Commercial cannabis grow parcel number 093–0 32–071

P.C. 01/25/2024
Item # 4

J Yates <jenniferyates2001@hotmail.com>
Fri 1/19/2024 10:41 PM
To:Planning Department <planning@edcgov.us>

Attention: Karen L Gardner, Director
I stand in opposition to the commercial grow, and large construction project, proposed for Somerset community.
I worked in this business for decades, and never once saw a grow that didn't use more than their share of water, and leave large traces upon the land that they were polluting. Malathion and glyphosphate based fertilizers are not uncommon.
Somerset is a community where families are trying to raise their children without having that kind of neighbor supplying temptation to our young children. Although not near any schools I'm pretty sure that this parcel is on a school bus route.
Please heed my warning that no matter how much revenue is gained from issuing such a permit it will pale in comparison to the investment the state will have to make to clean up after such a large scale operation.
Each plant raised to maturity outdoors requires a swimming pool worth of our precious water. Per plant!!
I cannot make it to the hearing on January 25 but please count my voice, as a 45 year resident of El Dorado County, I strongly oppose the issuing of this permit.
Sincerely,
Jennifer T Yates.

Sent from my iPhone

Fwd: Clarification of Neighbor Concerns: Harde Cannabis Cultivation Project

P.C. 01/25/24
Item # 4
2 Pages

David Harde <davidharde123@gmail.com>
Mon 1/22/2024 7:51 AM
To:C Clary <cclary8786@gmail.com>
Cc:Evan R. Mattes <Evan.Mattes@edcgov.us>;Aaron D. Mount <aaron.mount@edcgov.us>

Dear Alice and Carolyn
Thank you for sharing your concerns. I value and appreciate your feedback and suggestions. Please see the attached email which I hope will address and allay your concerns. Of major significance is the smaller footprint of the proposed cultivated area.

Our cultivation license for 2024 is a 10,000 square foot area. Originally Phase One of our proposal was one acre in cultivation area. We have reduced the area in size after considering your concerns. Additionally, the distance from your property line is well over 500' from that cultivation area and 957' from your home or the closest occupied residence. Our odor specialist has included an email stating the reduced size and increased setback distance from the eastern property line will the is sufficient based on the results in the October 18, 2023 Memo.

It is my intention to maintain and support a friendly, safe, and healthy family environment in Somerset. I appreciate and value our neighborhood and hold it in high esteem. I have lived on Perry Creek Road for 43 years and I have nurtured and cared for my property and our neighborhood throughout that time. I hope to be able to continue to see our community flourish and thrive for many years into the future.

I appreciate hearing your concerns and my hope is that this email will allay concerns that you have about the proposed farm project. The proposed farm project has followed and adhered all stipulations and regulations put forth by El Dorado County and the State of California.

Please be aware that this proposed project has currently been scaled back in size by 77 percent. The intention is to cultivate a licensed area of 10,000 square feet, far less than original one acre.Therefore the current proposed project is now only 23 percent of the initial proposal; this redefined cultivation area represents a considerably smaller footprint.

During the 43 years that I have lived in Somerset I have participated in and supported the following community ideals:

- Founding member of the Sierra Gold Chapter of The California Certified Organic Farmers,1985 and member 38 years to present
- Established and operate, Somerset Gourmet Farm, certified organic farm cultivating vegetables, wine grapes, industrial hemp,1982 to present
- Founder and volunteer manager of the first El Dorado County Certified Farmers Market at the EDC Fairgrounds, Placerville in 1986
- Volunteer and community promoter establishing the first school garden at Pioneer Elementary School 1986 to 1989
- Founder, owner and manager of Noah's Ark Natural Foods, Placerville's first community natural foods market, 1992 to 2011
- Member of Placerville Community Pride Committee, 3 years, 1993 to 1996
- El Dorado County Fair Director, 13 years, 1993 to 2006
- Grower of the first one acre, commercial industrial hemp farm production, Somerset, El Dorado County. 2019, 2020

- Business Owner of Heart Hemp, farm grown, Certified Organic CBD Hemp Derived Health and Beauty Products, 2020 to Present
- Owner Of Organic Farming Innovations, LLC, a California Corporation developing practical, sustainable, small scale organic farming systems.

In response to your listed concerns expressed in your January 18, 2024 letter to Evan Mattes, El Dorado County, California:

Security: Our security plan as presented in our environmental study, approved by the EDC Sheriff's Department will be fully installed and operational before our project is completed.
The surveillance systems, equipment, gates, locks and fencing have been reviewed and approved by the EDC Sheriff's Office. Our security fencing is an 8' non-climb game fence.

Water: As an organic and sustainable farmer, I am dedicated to conserving our natural resources utilizing the most efficient irrigation techniques and practices. Our Irregation practices are exemplary as we incorporate the best and newest technology. The farm currently and going forward will continue drip irrigation, row covers, cover crops and technology to maximize minimal water use promoting conservation of our water resources.

Chemicals/Odors: Integrated Pest Management, OMRI Approved organic soil amendments. Organic fertilizers, organic pesticides and mechanical weed control methods practiced on farm. No petrochemical based pesticides or fertilizers are used. Beneficial insects and crop monitoring are used to maintain a healthy and sustainable ecosystem.Public health: One of our cultivation methods is successive seeding, I.e., cultivating the same total licensed area, but planting and harvesting at different times. This enables us to at any given time as two plantings and two harvests require smaller nursery areas and smaller drying facilities. These plants are considerable shorter and less dense, thus having a lesser amount of cannabis scent.
We are researching OMRI Approved odor neutralizing additivesVOC odors and vapors: These compounds are naturally released by plants, animals and microorganisms. Mountain Misery, a common roadside plant, emits the spicy forrest scent. Limonene, a BVOC or Biogenic Volatile Compound, is emitted into our atmosphere by conifers in our neighborhood. The distance of our planting site from the public roadway and fence lines has been determined to be below the levels of odor detection.

Traffic: The DOT Study determined no impact, no traffic increase.

Noise: We currently have a working farm. The addition of this proposed project will utilize existing farm equipment and therefore there will be no additional noise.
Pollen: Female cannabis plants have no pollen and therefore there will be no increase in allergens.

Waste: Composting of cannabis vegetative waste materials, trunks and branches, is on site in a designated and controlled site location. Composting, the reduction of plants to elemental carbon, nutrients and organic matter is then reincorporated into our planting soils.

Fire Risk: The EDC Fire Department reviewed and approved our site, fire safe plan and fuel reduction plans. Moreover, we will install two (2) fire draft valves available for neighborhood emergency water resources. We are a neighborhood fire control resource.

Property Values: Our rural economy and environment has not suffered negative home value consequences due to agricultural and farming endeavors. In fact, planned development, reviewed, studied and published in our Environmental Impact Report supports the goals of good neighbor relationships, protects public safety, and the maintenance of a unique, healthy, vibrant quality of rural life.

David Harde
Somerset Gourmet Farm
Innovative Farming Innovations
davidharde123@gmail.com
530-906-7892
6540 Perry Creek Road
Somerset, California 95684

FW: CCUP21-0002

Kathy Witherow <kathy.witherow@edcgov.us>
Mon 1/22/2024 1:50 PM
To:Planning Department <planning@edcgov.us>

P.C. 01/25/24
Item # 4
238 Pages

3 attachments (12 MB)
ZPEZUOCC128_MSDS.pdf; D - Staff Report Exhibits A-J.pdf; E - Staff Report Exhibit K - Proposed Mitigated Negative Declaration and Intial Study.pdf;

Kathy Witherow
Executive Assistant
Planning and Building Department

County of El Dorado
Planning and Building Department
2850 Fairlane Court
Placerville, CA 95667
Direct: (530) 621-7593
Kathy.witherow@edcgov.us

Elevate to El Dorado
A Great Place to Live, Work & Play

From: C Clary <cclary8786@gmail.com>
Sent: Monday, January 22, 2024 11:28 AM
To: Kathy Witherow <kathy.witherow@edcgov.us>
Subject: CCUP21-0002

Hi Kathy,
I appreciate your time today.

Attached is the Staff Report Exhibit K: Proposed Mitigated Negative Declaration and Initial Study related to file 24-0114. (with a few blue comments of mine added and issues at hand identified in red but not changed from original text)

The Impact Analysis (starts on page 36 of the pdf) does not address the use of ZEP Odor Control anywhere at all.

Page 43 of the pdf addresses the Odor Mitigation System yet there is no mention of what the proposed chemical is. Nor is it mentioned under any of the sections addressing Sensitive Receptors or Toxic Air Contaminants.

In the Revised Technical Memorandum in the Staff Reports Exhibits A-J (also attached) on page 31, it states Zep Odor Control is the chemical used and is what the study was based on using. Please see the Data and Safety Sheet regarding this chemical (attached).

I am respectfully requesting that an amended Proposed Mitigated Negative Declaration and Initial Study which

more accurately reflects the effects of this project be completed before presenting this project to the Planning Commission. Otherwise, it is an incomplete and inaccurate mitigation declaration.

Thanks so much,
Carolyn Clary
6500 Klare Road
Somerset CA

Zep Commercial Sales & Service
1310 Seaboard Industrial Blvd.
Atlanta, GA 30318
1-888-805-HELP (4357)
www.zepcommercial.com

Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name Zep Odor Control Concentrate

Product code ZUOCC

Date of issue 03/07/13 **Supersedes** 11/10/11

This product is a registered pesticide. Number: 6836-165-40849

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 404-352-1680

For Medical Emergency
(877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency
CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared By
Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

*Hazard Determination System (HDS): Health, Flammability, Reactivity

DANGER!

CAUSES EYE BURNS. CAUSES SKIN IRRITATION. HARMFUL IF SWALLOWED.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects **Routes of Entry** Dermal contact. Eye contact.

Eyes Causes eye burns. Direct contact with the eyes can cause irreversible damage, including blindness. Inflammation of the eye is characterized by redness, watering and itching.

Skin Causes skin irritation. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation May cause irritation of respiratory tract, coughing, shortness of breath.

Ingestion Harmful if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects Contains material which may cause damage to the following organs: blood, kidneys, liver, spleen, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea. Repeated eye exposure may produce chronic inflammation of the eye or corneal damage. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Carcinogenicity No known significant effects or critical hazards.

Product/ingredient name

Not available.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	2.00
IPA; Isopropyl Alcohol; propan-2-ol	67-63-0	< 2

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call medical attendant, medical doctor, or poison control center.

Skin Contact Take off contaminated clothing. Flush affected area immediately with large amounts of water for at least 15 minutes.

Inhalation Move exposed person to fresh air. If breathing is difficult, Get medical attention.

Ingestion Call medical doctor or poison control center immediately. If affected person is conscious, give plenty of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)

Flash Point Not available.

Flammable Limits Not available.

Flammability Non-flammable.

Fire hazard In a fire or if heated, a pressure increase will occur and the container may burst.

Fire-Fighting Procedures Use an extinguishing agent suitable for the surrounding fire.

Section 6. Accidental Release Measures

Spill Clean up Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Storage Observe label precautions. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
IPA; Isopropyl Alcohol; propan-2-ol	**ACGIH TLV (United States, 2/2010).** TWA: 200 ppm 8 hour(s). STEL: 400 ppm 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 400 ppm 8 hour(s). TWA: 980 mg/m³ 8 hour(s). STEL: 500 ppm 15 minute(s). STEL: 1225 mg/m³ 15 minute(s). **NIOSH REL (United States, 6/2009).** TWA: 400 ppm 10 hour(s). TWA: 980 mg/m³ 10 hour(s). STEL: 500 ppm 15 minute(s). STEL: 1225 mg/m³ 15 minute(s). **OSHA PEL (United States, 6/2010).** TWA: 400 ppm 8 hour(s). TWA: 980 mg/m³ 8 hour(s).

