water diversions are made pursuant to a local plan that is protective of instream beneficial uses.
- Other options that may affect water quality: (e.g., percent of flow present in stream; minimum allowable riffle depth; streamflow gage at bottom of Class I stream; AB2121 equations; CDFW instream flow recommendations; promulgated flow objective in Basin Plan; etc.).

<u>Site Water Use Plan</u> -The record of activities, accomplishments and water monitoring results for the Water Use Plan for this site will be logged and recorded in data tables and site records (data forms) included in Appendix D of this WRPP. These will be tracked and kept up-to-date by the landowner or cultivator of the site.

Water Storage and Forbearance – The ultimate goal of the applicant is to accumulate enough water storage capacity to forebear the entire period from May 15th to October 31st, which appears to currently exist based on initial water use estimates. This will ensure the timing of water use is not impacting water quality objectives and beneficial uses. Currently, there is approximately

178,500 gallons of water storage, in tanks and a large water bladder on the Project Site. Based on the size of the cultivation area (5,056 ft²) and water use estimates it appears that there is adequate storage on the Project Site. Additionally, the operator forbears and no surface water diversions were occurring during the dry season from May 15th through October 31st. A Water Budget will need to be developed and refined to verify that no additional storage is needed for your operations to forbear (not divert) during this period.

Water Conservation - Water conservation measures currently practiced include the use of controlled hand watering. The large water bladder is not equipped with a float shut off valve to aid in water conservation. We suggest growing many of the plants in-ground (as compared to above ground pots) and watering late in the afternoon or evening to minimize water loss through evaporation and maximize water up-take by the plants. Starting this year, new water conserving techniques and equipment will be utilized and tested to evaluate their effectiveness and efficiency. Water Conservations measures you should consider employing are listed in Section 4.5b, above. Test and deploy volume limited drip emitters and incorporating water holding amendments and native soil during the initial soil preparation at the start of the season.

Water sources and use - Though two Class III watercourses are located within the Project Site parcel, the water used for irrigation activities comes from an isolated, non-jurisdictional spring (POD #1) identified in Figure 2. Because of it susceptibility to rupture and failure, the large water bladder should be retired from use and replaced with additional rigid water tanks and/or one or more off-channel, rainwater-fed ponds. Rainwater harvesting during the off-season should be evaluated and employed where possible to continue to avoid surface water diversion during the dry season. When and if ponds are approved and constructed, they should be designed to be off-stream and rainwater-fed so your operations will have minimal or no impact on downstream water quality and aquatic habitat, especially during the dry summer months.

At this time, the client estimates that 146,240 gallons of water is used for irrigation purposes on the Project Site during the calendar year and 178,500 gallons of storage is currently available. Surface water diversion during the forbearance period is not occurring on the Project Site. It will be important to continue to keep accurate records of your water diversion, storage and use so that it can be reported each year, as required by the DWR. The more frequently and accurately water use is recorded, the better you will understand the water uses and needs of your farm, the value of water conservation, and the volume of water storage that is needed for you to forbear (not divert from springs and streams) during the dry summer growing season.

Over the course of the upcoming cultivation season, water use should be accurately documented using the log forms supplied to you by PWA, attached in Appendix D, or by some other equally accurate method. Annual reporting of water diversion and use rates are required to be submitted annually to the NCRWQCB no later than March 31 for the preceding calendar year. A Lake and Streambed Alteration Agreement (LSAA) will be sought for the spring diversion through the California Department of Fish and Wildlife (CDFW). As more accurate water data is gathered, refined targets can be made to ensure adequate storage exists to protect downstream water quality and beneficial uses during the driest time of the year.

8.0 LIST OF CHEMICALS

The WRPP must contain a list of chemicals being stored onsite, in addition to quantities used and frequency of application. These include fertilizers/soil amendments, pesticides, herbicides, fungicides, petroleum products and other chemicals used in, or associated with, your cultivation activities and related operations.

Because this is the first year of enrollment, information regarding chemical use and storage is deficient or anecdotal. Appendixes E and F contain monitoring forms that should be used to list the chemical inventory record over time, as supplies are added to the site and used during the growing season. The landowner or operator will use these forms to track the types, storage volumes, timing of application, and volume of use of these products throughout the year. The initial chemicals and amendment list that may be used and stored onsite include:

<u>Fertilizers and amendments:</u> Azomite – 100 pounds Worm castings – 2,000 pounds Fish bone meal – 40 pounds Feather meal – 40 pounds Glacial rock dust – 320 pounds Kelp meal – 75 pounds Oyster shell – 35 pounds Chicken manure – 200 pounds

Pesticides, Herbicides, and Fungicides: None

<u>Petroleum and Other Chemicals</u>: Gasoline Motor oil Propane

9.0 LANDOWNER/LESSEE CERTIFICATION/SIGNATURES

This Water Resource Protection Plan (WRPP) has been prepared by Pacific Watershed Associates, an approved Third Party Program acting on behalf of the North Coast Regional Water Quality Control Board (NCRWQCB).

"I have read and understand this WRPP, including Section 2.0 – Certifications, Conditions and Limitations. I agree to comply with the requirements of the California Regional Water Quality Control Board North Coast Region Order No. 2015-0023 (Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region), including the recommendations and actions listed in this WRPP."

Name of Legally Responsible Person (LRP):	

Title (owner, lessee, operator, etc.):

Signature:	Date:
	2

WRPP prepared by (if different from LRP): Pacific Watershed Associates, Inc.

WRPP prepared and finalized on (date):

Signature: _____

Date:



Appendix G

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207 Septic Site Suitability Analysis

For Tree Pharm LLC 41000 Highway 36 Bridgeville, CA 95526 APN 210-191-015

By:

DTN Engineering 2731 K Street Unit A Eureka, CA 95501





Introduction:

DTN Engineering (Engineer) has contracted with AgDynamix (Client) to perform a Site Septic Suitability Analysis for Tree Pharm LLC (Owner) as part of the Humboldt County Commercial Medical Marijuana Land Use Ordinance (APPS #11207). A Referral from Health and Human Services, Environmental Health Division has been issued to complete a site suitability report to establish the potential for an onsite waste treatment system.

The project location (Appendix A) is on Highway 36 approximately 39 miles east of Highway 101 and for APN 210-191-015 Tree Pharm LLC, which is portion of the NW ¼ of Section 8 and a portion of NE ¼ Section 7, T. 1 N., R. 5 E. (Appendix B). The Longitude and the Latitude for the project is 40.4834,-123.6474. The Owner is planning on constructing a Cannabis processing facility that will have a shower, sink, and a gravity water closet for 1 to 2 employees.

Evaluation:

This Septic Site Suitability Analysis is being conducted in accordance with the Humboldt County Onsite Wastewater Treatment System (OWTS) Regulations and Technical Manual. The locations of the test pits are shown on the Site Plan (Appendix C). Laboratory results show that the site soils are of Zone 2 (Appendix D). The soil types are a Sandy Loam and Sandy Clay Loam with percolation rates for Test Pit (TP) – 1 is 31 minutes per inch and the percolation rate for TP – 2 is 26 minutes per inch (Appendix E). These percolation rates correspond to the soil types that were observed and tested. Based on the site investigation it is recommended that the bottom of the septic field be installed at 5 feet of depth with 3 feet of drain rock under the pipe.