Personal Protective Equipment (PPE)

Eyes Safety glasses. Splash goggles. Face shield.

Body Chemical-resistant gloves. Neoprene, Nitrile or Rubber gloves.

Respiratory Use with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State Liquid. [Clear.]

pH 6 to 7

Boiling Point Not available.

Specific Gravity 1.01

Solubility Easily soluble in the following materials: cold water and hot water.

Color Colorless to light yellow.

Odor Lemon-like.

Vapor Pressure Not available.

Vapor Density Not available.

Evaporation Rate Not available.

VOC (Consumer) 1.2 % (w/w) 0.105 lbs/gal (12.6 g/l)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

Hazardous Decomposition Products carbon oxides (CO, CO_2), sulfur oxides (SO_2, SO_3 etc.)

Section 11. Toxicological Information

Acute Toxicity

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LD50 Oral	Rat	426 mg/kg	-
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Section 12. Ecological Information

Aquatic Ecotoxicity

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	Acute EC50 670 ug/L Fresh water	Algae - Green algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	-	Acute EC50 5.9 ppb Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute LC50 0.28 ppm Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
propan-2-ol	-	Acute LC50 1400000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 mm	96 hours

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Classification: Non-hazardous waste by Characteristic.
Origin: RCRA waste.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	Not regulated.	-	-	-	
TDG Classification	Not regulated.	-	-	-	
IMDG Class	-	Not determined.	-	-	

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

Product name

propan-2-ol

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations

California Prop 65 No products were found.

Canada

WHMIS (Canada)

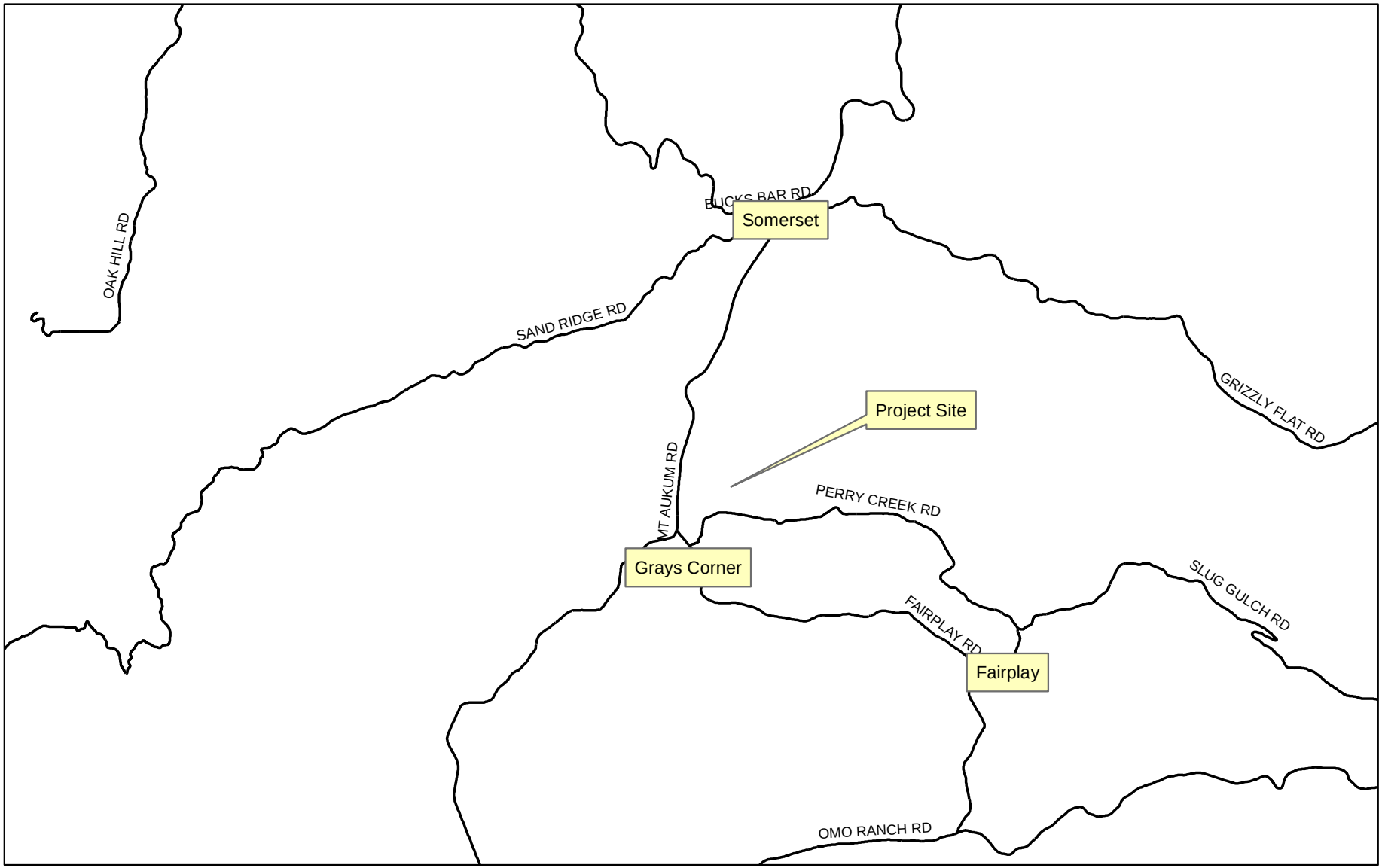
Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class E: Corrosive material

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.*

klm



CCUP21-0002/Harde
Vicinity Map
Exhibit A

N

0 0.75 1.5 3 Miles

CCUP21-0002/Harde
Aerial Map
Exhibit B

N

0 0.04 0.08 0.16 Mile

POR. SECS. 16 THRU 21, T.9N., R.12E., M.D.M.

93:03

1 " = 1,200 '

Bk 93 Pg 34 | Bk 93 Pg 18 | Bk 93 Pg 21 | Bk 93 Pg 31 | Bk 93 Pg 22 | Bk 93 Pg 25 | Bk 93 Pg 04 | Bk 93 Pg 30

Bk 46 Pg 62 | Bk 93 Pg 33 | Bk 46 Pg 04 | Bk 93 Pg 17 | Bk 93 Pg 19 | Bk 46 Pg 41 | Bk 46 Pg 40 | Bk 46 Pg 04 | Bk 46 Pg 80 | Bk 46 Pg 77 | Bk 46 Pg 78 | Bk 46 Pg 79 | Bk 46 Pg 06 | Bk 93 Pg 20 | Bk 94 Pg 02 | Bk 94 | Bk 94 Pg 03 | Bk 94 Pg 05 | Bk 94 Pg 06 | Bk 94 Pg 24 | Bk 95 Pg 08

NUTMEG LN | PISTACHIO LN | KRUSE LN | MT AUKUM RD | TIGER EYE RD | MEYERS LN | HI TWIST LN | SNOWBIRD LN | SNOWBIRD PL | PANO LN | GRIZZLY FLAT RD | ANT HILL RD | RED BAT RD | PERDENADO RD | OUTINGDALE RD | COSUMNES RIVER DR | M/R PARADISE DR | PARADISE RANCH RD | MIRA CIEL WAY | PERRY CREEK RD | BLAIR RD

1 — 80.0 A
2 — 48.33 A
3 — 30.52 A
4 — RS 18/13 — 40.0 A
5 — RS 14/79 — 42.02 A
6 — PPM 10/26/A — 20.56 A
7 — PM 10/26/B — 10.3 A
8 — 10.33 A — PM 10/26/C
9 — 40.0 A
10 — RS 18/150/1 — 40.0 A
11 — 5.0 A — PM 23/129/C
12 — PM 23/129/A — 10.23 A
13 — 12.28 A
14 — PM 23/129/B — 11.05 A
15 — PM 16/14/A — 19.98 A
16 — 20.0 A — PM 16/14/B — 1193.00'
17 — PM 16/14/C — 21.41 A
18 — RS 18/150/2 — 40.06 A
19 — RS 18/150/5 — 20.91 A
20 — RS 18/150/4 — 168.83 A
21 — M/R
22 — RS 18/150/3 — 120.49 A
23 — PM 47/108/1 — 102.22 A
24 — PM 47/108/2 — 76.63 A
25 — 40.0 A
26 — 80.0 A
27 — M/R
28 — M/R
29 — NA
30 — 5.0 A
31 — 5.0 A
32 — 5.0 A
33 — NA
34 — PM 47/108/3 — 181.06 A
35 — 1.0 A
36 — 39.0 A
37 — POR 2
38 — POR 2
39 — 20.0 A
40 — 10.0 A
41 — 10.0 A
42 — RS 32/18/1 — 19.614 A
43 — RS 32/18/2 — 19.746 A
44 — RS 24/7/1 — 62.96 A
45 — RS 24/7/2 — 17.55 A
46 — 4.08 A
47 — 80.0 A
48 — 20.0 A
49 — RS 23/17/1 — 9.9 A
50 — RS 23/17/2 — 9.9 A
51 — 40.0 A
52 — RS 25/7/1 — 5.482 A
53 — 10.0 A
54 — PM 29/138/A — 15.07 A
55 — 5.482 A
56 — PM 29/138/B
57 — RS 23/101 — 21.93 A
58 — 40.0 A — PM 27/134/B — 5.482 A
59 — 10.06 A — PM 30/67/3
60 — PM 29/138/B
61 — RS 23/101 — 167.999 A
62 — 5.482 A
63 — PM 29/138/A — 15.07 A
64 — 10.06 A
65 — PM 29/138/B
66 — 10.0 A
67 — RS 20/1/1 — 44.09 A
68 — 5.482 A
69 — PM 29/138/A — 15.07 A
70 — 10.06 A
71 — RS 12/13 — 57.294 A
72 — PM 29/138/B
73 — PM 48/66/2 — 66.615 A
74 — PM 48/66/3 — 76.258 A
75 — 4.08 A
76 — NA — 74.292 A
77 — 5.482 A
78 — PM 29/138/A — 15.07 A
79 — 10.06 A
80 — RS 30/96/2 — 53.050 A
81 — 5.482 A
82 — 34.55 A
83 — PM 29/138/A — 15.07 A
84 — 10.06 A
85 — RS 30/140/2 — 51.80 A
86 — RS 30/140/1 — 50.38 A
87 — RS 30/140/3 — 52.23 A

U.S.A. | USA | NA | Middle Fork Cosumnes River

RS 14/97

Acreages Are Estimates

THIS MAP IS NOT A SURVEY. It is prepared by the El Dorado Co. Assessor's office for assessment purposes only. Area calculations and characteristics are not guaranteed. Users should verify items such as dimensions and acreage.

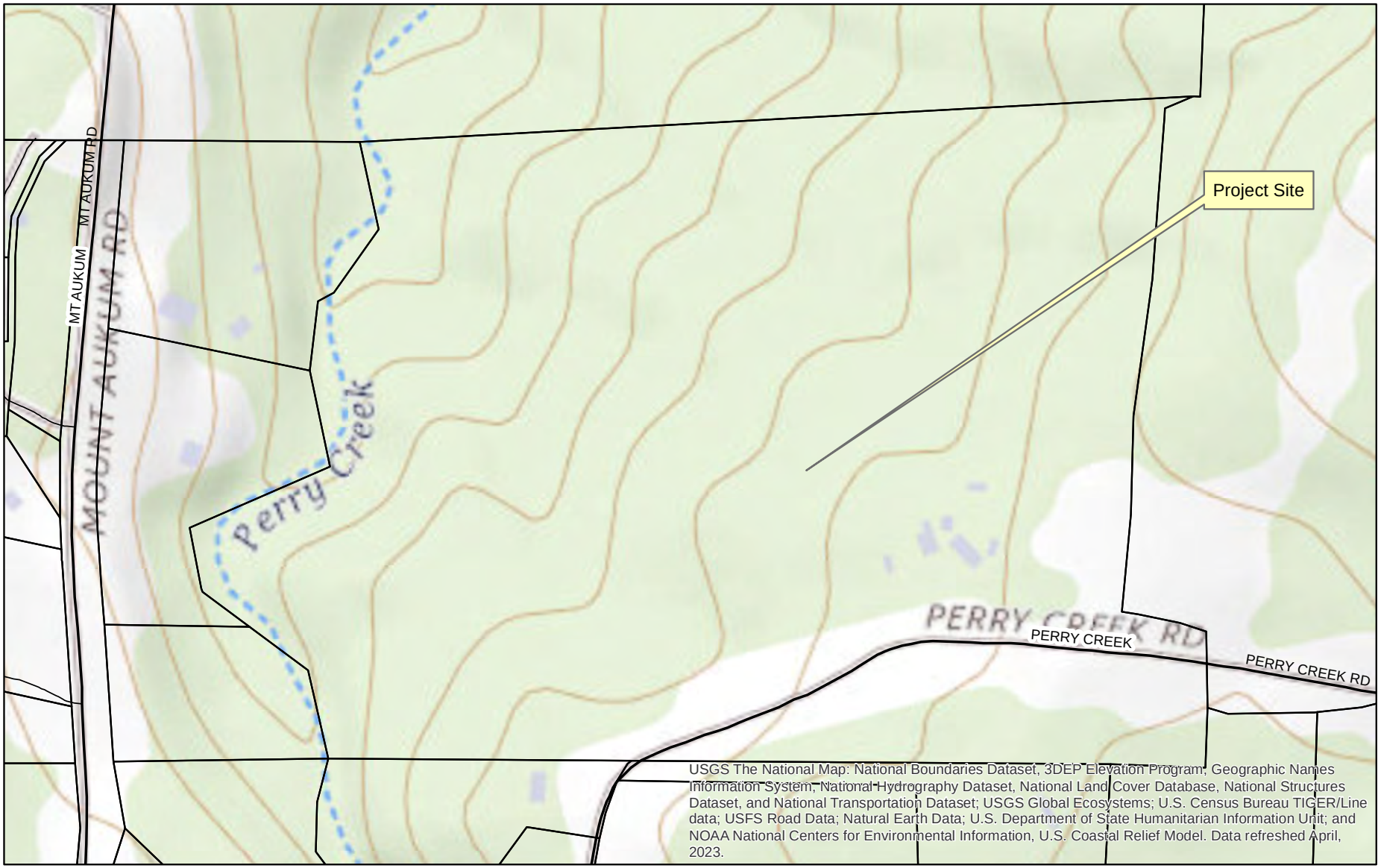
CCUP21-0002 Harde
APN Map
Exhibit C

Adjacent Map Pages Shown in Grey Text
Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

NOTE: All parcels on this page are Assessor's Block #2

Rev. Dec. 16, 2009

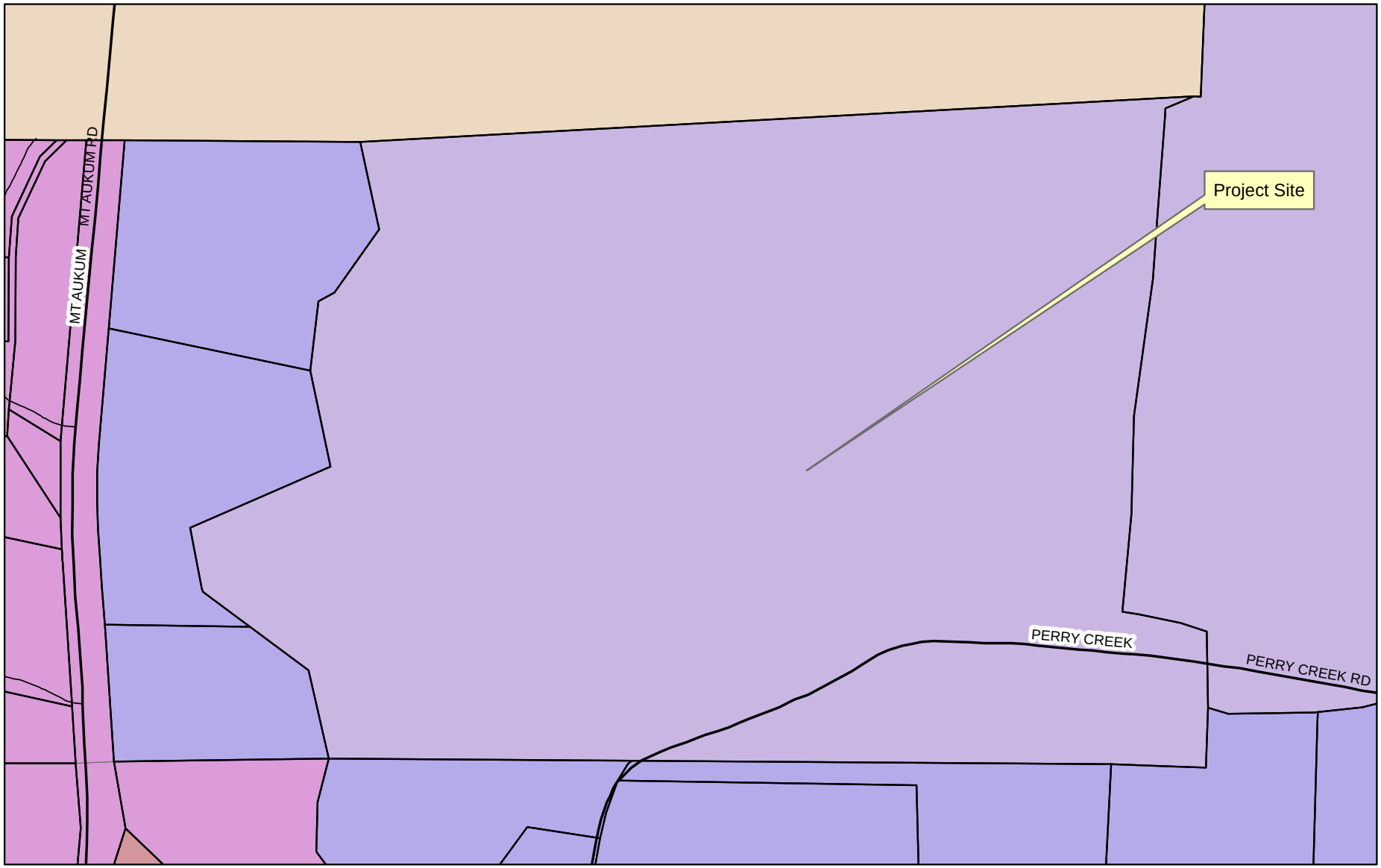
Assessor's Map Bk. 093, Pg.03
County of El Dorado, CA