This evaluation will size the proposed Cannabis processing facility as a 1 Bedroom Cabin\Mobile Home as shown in Table 1 – Septic Tank Sizing Requirements of the Humboldt County Onsite Wastewater Treatment System (OWTS) Regulations and Technical Manual. An effluent demand of 150 gallons per day will be assigned for leachfield sizing and a 750 gallon septic tank will be used. The onsite wastewater treatment system will have one proposed leachfield and one proposed reserve leachfield.

The leachfield locations and septic tank location will not be within a 100 year flood plain, not be within 100 feet of a private water well, not be within 50 feet of a perennial stream, not be within 25 feet of an ephermal stream. The site is constrained between two cut slopes. To maintain a minimum of 25 feet distance from the catch point of the cut slopes to the leachfield and septic tank, when the proposed structure is constructed locations of the septic tank and leachfield can be located more exactly.

The loading rate for a percolation rate of 31 minutes per inch is .363 gallons per day (GPD) per square feet (Ft^2) for Zone 2 soils. Dividing the effluent demand of 150 GPD divided by .363 GPD/ Ft^2 equals 413 Ft^2 of absorption area. Assuming 3 feet of sidewall on each side of the leachfield trench would create 6 Ft^2 per linear foot of absorption area. Dividing 413 Ft^2 of required absorption area by 6 Ft^2 of absorption area per foot equals a total of 68 feet of leachfield.

Conclusion:

Based on the calculations from soil type, percolation testing and the proposed project approximately 68 feet of leachfield trench would be required for the project and a 750 gallon septic tank.

Appendix A

Location Map



Appendix B

Parcel Map



Appendix C

Plot Plan and Test Pit Locations



Appendix D

Laboratory Soil Test Results



Reference: 018113

June 5, 2018

David Nicoletti DTN Engineering & Consulting 2731 K Street, Unit A Eureka, CA 95501

SOIL PERCOLATION SUITABILITY / TEXTURAL ANALYSIS RESULTS

Job Name: Free Farm Date Sampled: 05/21/18 Date Received: 05/29/18 Sampled By: DTN Date Tested: 06/05/18 AP Number: 210-191-015

					% Coarse Fragments by		
<u>Sample ID</u>	<u>Depth</u>	<u>% Sand</u>	<u>% Clay</u>	<u>% Silt</u>	Volume	Zone	<u>Bulk Density</u>
T P-1	8'	53.0	25.7	21.3	30.9	2	*
	Material:	Sandy C	lay Loan	1			

* = no peds provided

Regional Water Quality Control Board Zone Descriptions:

Zone 1 - Soils in this zone are very high in sand content. They readily accept effluent, but because of their low silt and clay content they provide minimal filtration. These soils demand greater separation distances from groundwater.

Zone 2 - Soils in this zone provide adequate percolation rates and filtration of effluent. They are suitable for use of a conventional system without further testing.

Zone 3 - Soils in this zone are expected to provide good filtration of effluent, but their ability to accept effluent at a suitable rate is questionable. These soils require wet-weather percolation tests to verify their suitability for effluent disposal by conventional leachfield methods.

Zone 4 - Soils in this zone are unsuitable for a conventional leachfield because of their severe limitations for accepting effluent.



NOTES

- 1. Soil texture is plotted on triangle based on percent sand, silt, and clay as determined by hydrometer analysis.
- 2. Adjustment for coarse fragments has been made by moving the plotted point in the sand direction an additional 2% for each 10% (by volume) of fragments greater than 2mm in diameter.
- 3. Adjustment for compactness of soil has been made by moving the plotted point in the clay direction an additional 15% for soils having a bulk-density greater than 1.7 gm/cc, when analyzed.
- 4. For soils falling in sand, loamy sand, or sandy loam, classification adjustment for bulk density will generally not affect suitability and a bulk-density analysis was not necessary.

JOB NUMBER:	NJN	DATE:	06/05/18
JOB NAME:	Free Farm	APN:	210-191-015

Consulting Engineers & Geologists, Inc.

812 W. Wabash Eureka, CA 95501-2138 (707) 441-8855

Appendix E

Soil Profile

Soil Exploration Log

APN #210-191-015

Logged By: David Nicoletti PE

Date 5/18/2018

Test Pit #	Description	Color	Moisture	Consist	Depth	Soil	Percolation
						Туре	Rate
	0-1.5 feet	Brn	Dry	Firm			
	Roots						
TP-1		Brn	Dry	Firm	1.5 - 5 Feet	SM	
		Brn	Dry	Firm	5 -8 Feet	SC	31Min∖In
TP-2		Brn	Dry	Firm	1.5 – 5 Feet	SM	
		Brn	Dry	Firm	5 - 8 Feet	SC	26 Min∖In



TP - 1





Appendix H

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

REGION 1 – NORTHERN REGION 619 Second Street Eureka, CA 95501

STREAMBED ALTERATION AGREEMENT

CALIFORNIA DEPARTMENT OF WILDLIFE

NOTIFICATION NO. 1600-2018-0814-R1 Unnamed Tributary to Van Duzen River, Tributary to the Eel River and the Pacific Ocean

Sunshine Simmons Simmons Water Diversion and Stream Crossings Project 6 Encroachments

This Lake or Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Sunshine Simmons (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittee initially notified CDFW on December 14, 2018, with revisions received August 16, 2019, October 23, 2019, October 25, 2019, and November 5, 2019, that the Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project to be completed is located within the Van Duzen River watershed, approximately 2.1 miles E/SE of the town of Dinsmore, County of Humboldt, State of California. The project is located in Section 08, T01N, R05E, Humboldt Base and Meridian; in the Larabee Valley U.S. Geological Survey 7.5-minute quadrangle; Humboldt County Assessor's Parcel Number 210-191-015; latitude 40.4825 N and longitude 123.6471 W at the first point of diversion (POD).

PROJECT DESCRIPTION

The project is limited to 6 encroachments (Table 1). One encroachment is for water diversion from unnamed tributaries to the Van Duzen River. Water is diverted for

domestic use and irrigation. Work for the water diversion will include use and maintenance of the water diversion infrastructure. The second proposed encroachment is to modify an existing constructed basin into a rainwater catchment pond and create a spillway that will discharge in proximity to a class III stream. The four other proposed encroachments are to upgrade or decommission failing stream crossings. Work for these encroachments will include excavation, removal of the failing crossings, replacement with new properly crossings (or stream restoration), backfilling and compaction of fill, and rock armoring as necessary to minimize erosion.

ID	Latitude/Longitude	Description
POD-1	40.4825, -123.6471	Point of Diversion (POD) diverts water from a spring for domestic use and irrigation. Use shall be consistent with the terms of this Agreement.
Pond Spillway /POD-2	40.4833, -123.6471	An existing 200,000-gallon water bladder containment basin drains via a 1x1 foot depression onto a slope at the head of a class III stream without erosion protection. Permittee plans to modify this feature to function as a rainwater catchment pond for irrigation use and create a spillway by excavating a portion of the berm to form a 4-foot-wide spillway channel with 2:1 side-slopes. The spillway channel and banks will be rock lined with 10 inch or greater average diameter rock. At project completion, the spillway will be a 4-foot-wide armored channel with a 4-foot by 4-foot area below the outlet that is armored with rock keyed into the natural ground below the base of the berm. The spillway shall be designed to withstand a 100-year flood event and promote dispersal and infiltration of flows to minimize surface overflow reaching waters of the State. The spillway shall be designed and placed to allow for a minimum of two feet of freeboard. Permittee shall submit site specific design plans prepared by a licensed professional for CDFW review and approval prior to construction. Use shall be consistent with the terms of this Agreement.
Crossing-1	40.4838123.6475	An existing 18-inch diameter culvert shall be removed, the stream crossing decommissioned, and the stream channel restored in accordance with the specifications provided in the Notification and this Agreement.
Crossing-2	40.4839, -123.6476	An existing 18-inch diameter culvert shall be removed, the stream crossing decommissioned, and the stream channel restored in accordance with the specifications provided in the Notification and this Agreement.
Crossing-3	40 4840 -123 6477	An existing 12-inch diameter culvert shall be replaced with a minimum 24-inch diameter by 30-foot long corrugated metal pipe in accordance with the specifications provided in the Notification and this Agreement. Old tires will be removed from the stream banks and the banks will be stabilized to minimize disturbance to the channel.
Crossing-4	40.4834, -123.6473	An existing dirt ford ATV trail on a Class III watercourse shall be upgraded to a rocked ford in accordance with the specifications in this Agreement. Fords may not be driven over while wet.

Table 1. Project Encroachments with Description

Notification #1600-2018-0814-R1 Streambed Alteration Agreement Page 3 of 21

No other projects that may be subject to FGC section 1602 were disclosed. This Agreement does not retroactively permit any stream crossings, water diversions or other encroachments not described in Table 1.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Western Brook Lamprey (*Lampetra richardsoni*), Pacific Lamprey (*Entosphenus tridentatus*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), Foothill Yellow-legged Frog (*Rana boylii*), Coastal Tailed Frog (*Ascaphus truei*), Western Pond Turtle (*Actinemys marmorata marmorata*) amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include:

Impacts to water quality:

increased water temperature; reduced instream flow; temporary increase in fine sediment transport;

Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:

loss or decline of riparian habitat; direct impacts on benthic organisms;

Impacts to natural flow and effects on habitat structure and process:

cumulative effect when other diversions on the same stream are considered; diversion of flow from activity site; direct and/or incidental take; indirect impacts; impediment of up- or down-stream migration; water quality degradation; and damage to aquatic habitat and function.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

The Permittee shall meet each administrative requirement described below.

1.1 <u>Documentation at Project Site</u>. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification

materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

- 1.2 <u>Providing Agreement to Persons at Project Site</u>. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 <u>Notification of Conflicting Provisions</u>. The Permittee shall notify CDFW if the Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact the Permittee to resolve any conflict.
- 1.4 <u>Project Site Entry</u>. The Permittee agrees to allow CDFW employees access to any property it owns and/or manages for the purpose of inspecting and/or monitoring the activities covered by this Agreement, provided CDFW: a) provides 24 hours advance notice; and b) allows the Permittee or representatives to participate in the inspection and/or monitoring. This condition does not apply to CDFW enforcement personnel.
- 1.5 <u>Adherence to Existing Authorizations</u>. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.
- 1.6 Other Agency Permitting Requirements. The U.S. Army Corps of Engineers (Corps) has permitting requirements for certain instream projects under Section 404 of the Federal Clean Water Act. If this project features the placement of dredged or fill materials into the channels of streams (below the ordinary high water mark) that are waters of the United States, a permit may be required by the Corps. If your project needs a permit from the Corps, you will also need to obtain a Water Quality Certification pursuant to Section 401 of the Federal Clean Water Act from the Regional Water Quality Control Board (Regional Water Board). In addition, if your project will involve disturbance within or discharges of pollutants to Waters of the State of California, the Regional Water Boards may require a permit, whether or not the Corps requires a permit. If there is any question regarding the possibility of the project meeting the above limitations, the Permittee should contact the Corps and the Regional Water Board prior to beginning work. This Agreement in no way represents permitting requirements by the Corps or the Regional Water Board. It is the responsibility of the Permittee to contact the Corps, and to comply with the provisions of any Section 404 permit issued, if required by the Corps. Similarly, it is the responsibility of the Permittee to contact the Regional Water Board and to comply with the provisions of any Section 401

Certification, Regional Water Board Waste Discharge Requirements or waiver of Waste Discharge Requirements issued by the Regional Water Board.

- 1.7 <u>Change of Conditions and Need to Cease Operations</u>. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken. This includes new information becoming available that indicates bypass flows, diversion rates or other measures provided in this Agreement are not providing adequate protection to keep aquatic life downstream in good condition or to avoid "take" or "incidental take" of federal or State listed species.
- 1.8 <u>CDFW Notification of Work Initiation and Completion</u>. The Permittee shall contact CDFW within the 7-day period preceding the beginning of work permitted by this Agreement. Information to be disclosed shall include Agreement number, and the anticipated start date. Subsequently, the Permittee shall notify CDFW no later than seven (7) days after the project is fully completed. Notification of completion will include photographs of the completed work, erosion control measures, waste containment and disposal, and a summary of any CNDDB submissions as required below.
- 1.9 Notification to the California Natural Diversity Database. If any special status species are observed at any time during the project, a qualified Biologist shall submit California Natural Diversity Data Base (CNDDB) forms to the CNDDB within five (5) working days of the sightings. A summary of CNDDB submissions shall be included with the completion notification. Forms and instructions for submissions to the CNDDB may be found at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.
- 1.10 <u>Cannabis Cultivation Policy</u>. If Cannabis is or becomes cultivated on the project parcel, Permittee shall comply with all requirements of the State Water Resource Control Board (SWRCB) Cannabis Cultivation Policy Principles and Guidelines for Cannabis Cultivation (Cannabis Cultivation Policy), dated April 16, 2019, or the latest version.
 - 1.10.1 <u>Site Management Plan and Related Technical Reports.</u> Permittee shall submit to CDFW the initial preparation and subsequent updates to the project's Site Management Plan and related technical reports that are prepared in conformance with the SWRCB Cannabis Cultivation Policy.
- 1.11 <u>Agreement Compliance</u>. The proposed work shall comply with the measures of this Agreement. Failure to comply with these measures shall result in suspension or revocation of this Agreement.
- 2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the Permittee shall implement each measure listed below.

- 2.1 <u>Permitted Project Activities</u>. Except where otherwise stipulated in this Agreement, all work shall be in accordance with Permittee Notification, together with all maps, Best Management Practices (BMPs), photographs, drawings, and other supporting documents submitted with the Notification and received on December 14, 2018, with revisions received August 16, 2019, October 23, 2019, October 25, 2019, and November 5, 2019.
- 2.2 <u>Listed Species</u>. This Agreement does not allow for the take, or incidental take of any state or federal listed threatened, endangered, or candidate species. No direct or indirect impacts shall occur to any threatened or endangered species as a result of implementing the project or the project's activities. If the project could result in the "take" of a state listed threatened or endangered species, the Permittee has the responsibility to obtain from CDFW, a California Endangered Species Act Permit (CESA section 2081).
- 2.3 <u>Nesting Birds</u>. Actively nesting birds and their nests shall not be disturbed by project activities. If construction, grading, vegetation removal, or other project-related improvements are necessary during the nesting season of protected raptors and migratory birds (March 1 through August 15), the Permittee shall notify CDFW of proposed work and a focused survey for bird nests and/or nesting behavior shall be conducted by a qualified biologist within seven (7) days prior to the beginning of project-related activities. Surveys should encompass the area up to 50 feet from disturbance to account for songbirds, and up to 250 feet from disturbance for raptors. If a nest is found or suspected to be present, Permittee shall consult with CDFW regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and FGC. If a lapse in project-related work of seven (7) days or longer occurs, another focused survey, and if required, consultation with CDFW shall be required before project work can be reinitiated.