CCUP21-0002/Harde
Topography Map
Exhibit D

N

0 0.04 0.08 0.16 Mile

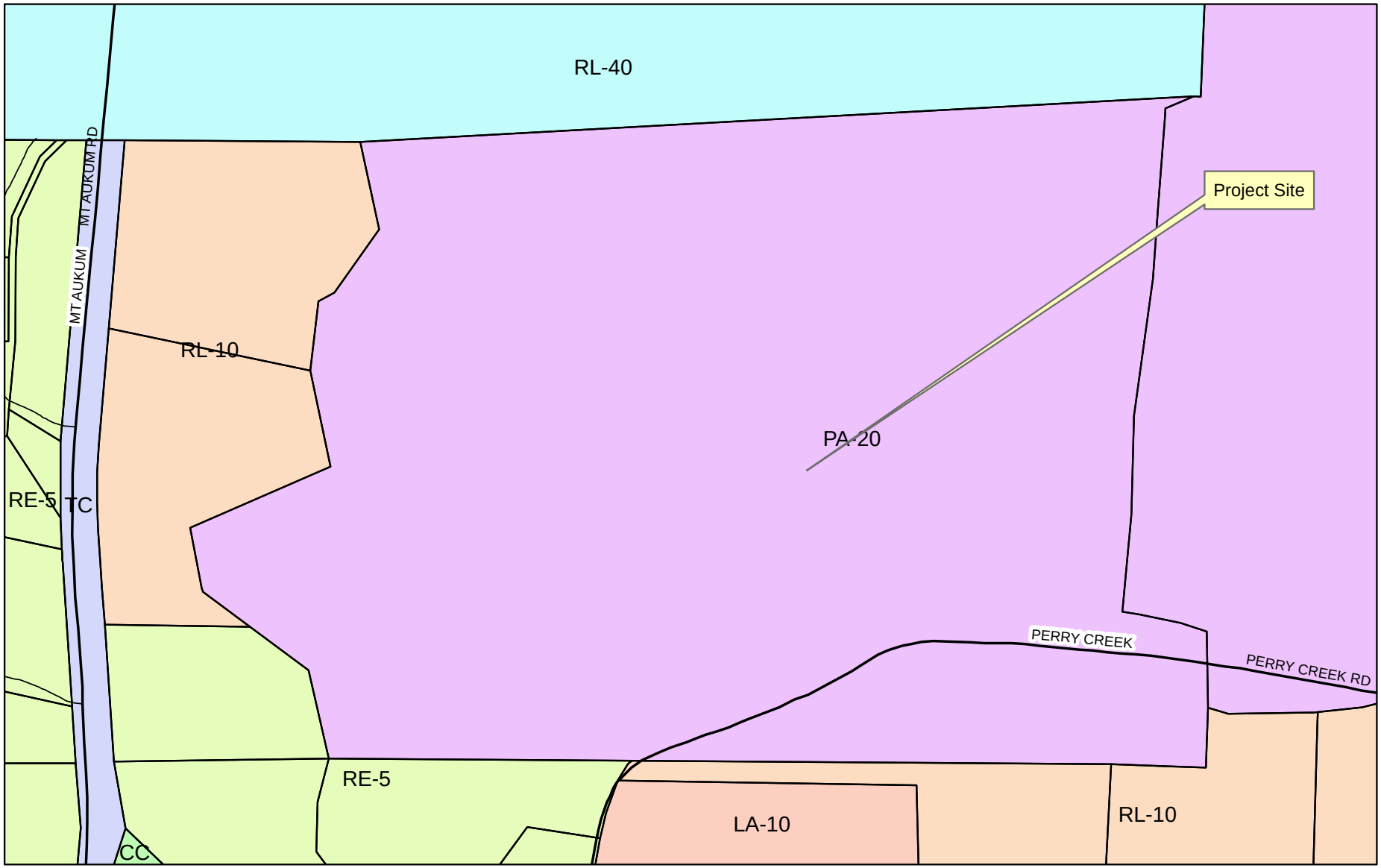


AL
OS
C
RR
MDR

CCUP21-0002/Harde
General Plan Land Use Designation Map
Exhibit E

N

0 0.04 0.08 0.16 Mile

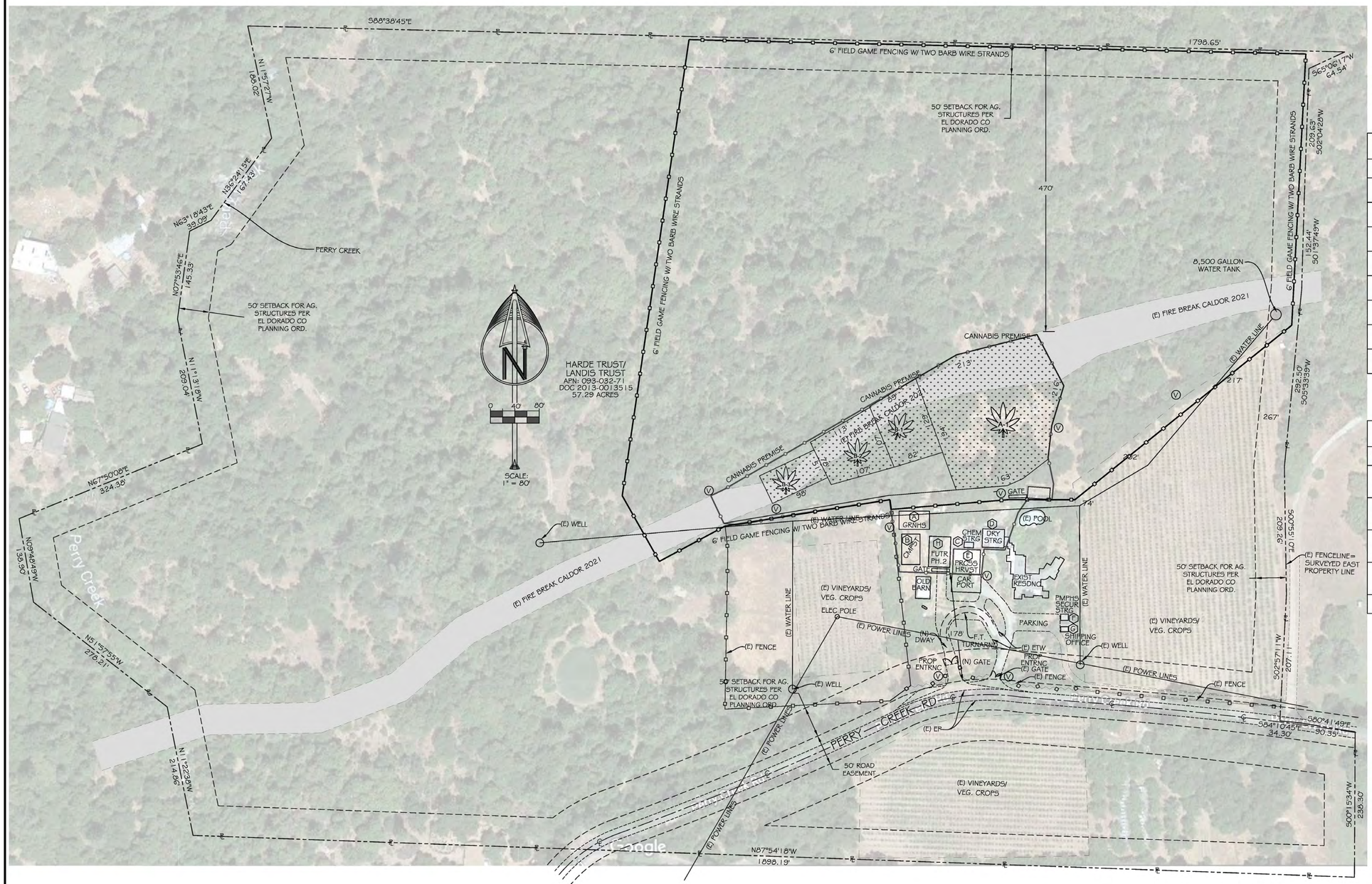


CC
RL-10
LA-10
RL-40
PA-20
TC
RE-5

CCUP21-0002/Harde
Zoning Designation Map
Exhibit F

N

0 0.04 0.08 0.16 Mile



** CANNABIS FACILITIES **

SYMBL#	DESCRIPTION
A	GREEN HOUSE- IMMATURE PLANTS 30' x 50'
B	COMPOST AREA 30' x 50'
C	CHEMICAL/ SECURE STORAGE 10' x 16'
D	DRY STORAGE 36' x 32'
E	PROCESS/ HARVEST BUILDING 44' x 40'
F	SECURE STORAGE VAULT 11' x 13'
G	OFFICE/ SHIPPING RECORDS 9' x 13'
H	*FUTURE PHASE 2 PROCESS/ HARVEST 35' x 50'

** OUTDOOR CULTIVATION **

SYMBL#	TYPE/ AREA	DIMENSIONS
	OUTDOOR CULTIVATION 43,000 SQ. FT.	200' x 215'
B-1	OUTDOOR CULTIVATION 10,000 SQ. FT.	89' x 112'
B-2	OUTDOOR CULTIVATION 10,000 SQ. FT.	107' x 91'
B-3	OUTDOOR CULTIVATION 5,000 SQ. FT.	51' x 98'
TOTAL:	68,000 SQ. FT.	

** LEGEND **

- PROPERTY LINE
- (E) FENCE LINE
- EDGE TRAVELED WAY
- (E) VINE/ VEGETABLES
- CENERLINE OF ROAD
- EDGE OF EASEMENT
- CNBS PRMS LIMIT
- 6' FNC W BARB WIRE
- (E) POWER LINE — OVRHEAD POWER LN
- (E) WATER LINE — UNDRGRND WTR LN
- OUTDR CULTIVATN AREA PER TABLE
- A — ADDT. CANNABIS FACILITY PER TABLE
- V — VIDEO CAMERAS/ ALARM SNSR

PREMISE DIAGRAM SITE PLAN

6540 PERRY CREEK ROAD
SOMERSET, CA 95684
APN: 093-032-71
DAVID HARDE, OWNER
EML: davidharde123@gmail.com
PH: 530-906-7892
FIRE DEPT: PIONEER FPD

CCUP21-0002/Harde
Exhibit G - Preliminary Site Plan

REVISIONS:

REVISIONS:

PREMISE DIAGRAM SITE PLAN
CANNABIS CULTIVATION & PROCESSING
APN #: 093-032-71
6540 PERRY CREEK ROAD
SOMERSET, CA 95684

OWNER:
DAVID HARDE
6540 PERRY CREEK ROAD
SOMERSET, CA 95684
davidharde123@gmail.com
(530) 906-7892

DRAWN BY:
PHILLIP GEROVDAKIS
3061 NEWTOWN ROAD
PLACERVILLE, CA 95667
pgerovdakis@gmail.com
(530) 903-0236

GD CONSULTING

SHEET: C2

REVISED TECHNICAL MEMORANDUM

To: David Harde

Date: October 18, 2022

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Copies: Arron Mount
El Dorado County Planning

Subject: Analysis of Odor at the Proposed Outdoor Cannabis Cultivation Located in Somerset (El Dorado County), California

INTRODUCTION AND SUMMARY

Environmental Permitting Specialists (EPS) has completed its review of potential odors at your proposed outdoor cultivation premises in Somerset. The site is located at 6540 Perry Creek Road, in Somerset.

The maximum area for outdoor cultivation is approximately 1.5 acres (68,560 square feet). The distance between the cultivation areas and the property lines varies between 1,650 feet to 20 feet. The nearest home is located 650 feet East of the property. A site map showing the cultivation areas and distances to the property lines is shown in Figure 1.

EPS used an air dispersion model, 1 year (2019) of hourly wind and temperature data at Somerset and on-site measurements of odor intensity at other locations to conduct this analysis. Data from 4 other outdoor cannabis and hemp cultivation facilities and one Tedlar bag sample were reviewed as part of the current analysis. Odor measurements taken at 0.75 acre outdoor cultivation site in Yolo County were used as baseline odors to predict odors at the property lines.

The results of our analysis indicate that maximum odor intensity along the property lines would range from 2.73 to 21.08 DT. Since there is a potential for odor intensity exceeding El Dorado

County's limit of 7 DT, EPS recommends the installation of an odor control system along a portion of the Eastern property line to mitigate the odors. See Figure 8.

This Technical Memorandum presents the methodology, data and assumptions used in this analysis. These are described in detail below. A description of the recommended odor control system is attached.

SCOPE AND METHODOLOGY OF ODOR ANALYSIS

The overall methodology used in this analysis is to use an atmospheric dispersion model to predict the dilution of odors as they migrate away from the outdoor cultivation area. By calculating the relative concentration of odors adjacent to the cultivation area and at the property line(s), we can determine the dilution ratio defined as odor concentration at the cultivation area divided by concentration at the property line(s).

For example, if the maximum concentration at the cultivation area is 5,000 micrograms per cubic meter (ug/m3) and the relative concentration at the property line 2,000 ug/m3, the dilution ratio would equal:

$$\text{Dilution Ratio} = \frac{5{,}000 \text{ ug/m3}}{2{,}000 \text{ ug/m3}} = 2.5$$

In other words, the odors would be dilution by a factor of 2.5 as they migrate from the cultivation area towards the property line.

The dilution factor is used along with measurements at other outdoor cannabis cultivation sites to predict odor intensity at property lines. This methodology was reviewed by the staff at El Dorado County Air Quality Management District (AQMD) to confirm that this approach would be acceptable. The District agreed with this approach as noted in their August 28, 2020 letter to Aaron Mount at El Dorado County Planning.

Modeling Methodology

We used the EPA and AQMD recommended AERMOD dispersion model (Version 19191) along with one year (2019) of hourly wind data for Somerset. The data (known as MM5) is derived from weather satellites to calculation winds and other parameters for all locations in the continental US. The data used was prepared by Lakes Environmental (Waterloo, Canada)[1].

The main cultivation site was modeled as a single ground based area source. Concentration were calculated using a 20 meter grid using an emission rate of 1.00×10^{-4} grams/sec-square meter. See Figure 7.

[1] Lakes Environmental. Waterloo, Canada. Information on the development of local wind data based on the MM5 for Somerset can be found at: https://www.weblakes.com/services/met_data.html#aermetmm5

The model results are concentrations in terms of micrograms per cubic meter at each grid location averaged over 1-hour. These concentrations are meaningful only in a relative sense to help establish the dilution pattern. It is recognized that the averaging time for odors is a few minutes, not 1 hour. Typically, peak concentrations over a few minutes are many times greater than those over 1 hour. However, the ratio of concentrations and the dilution factor will remain the same whether averaged over a few minutes or 1 hour averaging tine.

Finally, we note that the maximum predicted concentration varies with both the distance and the direction from the cultivation site. Generally, the concentration decreases with distance from the cultivation site, however, since the canopy is modeled with a release height of 2 meters, the peak concentration occur some distance from the canopy. Figures 4 and 5 illustrate the spatial distribution of 1-hour relative concentration. These figures show an East-West alignment of maximum odors.

Baseline Odor Used in the Analysis

We used odor measurements taken at a Yolo County outdoor cannabis site. This outdoor site covers 0.75 acres and is located at 22945 County Road 23, Esparto. At the time the measurements were taken, the plants were 2 weeks away from harvesting. Odor measurements were taken September 22, 2020 that indicated odor intensity of 15 DT. However, we noted that there were brief periods when odor intensity was above 15 but were not fully captures by the Nasal Ranger. We estimated the odor intensity to be closer to 20 DT and this is the value used in the current analysis. A complete documentation of the September 22nd odor survey is attached.

CALCULATION OF ODOR INTENSITY AND RESULTS

The calculation of odor intensity at the property lines is as follows:

$$\text{Odor Intensity at Property Line} = \frac{\text{Baseline Odor Intensity (DT)}}{\text{Dilution Factor}}$$

For example, the odor intensity at the Eastern property line (Figure 6) would equal:

$$\frac{20 \text{ DT}}{1.08} = 18.59$$

The results for the closest property lines is summarized on the next page.

Location	Distance to Property Line		Maximum Conc.	Conc. At Property Line	Lowest Dilution Ratio	Fenceline DT
	(ft)	(m)				
Eastern Property Line	20	6.1	1,764	1,640	1.08	18.59 (uncontrolled) 4.1 (controlled)
North Property Line	550	167.7	17,617	3,619	4.87	4.11
Western Property Line	1250	381.1	17,617	3,926	4.49	4.46
Southern Property Line	250	76.2	17,617	2,407	7.32	2.73
Nearest Home	650	198.2	17,617	367	48.1	0.42
Baseline DT	20					

The odor intensity at the Eastern property line would exceed the County's threshold of 7. As a result, odor mitigation along this property line is required. A misting system that dispenses a fine atomized mist containing an odor neutralizer will be used to control odors. Information about the odor control system is attached.

Effectiveness of Proposed Odor Mitigation

EPS has coordinated the measurements of odors[2] with and without odor mitigation using a misting system. A three-day odor survey was conducted on October 1-3, 2019 to measure the intensity of odors near greenhouses equipped with an odor neutralizing misting systems. The greenhouses were located in Chico, CA. A copy of the odor assessment report is attached.

Odor intensity was measured using a Nasal Ranger near the exhaust vents, at the property lines and at off-site locations with and without mitigation. Each greenhouse has several hundred cannabis plants that were approaching the harvest stage (See Figures 8 to 11). This is the stage when the maximum odors are known to occur.

To simulate the effectiveness of the odor control system, odors were allowed to accumulate overnight in the greenhouses with no ventilation. Then in the morning, exhaust fans were turned on and the intensity of odors were measured with and without the misting system in operation. See Figure 9. These measurements were repeated over 3 days to verify the effectiveness of the odor control system. See Test Rounds 1,2,6 and 7 on pages 8-10 in the attached odor assessment report.

The results of the survey indicated that odors declined from 7 DT to below 2 DT when the odor misting system was employed. Since the lowest odor intensity that can be measured with a Nasal

[2] Odor Assessment Study. Bosarge Environmental, LLC. November 1, 2019. Copy of report attached.

Ranger is 2 DT, it is not possible to distinguish odors that are 1 or 2 DT. If you assume odors were reduced to 1 DT, then that equates to a 86% reduction in odors. If the odors were reduced to 2 DT, then the reduction in odors is 71%. EPS assumed an average reduction in odors of 78% resulting in an odor intensity of 4.1 along the Eastern property line.

Once a permit has been issued and cannabis cultivation proceeds, EPS staff will be available to conduct odor monitoring at your property to confirm the effectiveness of the odor control system and that odors do not exceed the County limit of 7 DT.

As a way of comparison of odors that are associated with other industries, the following table lists typical odor intensities within 500 feet from each industry. EPS has been involved in several studies related to odor measurements at different industries.

Industry	Type of Odor	Odor Intensity (DT)
Meat Rendering	Rotting Animal Smell	Above 180
Pulp and Paper	Sulfur Compounds	Above 180
Wastewater Treatment Plants	Hydrogen Sulfide	60 to 120
Dairies	Rotten Egg	120+
Landfills	Rotten Egg	60+
Composting Facilities	Ammonia/sulfur	60+

FIGURES

Figure 1


PROPERTY DIAGRAM SITE PLAN
6540 Perry Creek Rd
Somerset CA 95667
Parcel 1 ID: 093-032-071-000
Lot 1 area: 57.29 Acres
Plot Size: 24"x36"
cont>1900ft
cont>1924ft
cont>1948ft
cont>1996ft
cont>2020ft
cont>2044ft
cont>2068ft
cont>2092ft
cont>2116ft
cont>2140ft
N
scale 1"=100'
VICINITY MAP
Property line
1767'
Property line
Property line
Property line
Gate
Perry Creek Rd
Existing Vineyards / Vegetable Crops
Prpoerty Enterance/Exit Gate
1656'
200'
Water Tank
Owners: David Harde
6540 Perry Creek Road,
Somerset, CA 95667
530-906-7892
davidharde123@gmail.com
Pio-neer FPD
68,560 sqft. Cultivation
Created by:
GETASITEPLAN.COM

Figure 2

Modeling Grid

Figure 3

Contours of Relative 1-Hour Concentrations

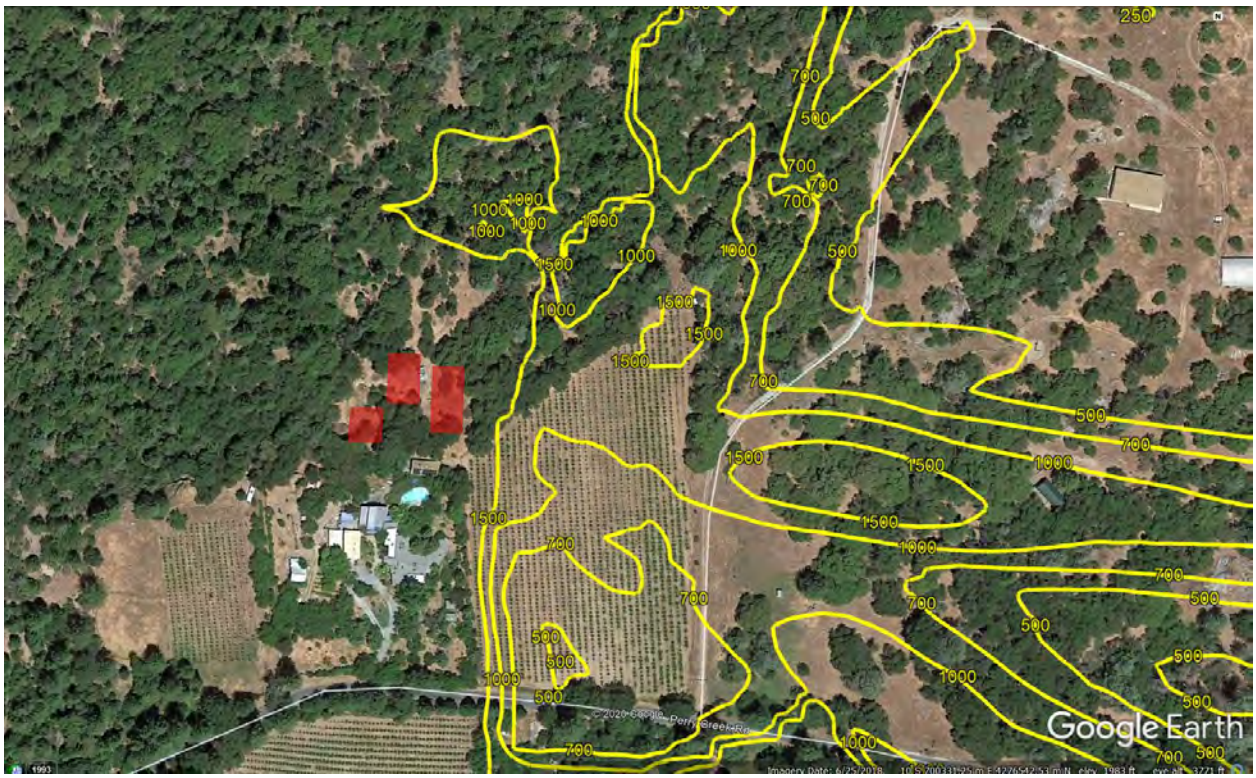

Figure 4

Contours of Relative Concentration (close-up)