Project Timing

- 2.4 <u>Work Period</u>. All work, not including diversion of water, shall be confined to the period **June 15 through October 15** of each year. Work within the active channel of a stream shall be restricted to periods of **dry weather**. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation. Limited vegetation removal may occur outside of this work period as per Measure 2.4.
- 2.5 <u>Extension of the Work Period</u>. If weather conditions permit, and the Permittee wishes to extend the work period after October 15, a written request shall be made to CDFW at least 10-working days before the proposed work period variance.

Written approval (letter or e-mail) for the proposed time extension must be received from CDFW prior to activities continuing past October 15.

2.6 <u>Work Completion</u>. The proposed work shall be completed by no later than October 15, 2021. Failure to complete work by this date may result in suspension or revocation of this Agreement. A notice of completed work, including photographs of each site, shall be submitted to CDFW within seven (7) days of project completion.

Vegetation Management

- 2.7 <u>Prohibited Plant Species.</u> Permittee shall not plant, seed or otherwise introduce invasive plant species within the Project area. Prohibited invasive plant species include those identified in the California Invasive Plant Council's inventory database, which is accessible at: <u>https://www.cal-ipc.org/plants/inventory/</u>.
- 2.8 <u>Minimum Vegetation Removal</u>. No native riparian vegetation shall be removed from the bank of the stream, except where authorized by CDFW. Permittee shall limit the disturbance or removal of native vegetation to the minimum necessary to achieve design guidelines and standards for the Authorized Activity. Permittee shall take precautions to avoid damage to vegetation outside the work area.
- 2.9 <u>Vegetation Maintenance</u>. Permittee shall limit vegetation management (e.g., trimming, pruning, or limbing) and removal for the purpose of Authorized Activity to the use of hand tools. Vegetation management shall not include treatment with herbicides.
- 2.10 <u>Avoidance of Nesting Birds</u>. Vegetation maintenance/removal as necessary within the scope of the project shall be confined to the period commencing August 16 and ending February 28, of any year in which this Agreement is valid, provided the work area is outside of the actively flowing stream. Work may continue during precipitation events provided stream flows have not risen into work areas and sediment delivery will not result.

General Stream Protection Measures

- 2.11 <u>Fish and Aquatic Amphibians</u>. If possible, work shall be conducted when the affected stream channel is void of surface water. If surface water is present during construction, the Permittee shall: a) have a biologist or other qualified professional survey the site and adjacent area for fish, amphibians, and turtles three (3) days or less before commencing project activities and b) if fish, amphibians, or turtles are detected, CDFW will be contacted and work shall not commence until authorized by a CDFW representative.
- 2.12 <u>Stream Protection</u>. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other material
deleterious to fish, plant life, mammals or bird life shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the stream.

- 2.13 <u>No Dumping</u>. Permittee shall not deposit, permit to pass into, or place where it can pass into a stream, lake, or other Waters of the State any material deleterious to fish and wildlife, or abandon, dispose of, or throw away within 150 feet of a stream, lake, or other Waters of the State any cans, bottles, garbage, motor vehicle or parts thereof, rubbish, litter, refuse, waste, debris, or the viscera or carcass of any dead mammal, or the carcass of any dead bird.
- 2.14 <u>Maintain Aquatic Life</u>. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, Permittee shall allow sufficient water at all times to pass downstream to maintain aquatic life below the dam pursuant to FGC section 5937.
- 2.15 <u>Maintain Passing of Fish Up and Down Stream</u>. It is unlawful to construct or maintain in any stream any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish (*wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn or ovum of any of those animals*) up and down stream pursuant to FGC section 5901.
- 2.16 Equipment Maintenance. Refueling of machinery or heavy equipment, or adding or draining oil, lubricants, coolants or hydraulic fluids shall not take place within stream bed, channel and bank. All such fluids and containers shall be disposed of properly off-site. Heavy equipment used or stored within stream bed, channel and bank shall use drip pans or other devices (e.g., absorbent blankets, sheet barriers or other materials) as needed to prevent soil and water contamination.
- 2.17 <u>Hazardous Spills</u>. Any material, which could be hazardous or toxic to aquatic life and enters a stream (i.e. a piece of equipment tipping-over in a stream and dumping oil, fuel or hydraulic fluid), the Permittee shall immediately notify the California Emergency Management Agency State Warning Center at 1-800-852-7550, and immediately initiate clean-up activities. CDFW shall be notified by the Permittee within 24 hours at 707-445-6493 and consulted regarding clean-up procedures.
- 2.18 <u>Clean-up</u>. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the ordinary high water mark before such flows occur or the end of the yearly work period, whichever comes first. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.

2.19 Erosion Control Measures

2.19.1 <u>Seed and Mulch</u>. Upon completion of construction operations and/or the onset of wet weather, Permittee shall stabilize exposed soil areas within

the work area by applying mulch and seed. Permittee shall restore all exposed or disturbed areas and access points within the stream and riparian zone by applying local native and weed free erosion control grass seeds. Locally native wildflower and/or shrub seeds may also be included in the seed mix. Permittee shall mulch restored areas using at least two (2) to four (4) inches of weed-free clean straw or similar biodegradable mulch over the seeded area. Alternately, Permittee may cover seeding with jute netting, coconut fiber blanket, or similar non-synthetic monofilament netting erosion control blanket.

- 2.19.2 Erosion and Sediment Barriers. Permittee shall monitor and maintain all erosion and sediment barriers in good operating condition throughout the work period and the following rainy season, defined herein to mean October 15 through June 15. Maintenance includes, but is not limited to, removal of accumulated sediment, replacement of damaged sediment fencing, coir rolls/logs and/or straw bale dikes and ensuring drainage structures and altered streambeds and banks remain sufficiently armored and/or stable. If the sediment barrier fails to retain sediment, Permittee shall employ corrective measures, and notify CDFW immediately.
- 2.19.3 <u>Cover Spoil Piles</u>. Permittee shall have readily available erosion control materials such as wattles, natural fiber mats, or plastic sheeting, to cover and contain exposed spoil piles and exposed areas in order to prevent sediment from moving into a stream or lake. Permittee shall apply and secure these materials prior to rain events to prevent loose soils from entering a stream, lake, or other Waters of the State.
- 2.19.4 <u>Prohibition on Use of Monofilament Netting</u>. To minimize the risk of ensnaring and strangling wildlife, Permittee shall not use any erosion control materials that contain synthetic (e.g., plastic or nylon) monofilament netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
- 2.20 <u>Waste Containment and Disposal</u>. Permittee shall contain all operation associated refuse in enclosed, wildlife proof, storage containers, at all times, and relocate refuse to an authorized waste management facility, in compliance with State and local laws, on a regular and ongoing basis. All refuse shall be removed from the site and properly disposed of, at the close of the cultivation season and/or when the parcel is no longer in use.
- 2.21 <u>Prohibition of Live Stream Work</u>. No work is authorized in a live flowing stream. All work shall be conducted when the stream is dry.

Water Diversion

- 2.22 <u>Maximum Diversion Rate</u>. The maximum instantaneous diversion rate from the water intake shall not exceed **three (3) gallons per minute** (gpm) at any time.
- 2.23 <u>Bypass Flow</u>. The Permittee shall pass **80% of the flow** at all times to keep all aquatic species including fish and other aquatic life in good condition below the POD.
- 2.24 <u>Seasonal Diversion Minimization for POD-1</u>. No more than 200 gallons in any one day shall be diverted (intended for household domestic use) during the low flow season from May 15 to October 31 of each year. Water shall be diverted only if the Permittee can adhere to the maximum diversion rate and bypass flow conditions of this Agreement.
- 2.25 <u>Measurement of Diverted Flow.</u> Permittee shall install and maintain an adequate measuring device for measuring the instantaneous and cumulative rate of diversion. This measurement shall begin as soon as this Agreement is signed by the Permittee. The device shall be installed within the flow of diverted water. The Permittee shall maintain records of diversion, and provide information including, but not limited to the following:
 - 2.25.1 A log including the date, time and quantity of water diverted from the POD.
 - 2.25.2 The amount of water used per day for cannabis cultivation separated out from the amount of water used for other irrigation purposes and other uses of water (e.g., domestic use or fire protection).
 - 2.25.3 Permittee shall make available for review at the request of CDFW the diversion records required by the SWRCB Cannabis Cultivation Policy.
- 2.26 <u>Water Management Plan</u>. The Permittee shall submit a Water Management Plan no later than **sixty days** from the time this Agreement is made final that describes how compliance will be achieved under this Agreement. The Water Management Plan shall include details on water use, water storage, water conservation, or other relevant material to maintain water needs in coordination with forbearance and bypass flow requirements. The Water Management Plan shall include a brief narrative describing water use on the property, photographs to support the narrative, and water use calculations to ensure compliance with this Agreement.

Water Diversion Infrastructure

- 2.27 <u>Intake Structure</u>. No polluting materials (e.g., particle board, plastic sheeting, bentonite) shall be used to construct or screen, or cover the diversion intake structure.
- 2.28 <u>Pond Intake Screening</u>. The Permittee shall regularly inspect, clean, and maintain screens in good condition.

- 2.28.1 The water intake screens shall be securely attached (e.g., threaded or clamped) to the intake line and have a minimum wetted area of 0.25 square feet.
- 2.28.2 A water intake screen with round openings shall not exceed 3/32-inch diameter; a screen with square openings shall not exceed 3/32-inch measured diagonally; and a screen with slotted openings shall not exceed 0.069 inches in width. Slots must be evenly distributed on the screen area.
- 2.28.3 The water intake screen may be constructed of any rigid material, perforated, woven, or slotted and should have a minimum of 27% open area. Stainless steel or other corrosion-resistant material is recommended to reduce clogging due to corrosion. Care should be taken not to use materials deemed deleterious to aquatic species.
- 2.29 <u>Intake Shall Not Impede Aquatic Species Passage</u>. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.
- 2.30 <u>Intake Maintenance</u>. Intakes shall be kept in good repair. Intakes shall be inspected periodically and kept clean and free of accumulated algae, leaves or other debris, which could block portions of the screen surface and increase approach velocities at any point on the screen. No part of screen surfaces shall be obstructed.
- 2.31 <u>Exclusionary Devices</u>. Permittee shall keep the diversion structures covered at all times to prevent the entrance and entrapment of amphibians and other wildlife.
- 2.32 <u>Diversion Intake Removal</u>. Permittee shall plug, cap, block (e.g., with a shut-off valve), or remove all intakes when water is not diverted for more than one week.
- 2.33 <u>Heavy Equipment Use</u>. No heavy equipment shall be used in the excavation or replacement of the existing water diversion structure. The Permittee shall use hand tools or other low impact methods of removal/replacement. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.

Diversion to Storage

2.34 <u>Water Storage</u>. All water storage facilities (WSFs) (e.g., reservoirs, storage tanks, mix tanks, and bladders tanks) must be located outside the active 100-year floodplain and outside the top of bank of a stream. Covers/lids shall be securely affixed to water tanks at all times to prevent potential entry by wildlife. Permittee shall cease all water diversion at the POD when WSFs are filled to capacity.

- 2.35 <u>Water Storage Maintenance</u>. WSFs shall have a float valve to shut off the diversion when tanks are full to prevent overflow. Water shall not leak, overflow, or overtop WSFs at any time. Permittee shall regularly inspect all WSFs and infrastructure used to divert water to storage and use and repair any leaks.
- 2.36 <u>Water Conservation</u>. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.37 <u>Limitations on Impoundment and Use of Diverted Water</u>. The Permittee shall impound and use water in accordance with a valid water right, including any limitations on when water may be impounded and used, the purpose for which it may be impounded and used, and the location(s) where water may be impounded and used.
- 2.38 <u>State Water Code</u>. This Agreement does not constitute a valid water right. The Permittee shall comply with State Water Code sections 5100 and 1200 *et seq.* as appropriate for the water diversion and water storage. The application for this registration is found at: <u>https://www.waterboards.ca.gov/waterrights/water_issues/programs/registrations/</u>

Reservoirs

- 2.39 <u>Reservoirs</u>. Shall be appropriately designed, sized, and managed to contain any diverted water in addition to precipitation and storm water runoff, without overtopping. The Permittee shall install an overflow spillway that will withstand a 100-year flood event, designed with a dispersal mechanism, or low-impact design, that discourages channelization and promotes dispersal and infiltration of flows to prevent surface overflow from reaching Waters of the State. The spillway shall be designed and placed to allow for a minimum of two-feet of freeboard.
- 2.40 <u>Diversion</u>. Water shall be diverted to reservoirs only if the Permittee can adhere to the diversion rate, bypass flow, season of diversion and all other relevant conditions of this Agreement.
- 2.41 <u>No Stocking</u>. Stocking of fish, wildlife, or plant of any kind, in any Waters of the State, including reservoirs, shall be prohibited without written permission from CDFW pursuant to FGC section 6400.
- 2.42 <u>Invasive Species Management for Reservoirs</u>. Permittee shall implement an invasive species management plan prepared by a Biologist for any existing or proposed reservoir. The plan shall include, at a minimum, an annual survey for invasive aquatic species, including the American bullfrog (*Lithobates catesbeianus = Rana catesbeiana*). The Biologist, if appropriate, shall implement eradication measures if invasive aquatic species are identified as part of the survey.

2.42.1 Bullfrog Management Plan. If bullfrogs are observed, they shall be

appropriately managed. Management of bullfrogs, including annual draining and drying of ponds, shall follow the guidelines in Exhibit A. A copy of the annual monitoring report, shall be submitted to CDFW in accordance with the reporting measures described in Exhibit A and in the Reporting Measures section of this Agreement.

- 2.43 <u>Wildlife Entrapment Prevention</u>. If open reservoirs have plastic lining, slopes greater than 2:1, or if there is any potential for wildlife entrapment, Permittee shall install several exit ramps to prevent wildlife entrapment. Exit ramps shall meet the following requirements: installed at no greater than 2:1 slope, securely fixed at the upslope end, made of solid material (e.g. wood), and be a minimum length of 1.5 times the radius of the pond.
- 2.44 <u>Inspection</u>. Ponds will be designed and/or inspected by a licensed geologist or engineer to determine if the embankment and spillway are stable, appropriately designed for 100-year flows and associated debris, and to evaluate potential risks to downstream resources. Additional work and amendments to the Agreement may be required.