Showing Location of Nearby Home

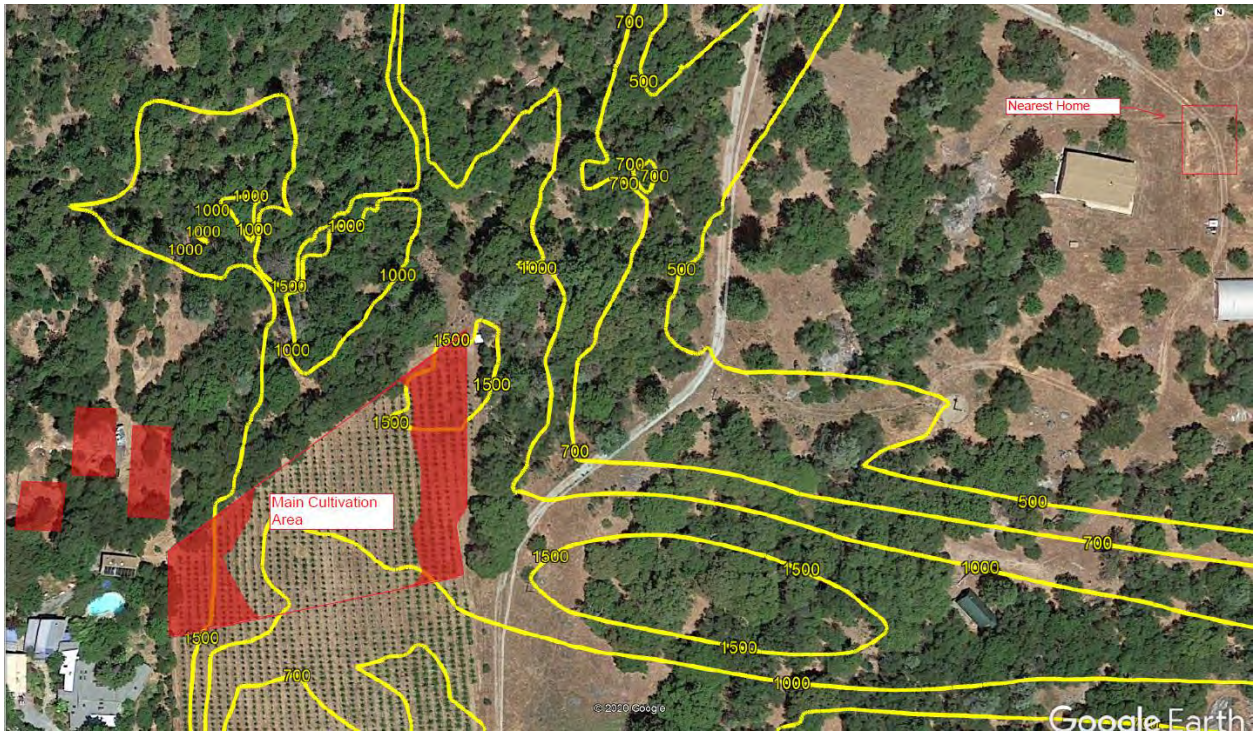

Figure 5

Numerical Values of Relative Concentration

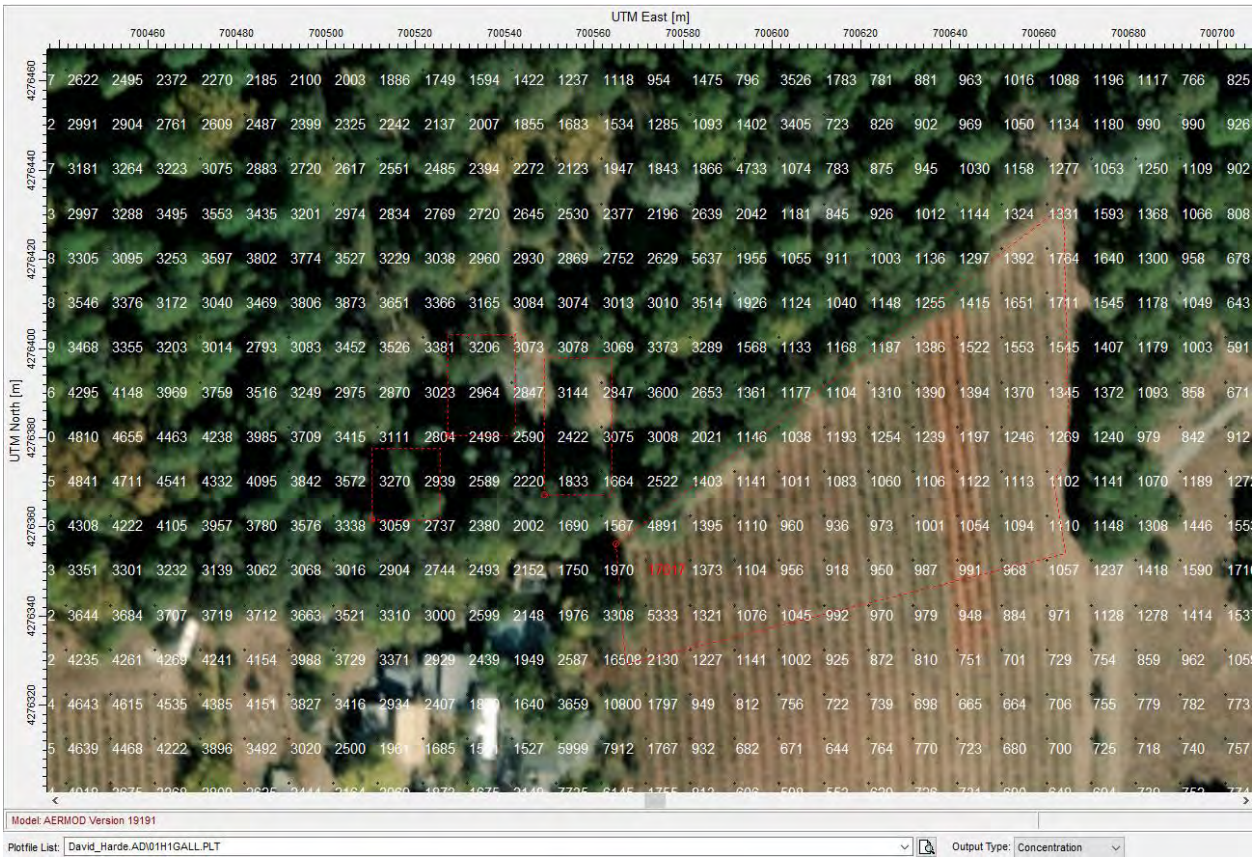

Figure 6

Sample Calculation of Dilution Factor at Eastern Property Line

Distance to Property Line 20 feet (6.1meters)

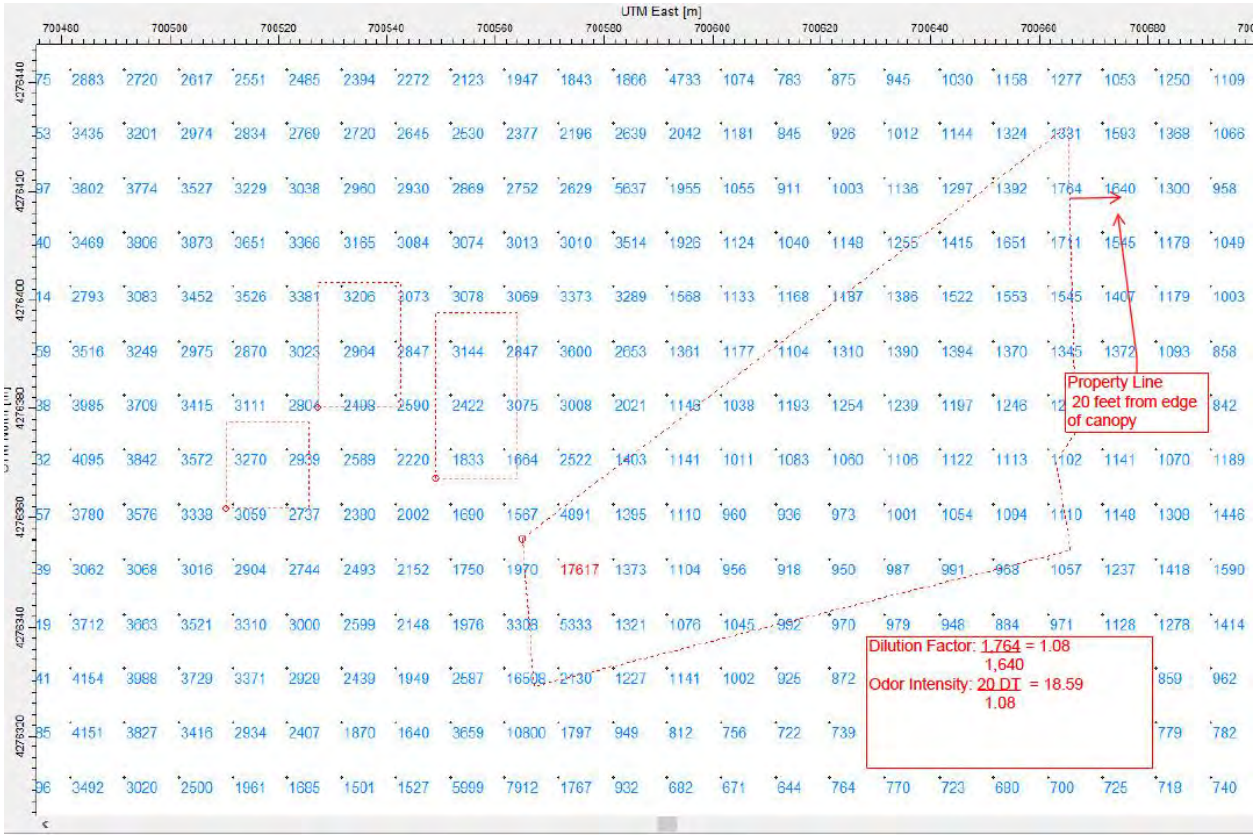

Figure 7

Summary of Results and Recommended Mitigation

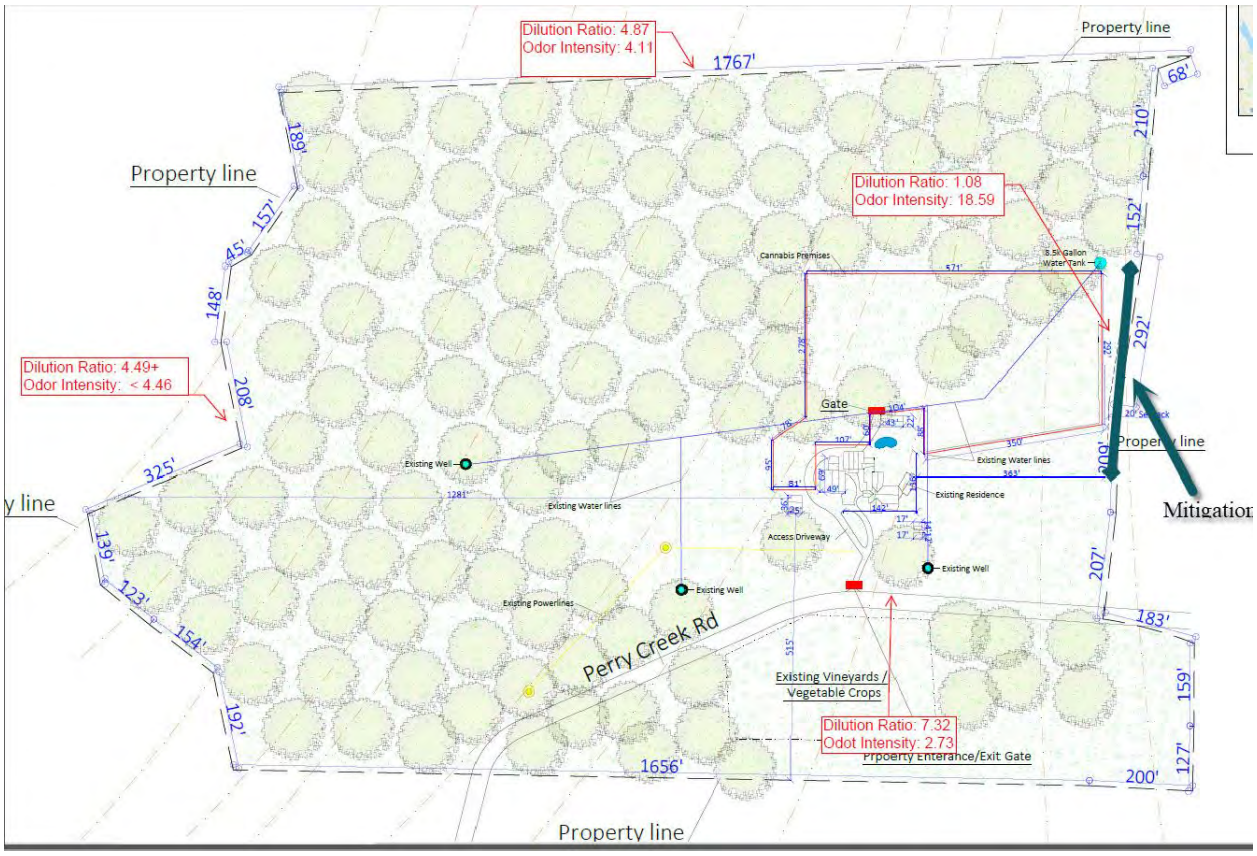

Figure 8
Overview of Greenhouses Used in the Odor Neutralizer Assessment

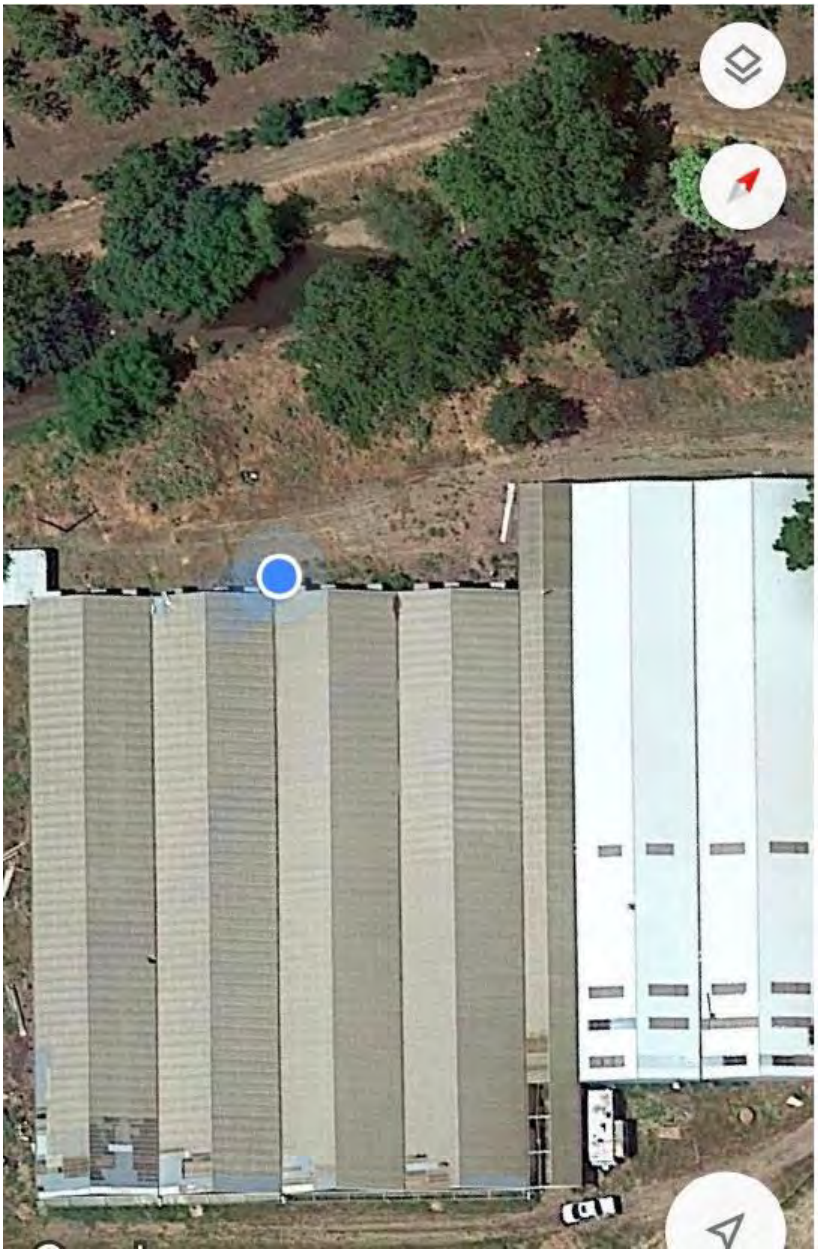

Figure 9
Interior of Greenhouses Used in the Odor Neutralizer Assessment

Figure 10
Details of Odor Control Misting Nozzles

Figure 11
Field Measurements of Odor Intensity Using Nasal Ranger
Oct 1-3, 2019

Description of Odor Mitigation System

24-0114 Public Comment
PC Rcvd 01-22-24

Approximately 350 feet along the Eastern portion of the property require odor mitigation. This was shown in Figure 7.