Stream Crossings

- 2.45 <u>Road Approaches</u>. The Permittee shall treat road approaches to new or reconstructed permanent crossings to minimize erosion and sediment delivery to the watercourse. Permittee shall ensure road approaches are hydrologically disconnected to the maximum extent feasible to prevent sediment from entering the crossing site, including when a Stream Crossing is being constructed or reconstructed. Road approaches shall be armored from the crossing for a minimum of *50 feet in both directions*, or to the nearest effective water bar or point where road drainage does not drain to the crossing, with durable, clean, screened, angular rock.
- 2.46 Excavated Fill. Excavated fill material shall be placed in upland locations where it cannot deliver to a watercourse. To minimize the potential for material to enter the watercourse during the winter period, all excavated and relocated fill material shall be tractor contoured (to drain water) and tractor compacted to effectively incorporate and stabilize loose material into existing road and/or landing features.
- 2.47 <u>Runoff from Steep Areas</u>. The Permittee shall make preparations so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures. Erosion control structures such as straw bales and/or siltation control fencing shall be placed and maintained until the threat of erosion ceases. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.
- 2.48 <u>Crossing Maintenance</u>. The Permittee shall provide site maintenance for the life of the structures, including, but not limited to, re-applying erosion control to minimize

surface erosion and ensuring drainage structures, streambeds and banks remain sufficiently armored and/or stable.

- 2.48.1 The placement of armoring shall be confined to the work period when the stream is dry or at its lowest flow.
- 2.48.2 No heavy equipment shall enter the wetted stream channel.
- 2.48.3 No fill material, other than clean rock, shall be placed in the stream channel.
- 2.48.4 Rock shall be sized to withstand washout from high stream flows, and extend above the ordinary high water level.
- 2.48.5 Rock armoring shall not constrict the natural stream channel width and shall be keyed into a footing trench with a depth sufficient to prevent instability.

2.49 Culvert Installation.

- 2.49.1 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow [i.e. ≥1.0 times the width of the bankfull channel width or the 100-year flood size, whichever is greater], including debris, culvert embedding, and sediment loads.
- 2.49.1 Where diversion potential exists, a critical dip shall be installed to direct flood flow over the crossing fill and back into the channel. Critical dips shall be constructed to accommodate the entire estimated 100-year flood flow and may be installed by lowering the existing fill over the crossing or by constructing a deep, broad rolling dip over the crossing surface to prevent flood flow from diverting down the road.
- 2.49.2 If the project is located in a high to very high Fire Hazard Severity Zone as designated by CAL FIRE, CDFW recommends culvert materials consist of corrugated metal pipe (CMP). Use of High Density Polyethylene (HDPE) pipe is discouraged. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps
- 2.49.3 Existing fill material in the crossing shall be excavated down vertically to the approximate original channel and outwards horizontally to the approximate crossing hinge points (transition between naturally occurring soil and remnant temporary crossing fill material) to remove any potential unstable
- 2.49.4 Culvert shall be installed to grade (not perched or suspended), aligned with the natural stream channel, and extend lengthwise completely beyond the toe of fill. If culvert cannot be set to grade, it shall be oriented in the lower third of the fill face, and a downspout or energy dissipator (such as

debris and voids in the older fill prism.

boulders, rip-rap, or rocks) shall be installed above or below the outfall as needed to effectively control stream bed, channel, or bank erosion (scouring, headcutting, or downcutting). The Permittee shall ensure basins are not constructed and channels are not be widened at culvert inlets.

- 2.49.5 Culvert bed shall be composed of either compacted rock-free soil or crushed gravel. Bedding beneath the culvert shall provide for even distribution of the load over the length of the pipe, and allow for natural settling and compaction to help the pipe settle into a straight profile. The crossing backfill materials shall be free of rocks, limbs, or other debris that could allow water to seep around the pipe, and shall be compacted.
- 2.49.6 Culvert inlet, outlet (including the outfall area), and fill faces shall be armored where stream flow, road runoff, or rainfall energy is likely to erode fill material and the outfall area.
- 2.49.7 <u>Project Inspection</u>. The Project shall be inspected by a licensed professional to ensure that the stream crossings were installed as designed. A copy of the inspection report, including photographs of each site, shall be submitted to CDFW within 90 days of completion of this project.

2.50 Fords, Armored Fill and Vented Crossings.

- 2.50.1 Fords, armored and vented crossings are considered permanent watercourse encroachments and shall be designed and sized to accommodate the 100-year flood flow plus associated sediment and debris.
- 2.50.2 Fords, armored and vented crossings and hydrologically-connected road approaches shall be maintained as necessary to avoid delivery of fine sediment to the watercourse below.
- 2.50.3 Fords, armored and vented crossings shall be sufficiently outsloped to minimize aggradation of suspended sediments at the crossing.
- 2.50.4 The lowest point of fords, armored and vented crossings shall be constructed within or directly over the original stream channel, to the extent feasible, in order to contain high flows up to twice bank-full and to avoid diversion potential.
- 2.50.5 Armor material shall be comprised of durable angular screened quarry rock of sufficient size and placement to minimize mobilization during a 100-year storm event. Wood may be used for armoring if sound, tight-grained, redwood is applied and sufficiently keyed into the fillslope to resist movement during a 100-year storm event.

- 2.50.6 If maximum fill heights exceed 15 feet or fills exceed 500 cubic yards of fill, rock sizing, armoring thickness, chute width and chute depth shall be calculated and sized using the nomograph provided in Figure 23 of Cafferata et al. (2017).
- 2.50.7 Stream crossing spillway fill slopes shall be armored from roadbed to the natural channel in a manner sufficient to prevent significant scour or removal of armor during high flows. Scour is expected through road surface rock cap.
- 2.50.8 Fords shall only be used when the fording surface is dry.
- 2.50.9 <u>Project Inspection</u>. The Project shall be inspected by a licensed professional to ensure that the stream crossings were installed as designed. A copy of the inspection report, including photographs of each site, shall be submitted to CDFW within 90 days of completion of this project.

3. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 3.1 <u>CDFW Notification of Work Initiation</u>. The Permittee shall contact CDFW within the seven-day period **preceding the beginning of work** permitted by this Agreement. Information to be disclosed shall include Agreement number, and the anticipated start date.
- 3.2 <u>Work Completion</u>. The proposed work shall be completed by no later than October 15, 2021. Failure to complete work by this date may result in suspension or revocation of this Agreement. Notification of completion will include photographs of the completed work, erosion control measures, waste containment and disposal, and a summary of any CNDDB submissions and shall be submitted to CDFW, LSA program at 619 Second Street, Eureka, CA 95501 within seven (7) days of project completion.
- 3.3 <u>Project Inspection</u>. The Project shall be inspected by a licensed professional to ensure that the stream crossings were installed as designed and/or the stream restoration was implemented as designed. A copy of the inspection report, including photographs of each site, shall be submitted to CDFW within 90 days of completion of this project. The Permittee shall submit the **Project Inspection Report** to CDFW, LSA Program at 619 Second Street, Eureka, CA 95501.

- 3.4 <u>Measurement of Diverted Flow</u>. Copies of the **Water Diversion Records** shall be submitted to CDFW, LSA Program at 619 Second Street, Eureka, CA 95501 no later than **March 31** of each year beginning in **2020**.
- 3.5 <u>Water Management Plan</u>. The Permittee shall submit a **Water Management Plan** within **60 days** from the effective date of this Agreement. The Water Management Plan shall be submitted to CDFW, LSA Program at 619 Second Street, Eureka, CA 95501.
- 3.6 <u>Site Management Plan and Related Technical Reports</u>. The Permittee shall submit to CDFW the project's current draft of the Site Management Plan and related technical reports if it was not included in the Notification. If the Site Management Plan and/or related technical reports are still in preparation, Permittee shall submit it and all subsequent revisions and updates within 30 days of submittal to the SWRCB.
- 3.7 <u>Invasive Species Management for Reservoirs</u>. The Permittee shall submit all required documents described in the Invasive Species Management for Reservoirs, **Bullfrog Management Plan** (Exhibit A) no later than **December 31** of each year. The Bullfrog Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.
- 3.8 <u>Pond Design/Inspection Report.</u> The pond shall be designed and/or inspected by a licensed geologist or engineer to determine if the embankment and spillway are stable, appropriately designed for 100-year flows and associated debris, and to evaluate potential risks to downstream resources. The Permittee shall submit site specific plans prepared by a licensed professional for CDFW review and approval prior to pond construction. Use shall be consistent with the terms of this Agreement.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

Sunshine Simmons 1301 Kansas St San Francisco, CA 94107 707-496-5550 ndim707@gmail.com Notification #1600-2018-0814-R1 Streambed Alteration Agreement Page 18 of 21

To CDFW:

Department of Fish and Wildlife Northern Region 619 Second Street Eureka, California 95501 Attn: Lake and Streambed Alteration Program – Greg O'Connell Notification #1600-2018-0814-R1

LIABILITY

Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

Notification #1600-2018-0814-R1 Streambed Alteration Agreement Page 19 of 21

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with, or obtaining any other permits or authorizations that might be required under, other federal, state, or local laws or regulations before beginning the project or an activity related to it. For example, if the project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

Nothing in the Agreement authorizes the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

The Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittee. To request an amendment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by the Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, the Permittee shall

Notification #1600-2018-0814-R1 Streambed Alteration Agreement Page 20 of 21

submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under CEQA; and 3) after payment of the applicable FGC section 711.4 filing fee listed at

https://www.wildlife.ca.gov/Conservation/CEQA/Fees.

TERM

This Agreement shall **expire five (5) years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605, subdivision (a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

Exhibit A. Bullfrog Monitoring and Management Plan

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's Notification #1600-2018-0814-R1 Streambed Alteration Agreement Page 21 of 21

behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR SUNSHINE SIMMONS

Sunshine Simmons

Date

FOR DEPARTMENT OF FISH AND WILDLIFE

Cheri Sanville Senior Environmental Scientist Supervisor

Prepared by: Greg O'Connell, Environmental Scientist, December 5, 2019

EXHIBIT A.

BULLFROG MONITORING AND MANAGEMENT PLAN FOR 1600-2018-0814-R1

GENERAL BULLFROG INFORMATION

The American bullfrog (*Lithobates catesbeianus* = *Rana catesbeiana*); hereafter bullfrog, is an invasive non-native species in California and poses a significant threat to California's native fish and wildlife resources. Bullfrogs were introduced in California over 100 years ago from eastern parts of the United States as a food supply but have since caused substantial ecological consequences. Bullfrogs are considered highly invasive and are well documented to be prey upon a variety of fish and wildlife species, including some that are rare, threatened, and endangered. Human modifications to the environment provide favorable condition to bullfrogs such as artificially created agricultural ponds, canals and ditches where warm still water occurs. As a result, bullfrogs have spread throughout California.

Efforts to control bullfrogs have been met with varying degrees of success because: 1) bullfrogs can be difficult to detect and go dormant from fall through winter, 2) bullfrogs often take cover in difficult areas to manage (e.g. dense vegetation), 3) they can travel long distances to colonize and re-colonize areas, 4) they have high reproductive output, 5) they are weary and readily flee perceived threats, and 6) they can survive physical trauma remarkably well. CDFW scientific staff recognizes there is an urgent and immediate need to develop improved bullfrog management strategies to protect California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. Public support and implementation of bullfrog control in California is an important conservation strategy that will help protect natural resources for future generations.

MONITORING

The Project reservoir(s) shall be monitored for bullfrog presence on an annual basis with a minimum of five total surveys, no less than two weeks apart, throughout the months of May-July

- All pond survey effort must be made by a person knowledgeable in bullfrog identification (see Appendix A for reference photos);
- Survey efforts shall include listening for bullfrog calls and slowly walking the complete perimeter of the pond at night* (dusk or later) while shining a flashlight to detect movement and eye-shine

If bullfrogs are not detected upon completion of five total surveys, or at any other time of the year incidentally, removal efforts are not required that year.

*Day time monitoring can also be conducted to aid detection but is not required under this plan.

SUCCESS CRITERIA

The level of effort needed to successfully manage bullfrog populations varies with infestation levels. This plan shall be considered successfully implemented if sufficient effort is provided to prevent adult bullfrogs from reproducing in the reservoir(s) each year, and no bullfrog life-stages can be detected. Bullfrogs are capable of traveling long distances over-land, and on-going

Notification #1600-2018-0814-R1 Lake or Streambed Alteration Agreement Page 2 of 4

efforts will be required to ensure dispersing bullfrogs do not colonize the reservoir(s) at a future time.

OPTIONS FOR MANAGEMENT

Two management methods may by employed for controlling bullfrogs under this plan and include:

- Manual direct removal
- Reservoir de-watering (Hydro-modification)

Implementing both reservoir de-watering and manual direct removal is currently believed to be the most effective method of managing bullfrog infestations. For reservoirs that are heavily infested with juvenile bullfrogs and/or tadpoles, reservoir dewatering may be necessary to break the bullfrog's life cycle and prevent on-going reproduction. Prior to conducting reservoir dewatering activities, please coordinate with CDFW Scientist Greg O'Connell at <u>gregory.oconnell@wildlife.ca.gov</u>.

Direct Removal

All direct removal efforts must be made by a person knowledgeable in bullfrog identification.

- Removal efforts must occur during, but are not be limited to the active/breeding season, occurring May – July;
- A minimum of *five* efforts throughout the season are considered necessary;
- Direct removal efforts are typically most effective when conducted at night with use of lights but can also be conducted during the day;
- Direct removal must include working the entire perimeter of the reservoir;
- A rubber raft or small boat may be necessary to successfully remove some individuals;
- A team of two individuals or more is often helpful, one person for shining lights and/or operating a boat and the other person to perform removal efforts;
- Bullfrog tadpoles must be removed and dispatched and must not be relocated or kept as pets.

Management Authorization

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (T-14) section 5.05(a)(28), under the authority of a sport fishing license. There is no daily bag limit, possession limit or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow or fish tackle.

Alternatively, FGC Section 5501 allows CDFW, as limited by the commission, to issue a permit to destroy fish that are harmful to other wildlife. The regulations have addressed this under Section CCR T-14 226.5 Issuance of Permits to Destroy Harmful Species of Fish in Private Waters for Management Purposes. This allows the CDFW to issue free permits to destroy harmful aquatic species by seining and draining.