There are two option for mitigating odors:

1. Use a misting system that sprays the odor neutralizer across the property line.

2. Use a fan that blows the neutralizer across and towards the canopy.

Information about these systems is attached.

Given the relatively small portion of the property that requires mitigation, the fan based mitigation is recommended. Three to six fans would be mounted along the Eastern portion of the property line. The amount of neutralizer that would be dispensed is adjusted to ensure that odors are neutralized. The effectiveness of the system will be confirmed by measuring the odor intensity using the Nasal Ranger olfactometer.

Sample Misting Systems that Spray Odor Neutralizer Mixed with Water

24-0114 Public Comment
PC Rcvd 01-22-24

Misting System by NCM

http://www.ncmodorcontrol.com/

24-0114 Public Comment
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Commercially Available Odor Neutralizer

24-0114 Public Comment
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Odor Control Concentrate

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The Micro-Jet® DS 7421 drum mounted unit features precision control of particle size, from a dry, 7-micron ULV (ultra low volume) droplet to the larger particles of conventional fogging and misting equipment. ULV application provides greater penetration and diffusion of fog particles, allowing more concentrated solutions to be used and shortening application times. Also, the higher surface to volume ratio of small droplets makes them superior for odor control and other gas contact applications.

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Fog master's Micro-Jet DM 7421 -- technologically advanced fogging, with controlled flow and particle size.

SPECIFICATIONS

Motor	1 Hp., 120VAC 50/60Hz, 8.0 amp. Optional: 240VAC, 4.0 amp
Fogging Nozzle	High-shear, vortex design nozzle
Particle Size	7-30 micron VMD, adjustable
Chemicals	Water- and oil-based solutions
Liquid Flow Rate	0-10 oz/min [0-300 ml/min], adjustable Nine-turn vernier control valve, memory lock
Capacity	Mounts to chemical drum (not included)
Materials of Construction	Power head, drum adapter - aluminum Tubing - fuel and oil resistant vinyl Control valve - glass filled nylon, stainless stem, Viton® seal Fittings - brass Nozzle - Celcon
Dimensions	H x L x Dia: 15.4 x 12.5 x 8.6 in [39 x 32 x 22 cm]
Shipping Weight	12 pounds

Weaver Consultants Group

GOC Tech

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- WASTEWATER TREATMENT FACILITIES

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Odor Assessment Report

Bosarge Environmental, LLC

October 1 to 3, 2019

Bosarge Environmental, LLC
707 Bienville Blvd.
Ocean Springs, MS 39564
(228) 217-3180

November 1, 2019

Fulcrum Enterprises, LLC
390 Main Street
Great Barrington, MA 01239

RE: Odor Assessment Study

Introduction

Fulcrum Enterprises, LLC, (Fulcrum) retained Bosarge Environmental, LLC, as a third-party Odor Expert, to analyze the cannabis odor impact of a facility in California that is similar to a project Fulcrum is proposing for approval in Great Barrington, MA. The California facility is much older, but very similar in building size and plant production, of the proposed new facility. The Fulcrum design incorporates the same measures for odor control as the California facility. Fulcrum plans to present this odor study of an existing operational facility as a model for permitting the new facility.

Ms. Melanie Bosarge conducted ambient odor surveys the three days of October 1- 3, 2019. This time frame was selected because the operation was in full flowering stage. During this period, the greenhouses would have a crop of fully formed flowering cannabis plants at the stage when terpene odor is the greatest, creating a "worst-case-scenario" of odor for the facility.

Ms. Bosarge is a Chemical Engineer and Owner/Manager of Bosarge Environmental, LLC. She has represented St. Croix Sensory (St. Croix) as a certified instructor and provided client training and odor assessment services, as an independent contractor, since 2002. For more than thirty-five (35) years, St. Croix has been assisting facility owners, consulting engineering firms, and regulatory agencies to quantify odors from a variety of industrial, agricultural, and municipal operations, including wastewater treatment, landfills, composting, and manufacturing in both field and laboratory settings. St. Croix manufactures and markets state-of-the-art odor sampling and measurement equipment, including the Nasal Ranger Olfactometer. St. Croix's "ODOR SCHOOL"® is an internationally recognized program to prepare inspectors to conduct field evaluations of ambient odors.

Ambient Odor Assessment Methodology

Odor surveys were conducted using a newly calibrated Nasal Ranger field olfactometer to quantify odor strength when odor was noticed at each monitoring location. The Calibration Certificate appears in the Appendix as ***Exhibit 1***. Prior to odor observations, an inspector breathes through carbon cartridges for approximately one minute to "zero" nose to 100%. Upon arrival at each separate location, ambient odor is assessed with the "naked nose". If no odor is detected, the current time and "non-detected" (ND) is recorded. If an odor is detected, a reading is then taken with Nasal Ranger Olfactometer.

Using the Nasal Ranger, odor strength is measured as dilution ratios, reported as Dilution-to-Threshold (D/T) values. The Nasal Ranger Dilution-to-Threshold odor measurement is an "instantaneous" measurement, which is a recognition threshold. For example, a 4-D/T is the dilution ratio of 4-volumes of carbon filtered odor free air mixed with one-volume of ambient (odorous) air that makes the ambient odorous air "just-barely-recognizable" as an odor.

The D/T dilution ratio steps of the Nasal Ranger olfactometer used for the odor surveys were 2, 4, 7, 15, 30, and 60. If an odor is detected with the "naked nose" at a location, a measurement is taken with the Nasal Ranger. An odor in the air that is not measured at the 2-D/T dilution ratio is reported as less than 2-D/T (<2). The absence of ambient odor is reported as "non-detected" (ND).

Figure 1 – Nasal Ranger Olfactometer is a photograph taken during an odor survey at a cannabis growing operation in Colorado.

Figure No. 1 – Nasal Ranger Olfactometer

Building and Odor Control Specifications

NCM Environmental Solutions (NCM) constructed the odor neutralizing mist system for the California facility and currently provides the odor neutralizing agent and ongoing maintenance of the system. The California facility is much older, but very similar in building size and plant production, of the proposed new Fulcrum facility. Fulcrum plans to incorporate the same measures for odor control as the California facility. Consequently, one of the objectives of this odor study was to evaluate the efficiency of the exhaust and odor neutralizing system.

The cannabis growing area is made up of seven (7) greenhouses, two hundred (200) feet in length and forty-two (42) feet in width. Each greenhouse has three (3) rows of four hundred (400) plants, totaling twelve hundred (1,200) plants per greenhouse. The greenhouses have multiple holes on the siding and roof, as shown in pictures in ***Exhibit 2.***

NCM system specifications include an electric 1 HP system with a 1.75 GPM high pressure atomizing pump, operating at 800 PSI. During the odor study, the chemical injection pump was not automated. It was adjusted by hand using two knobs, as shown in photographs in ***Exhibit 2.***

The exhaust vents are fifty-five inches, square shaped, and powered by a 1-HP motor. Each exhaust vent has three (3) NCM 1.9 GPH nozzles. The nozzles are located on the exhaust vents, centered and positioned in a straight line. The California facility maintains the odor neutralizer injection pump at their preferred setting of 1000:1 dilution ratio. This set dilution ratio achieves the level of odor control needed and works within operations budget. Growers have determined that the facility has low levels of cannabis odors without the system on; therefore, the 1000:1 dilution ratio is sufficient for that site.

Odor Survey – Introduction and Mapping

Upon arrival at the facility on the afternoon of October 1, 2019, Ms. Bosarge was taken on an extensive tour of the site. Each step of the odor control system was identified and explained. A plan of action was developed and coordinated. The first odor survey was performed to test the efficiency of the odor control system. After concluding the onsite test, Ms. Bosarge investigated the area within the security fence, and along accessible residential, commercial and agricultural areas throughout neighborhood. Meteorological conditions were recorded and several locations were mapped and designated as survey locations. No odors were detected past the perimeter of the property during this initial investigation.

After the initial tour and first round of controlled test measurements of the odor neutralizer, Ms. Bosarge continued independently to develop a monitoring plan and complete several additional surveys during the three-day odor assessment study. Sixteen (16) onsite locations within the fenced area of the property and twelve (12) locations in the surrounding community were designated and mapped by recording latitude and longitude coordinates at each location. Unique identification codes were assigned to each location. The onsite locations were designated as Locations A through P. The offsite locations were designated as Locations 1 through 12. The center point of the cannabis greenhouses was designated as Location X. Latitude and longitude coordinates for each location were entered into Odor Tracker software to produce Google Earth Maps of the areas within the property and the surrounding community.

Table No. 1 Cannabis Facility Odor Monitoring Locations lists the center of the cannabis facility as Location X, along with twenty-eight (28) ambient odor survey locations. The table specifies an identification number, the latitude and longitude coordinates for each location and whether each location is onsite or offsite.

Table 1 - Cannabis Facility Odor Monitoring Locations

Loc #		Name	Latitude	Longitude
1	Offsite			
2	Offsite			
3	Offsite			
4	Offsite			
5	Offsite			
6	Offsite			
7	Offsite			
8	Offsite			
9	Offsite			
10	Offsite			
11	Offsite			
12	Offsite			
A	Onsite	Test Area 6 Ft from Exhaust		
B	Onsite	Test Area 12 FT From Exhaust		
C	Onsite	Test Area 24 Ft From Exhaust		
D	Onsite	West Corner of Greenhouses		
E	Onsite	South Corner of Greenhouses		
F	Onsite	South Midpoint of Greenhouses		
G	Onsite	East Corner of Greenhouses		
H	Onsite	East Corner of Whse		
I	Onsite	East Midpoint of Whse		
J	Onsite	North Corner of Whse		
K	Onsite	North Corner of Greenhouses		
L	Onsite	North Center of Greenhouses		
M	Onsite	Front Gate To Property		
N	Onsite	Post by Dumpster		
O	Onsite	Post Behind House		
P	Onsite	On Hill Behind House		
X	Onsite	Reference Center of Facility		

Figure No. 2 - Odor Inspection Locations Full View identifies the center of the cannabis facility as Location X and each of the twenty-eight (28) monitoring locations on a Google Earth map. The offsite Locations 1 through 12 are featured in this figure.

Figure No. 2 - Odor Inspection Locations Full View (Google Earth Map)

Figure No. 3 - Onsite Odor Inspection Locations identifies the center of the cannabis facility as Location X, and each of the sixteen (16) onsite monitoring Locations A through P on a Google Earth map.

Figure No. 3 - Onsite Odor Inspection Locations (Google Earth Map)

Odor Survey – Discussion

Fourteen (14) ambient odor surveys were conducted during the three-day study. Seven (7) of the rounds were performed offsite, in the surrounding community, and seven (7) rounds were conducted onsite. Two (2) of the onsite rounds, referred to as Test Rounds, included locations on the side of the greenhouses where the odor control system is installed. The objective of these Test Rounds was to evaluate the efficiency of the exhaust and odor neutralizing system.