Notification #1600-2018-0814-R1 Lake or Streambed Alteration Agreement Page 3 of 4

Pond Dewatering

Pond dewatering may be appropriate if the reservoir can be successfully dewatered without adversely affecting stream resources. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

In general, bullfrog tadpoles require two years to develop into frogs, whereas native amphibians only require one year. Therefore, draining a reservoir every year is intended to interrupt bullfrog tadpole development, dramatically decrease bullfrog populations and allow for reduced efforts as a measure of adaptive management. Typically, in Northern California, reservoir draining should occur in September through October to avoid impacts to sensitive native amphibian and fishery resources. While draining occurs, direct removal efforts should be employed as described above if possible.

REPORTING

A written log shall be kept of monitoring and management efforts and shall be provided to CDFW **each year** by December 31. The written log shall include: 1) date and time of each monitoring and management effort, 2) approximate number of each bullfrog life stage detected and/or removed per effort, and 3) amount of time spent for each monitoring and management effort.

APPENDIX A. BULLFROG REFERENCE PHOTOS



This is a photo of a Bullfrog tadpole. (Photo taken by Mike van Hattem).



The photos shown in this Appendix demonstrate a medium sized adult bullfrog that was removed from Ten Mile Creek, Mendocino County. Note the bullfrog has a large tympanum, (circular ear drum shown with an arrow) and **does not** have distinct ridges along its back (dorsolateral folds). Photo taken by Wes Stokes.



The bullfrog has somewhat distinct mottling and <u>the underside of the bullfrog's hind</u> legs are not shaded pink or red.

Appendix I

Addendum to the Cultivation and Operations Plan for Tree Pharm, LLC. Sunshine Simmons, APN: 210-191-059, Apps # 11207



February 20, 2020

County of Humboldt Planning and Building Department Cannabis Services Division 3015 H Street Eureka, CA 95501 Phone: 707-445-7541

Dear Elizabeth Moreno,

The following pages comprise the NRM response (in green) to your letter, dated March 29, 2019, and addressed to Mr. Sunny Simmons. The letter consisted of your review of the Mr. Simmons application for a commercial cannabis permit for Tree Pharm, LLC. located on Humboldt County APN 210-191-059 (Apps #11207).

NRM has attempted to address each concern raised by the County of Humboldt and described in the March letter to Mr. Simmons. In conjunction with this response, NRM is submitting an amended Cultivation and Operations Plan and Plot Plan (see attached). Page numbers and descriptions in the NRM response are taken from and refer to the Amended Cultivation and Operations Plan and Edited Plot Plan (NRM, 2020).

Sincerely,

Breeanna Kalson Environmental Planner Natural Resources Management Corporation bkalson@nrmcorp.com



COUNTYOFHUMBOLDT PlanningandBuildingDepartment CannabisServicesDivision

3015 H Street Eureka CA 95501 Fax: (707) 268-3792 Phone: (707)445-7541

May 29,2019

Tree Pharm, LLC.

RE: PermitApplicationNo.11207

APN: 210-191-015

Dear: Mr. Simmons

Thank you for your submittal of the above referenced application for a commercial cannabis permit. Unfortunately, after reviewing the application submittal was found not to contain all of the required information and we are unable to move the permit forward at this time.

Below is listed the information we need to continue processing this permit application:

- Even though, we have received the consent from the neighbors from APN 210-191-049, the property line on the eastside, will still need to be **surveyed by a qualified surveyor**. See Lot Line Survey 'Hoop 1 Detail' from Ed Gorge Jr, Feb 2020.
- Please revise the Cultivation and Operations Plan to include replacement of the existing 175,000-gallon water bladder with hard tanks, a pond, or other authorized water storage facilities. It is noted that the Plot Plan shows the proposed pond is located on the site of the existing water bladder. Please add a discussion in the Cultivation and Operations Plan, if applicable, of all needed elements to install the pond (i.e. Bullfrog Management Plan, grading permits, agency coordination, etc.).
 See 'Water Quality' page 19, #2 "pond" of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC;
- Please revise the Cultivation and Operations Plan regarding the status of obtaining the Initial Statement of Diversion and Use, Streambed Alteration Agreement, and other pertinent documents. See 'Regulatory Compliance' section (page 7) of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC; NRM Feb 2020.
- 4. Per the letter from California Department of Forestry and Fire Protection (CAL FIRE) dates October 7, 2017, please revise the **Cultivation and Operations Plan** to discussion, and show on the Plot Plan (or show on a separate plan), where appropriate, the emergency access turnarounds; signing & building numbers; emergency water standards designated water for storage for fire; and fuel modification standards. Requested detail described in document, 'Fire Safe Standards' section (pp22-23) of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC; and on Edited Plot Plan.
- 5. Please revise the **Cultivation and Operations Plan** to include a complete description of the month to month cultivation schedule. Please include a monthly accounting of projected water use in this section.

See subsections, 'Harvests' and 'Water' (tables 1 and 2) for cultivation schedule and anticipated water use -Pp 12 & 13 of NRM's Addendum to Cultivation and Operation

Plan for Tree Pharm, LLC

- The Cultivation and Operations Plan mentions installation of water reduction irrigation systems. Please include a description of these measures, the plan for implementation (if applicable), and volume of water they are projected to save. In the 'water' subsection, the plan for drip irrigation is described as a goal that will occur after cultivation has been approved and any permitted relocation of cultivation carried out – 2020 or 2021.
- Please provide additional detail on how the employees will travel (i.e. individual vehicles, carpooling, etc.) to the site daily.
 Please see 'Employees' subsection (page 20) of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC.
- Please revise the **Plot Plan (**or show on a separate plan) the location of proposed parking (needed for all employees) and show connection of access road to named County/State roadway.

See Figure 2 and Figure 3 (Pages 5 & 6) of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC; NRM Oct 2019.

 Please revise the Cultivation and Operations Plan to discuss the details of the Soil Management Plan.
 See 'Soils Management' section (page 11) of NRM's Addendum to Cultivation and Operation Plan for Tree Pharm, LLC; NRM Oct 2019.

Without this requested information the Department is unable to fully evaluate this project for compliance with the findings specified in Humboldt County Code Sections 312-1.1.2 and 312-17 et seq., and the California Environmental Quality Act (CEQA). Until this additional information is received we must suspend further evaluation of your project application.

We have limited this list to the information essential to our understanding of your project's compliance with the findings for permit approval. If you believe the information requested is not required, you may submit a letter indicating such and request that your project be taken to a Hearing Officer Zoning Administrator. However, going to hearing prior to having submitted documentation sufficient to show that all findings for permit approval can be made will result in a Department recommendation of denial for the project.

We understand that securing this documentation may require additional work by you or by others on your behalf. However, you must be diligent in your efforts to complete these items or the Department will have no option other than to schedule your project for a hearing and decision as described above.

When you have assembled all the requested material, submit these items with this letter as a package to the Cannabis Planner on Duty (CPOD) during regular business hours attn: Elizabeth Moreno. In order to devote our time to actively working on applications that are fully complete and ready to move forward, the county must strictly adhere to our policy of not accepting incompleteorindividual submittals of required information. All required items must be submitted as a single package. In order to complete your application and restart the review process we will need for you to submit this deficiency letter with all required submittals as a package. Once the required information is received processing your application will promptly resume.

Please remember that the filing of a permit application does not authorize the applicant to engage in any new commercial marijuana cultivation, processing, manufacture or distribution activity. No such activity shall commence until the application has been processed to decision and all requisite clearances, permits and/or licenses have been secured. If you have questions about this letter, please contact Elizabeth Moreno at emoreno@co.humboldt.ca.us, or call at 707.445-7245.

Sincerely, Elizabeth Moreno Planner