For the Test Rounds, Locations A, B and C were designated at points six feet, twelve feet and twenty-four feet away from the exhaust fan of the greenhouses with the most mature plants. The exhaust fan, when operational, was blowing from the greenhouses at approximately sixteen MPH. The Test Rounds were performed under different scenarios to test the efficiency of the exhaust and odor neutralizing system.

Five (5) additional odor surveys were conducted onsite, within the facility property over the three-day odor study. During each survey, the date, time, odor reading and meteorological conditions, including temperature, humidity, precipitation, sky conditions, wind speed and wind direction were recorded at each location. Each survey was recorded separately and odor survey data reports appear in the Appendix as ***Exhibit 3***.

Approximately one hundred and sixty-eight (168) odor observations were recorded during the three-day study. During those days, seven offsite odor surveys were completed and seventy-nine (79) offsite observations were recorded. No cannabis odor was detected offsite at the property perimeter or in the community during those three days. The meteorological conditions, time of day and level of odor treatment varied between each offsite survey. Based on the results of the Odor Study, cannabis odor from the cultivation process does not leave the property.

During the same three-day timeframe, seven (7) onsite odor surveys were conducted and eighty-nine (89) onsite observations were recorded. No cannabis odor was detected during fifty-two (52) of those observations. Cannabis odor was detected at <2 D/T during twenty-three (23) observations and 2 D/T during nine (9) observations. Cannabis odor was detected at a level of 4 D/T during three (3) observations and 7 D/T during two (2) observations. During each observation of 4 D/T and 7D/T, the exhaust system had just been activated without odor neutralizer treatment, after cannabis odors had built up over night in the greenhouses. Those values returned to 2 D/T or less, within minutes after the greenhouses were properly vented and/or treated. These levels are extremely low for onsite operations.

Meteorological data and odor observation readings, from each Round, were loaded into the Odor Tracker software. ***Exhibit 3*** displays the results of each of the fourteen (14) Rounds. ***Exhibit 4*** contains several Maps that were created by the Odor Tracker Software, utilizing the entered data.

Odor Rounds Summary

Test Round 1 - Onsite

On the first afternoon, Test Round 1 was conducted from approximately 2:45 PM until 3:30 PM. In ***Exhibit 3,*** the Round 1 Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30%, and the temperature was 74 degrees F. The wind was moderate and blowing from the west northwest. Prior to the odor observations, the exhaust and odor neutralizer systems were turned off. Cannabis odors were allowed to accumulate within the greenhouses. At 2:45 PM, the ventilation and exhaust system was turned on, without engaging the mist system. Measurements were taken at the three locations A, B and C, as the exhaust fans were turned on, but with no water mist or odor neutralizer. A reading of 7 D/T was taken at Location A with the Nasal Ranger. Within two minutes, a reading of 4 D/T was taken at Location B. Within two more minutes, a reading of 2 D/T was taken at Location C. These readings are higher than normal, because of the accumulation of cannabis odors, with an outdoor temperature of 74 degrees F and without any consistent ventilation in the greenhouses.

The next test was performed with the exhaust fans on and water mist only. After the system was on for approximately five minutes, a reading of 4 D/T was taken at Location A. Within two minutes, a reading of 2 D/T was taken at Location B. Within two more minutes, a reading of <2 D/T was taken at Location C. The lower readings were due to a combination of additional venting time and the water mist.

The odor control system was fully operational for the third and fourth set of readings. Each survey was within five to eight minutes of each other and results were identical at Locations A, B and C. A reading of <2 D/T was taken at Locations A and B. At Location C, no odor was detected. From these test results, it appears that a fully operational odor control system lowers the odor intensity readings from 7 D/T to <2 D/T, at six to twelve feet from the greenhouse ventilation fan. At twenty-four feet, the odor intensity goes from 2 D/T to non-detected.

Round 2 - Onsite

Several more onsite locations were designated and observed that afternoon, during Round 2, from 3:36 PM until 4:11 PM. The sky was sunny with no precipitation. The humidity was 20%, and the temperature was 74 degrees F. The wind was moderate and blowing from the northwest. The odor control system was fully operational. Odor was observed at <2 D/T at Locations D, E and G. No odors were detected at Locations M or K.

Round 3 - Offsite

After the initial onsite investigation, several offsite locations were designated and observed during Round 3, from approximately 4:13 PM until 5:06 PM. In ***Exhibit 3,*** the Round 3 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 19%, and the temperature was 74 degrees F. The wind was moderate and blowing from the west northwest. The odor control system was fully operational. No odors were detected.

Round 4 - Offsite

On the second day of the odor study, a few more offsite locations were designated and observed during Round 4, from approximately 9:56 PM until 10:30 PM. In ***Exhibit 3,*** the Round 4 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 51%, and the temperature was 55 degrees F. The wind was calm and blowing from the north. The odor control system was not operational yet. No odors were detected.

Test Round 5 - Onsite

Several more onsite locations were designated and observed during Round 5, from approximately 11:00 AM until 11:45 AM. In ***Exhibit 3,*** the Round 5 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30 - 36%, and the temperature was 63 - 64 degrees F. The wind was light and variable. The odor control system had been during the night and had not been turned on yet. Odor was detected at a level of 2 D/T at Location O. At that moment, this location was downwind of greenhouses. Odor was detected at a level of <2 D/T at Locations A, B and F. No odors were detected at the other onsite locations.

Test Round 6 - Onsite

On the second day, Test Round 6 was conducted from approximately 11:40 AM until 12:24 PM. Additional onsite Locations L & K were incorporated into Test Round 6. In ***Exhibit 3,*** the Round 6 Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30%, and the temperature was 64 degrees F. The wind was light and blowing from the north. Prior to the odor observations, the exhaust and odor neutralizer systems were still turned off. Cannabis odors were accumulating within the greenhouses, but appeared to be staying within the greenhouses. Readings were taken at Locations A and B at a level of <2 D/T. No odor was detected at Locations C or L. At approximately 11:45 PM, the ventilation and exhaust system was turned on, without engaging the mist system and allowed to vent for ten minutes. A reading of 2 D/T was taken at Locations A, B and C, within two minutes of each other. Within five to six more minutes, a reading of <2 D/T was taken at Locations L and K. These readings are higher than the first set of readings, because of the discharge of accumulated cannabis odors in the greenhouses.

The odor control system was fully operational during the next set of readings. The system was allowed to operate for fifteen minutes before odor was measured. A reading of <2 D/T was taken at Locations A, B and C. At Locations L and K, no odor was detected. From these test results, it appears that a fully operational odor control system, operated for fifteen to twenty minutes, lowers the odor intensity readings to non-detectable up to <2 D/T, at six to twenty-four feet from the greenhouse perimeter.

Round 7 – Onsite

After Test Round 6, one more set of observations were taken onsite, from approximately 12:26 PM until 12:51 PM. In ***Exhibit 3,*** the Round *7* Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 25%, and the temperature was 70 degrees F. The wind was light and blowing from the north. The odor control system was fully operational for approximately twenty to forty-five minutes. No odors were detected. This onsite round indicates that under the circumstances stated above, the odor control system, when operated consistently for less than one hour, reduces all onsite cannabis odor to zero.

Round 8 – Offsite

Offsite locations were observed during Round 4, from approximately 12:58 PM until 1:28 PM. In ***Exhibit 3,*** the Round 8 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 24%, and the temperature was 72 degrees F. The wind was light and blowing from the north. The odor control system was fully operational. No odors were detected.

Round 9 – Offsite

Offsite locations were observed during Round 9, from approximately 6:09 PM until 6:34 PM. In ***Exhibit 3,*** the Round 9 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 21%, and the temperature was 72 degrees F. The wind was moderate and blowing from the south southwest. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Round 10 – Offsite

On the third day of the odor study, offsite locations were observed during Round 10, from approximately 9:42 AM until 10:09 AM. In ***Exhibit 3,*** the Round 10 Offsite Data Sheet displays the test data. The sky was mostly cloudy and foggy. The humidity was 51%, and the temperature was 59 degrees F. The wind was moderate and blowing from the south. The ventilation exhaust and odor control system were not in operation. No odors were detected.

Round 11 – Onsite

The next round was conducted from approximately 10:11 AM until 10:35 AM. In ***Exhibit 3,*** the Round 11 Onsite Data Sheet displays the test data. The sky was partly cloudy with no precipitation. The humidity was 37%, and the temperature was 60 degrees F. The wind was light and blowing from the north. Prior to the odor observations, the exhaust and odor neutralizer systems were still turned off. Cannabis odors had been accumulating within the greenhouses overnight.

At approximately 10:29 AM, the ventilation and exhaust system turned on automatically, because it was set to activate based on temperature in the greenhouses. The readings prior to the system coming on were relatively low. Readings at Locations J, O and K were <2 D/T. No odor was detected at any other locations before the system engaged. Once the ventilation and exhaust system turned on, a reading of 7 D/T was taken at Location A. A reading of 4 D/T was taken at Location B. A reading of 2 D/T was taken at Locations C and L. These readings are high and consistent with values obtained in Test Round 1, on the first day of the odor study, when the exhaust system was turned on, without the odor neutralizer. The elevated values are because of the discharge of accumulated cannabis odors in the greenhouses.

Round 12 – Onsite

After Round 11, one more set of observations were taken onsite, from approximately 11:20 AM until 11:50 AM. In ***Exhibit 3,*** the Round 12 Onsite Data Sheet displays the test data. The sky was partly cloudy with no precipitation. The humidity was 28%, and the temperature was 67 degrees F. The wind was light and blowing from the north. The ventilation and exhaust system had been operational for approximately fifty minutes to one hour and twenty minutes. The odor neutralizing system was still down because of the pump malfunction. Odors were detected at a level of 2 D/T at Location A. Odor was detected at a level of <2 D/T at Locations B, C, L and K. No odors were detected at any other locations. This onsite round indicates that under the circumstances stated above, the ventilation and exhaust system operating alone reduces the odor level onsite to a level of 2 D/T or less, when operated consistently.

Round 13 – Offsite

Offsite locations were observed during Round 13, from approximately 12:00 PM until 12:20 PM. In ***Exhibit 3,*** the Round 13 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 26%, and the temperature was 68 degrees F. The wind was light and blowing from the north. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Round 14 - Offsite

Offsite locations were observed during Round 14, from approximately 3:40 PM until 4:10 PM. In ***Exhibit 3,*** the Round 14 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 16%, and the temperature was 77 degrees F. The wind was moderate and blowing from the south southeast. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Odor Survey Conclusions

No odors were detected at any of the designated locations throughout the California Community, during the three-day Odor Study. Seven (7) offsite surveys were conducted under three different operational conditions including 1) ventilation fan exhaust and odor neutralizer treatment 2) ventilation fan exhaust and no odor neutralizer treatment and 3) no ventilation fan exhaust and no odor neutralizer treatment. Based on these findings, this facility or one similar in size, construction, cultivation and basic odor control measures, should not adversely affect the surrounding community, even in times when odor control equipment is out-of-service for maintenance or not working properly.

In each case of onsite odor detection, where proper ventilation, exhaust and odor neutralizer treatment was in place, the odor was faint and intermittent at each location where <2 D/T was recorded. These locations were along the exhaust side of the greenhouses and either next to the greenhouses or directly downwind of the exhaust fans. This value indicates a barely discernible odor with the "naked nose", but under the threshold to be considered a recognizable odor with the Nasal Ranger Olfactometer on the lowest setting of 2-D/T.

Based on the findings in this Odor Study, Bosarge Environmental, LLC, concludes that "no discernible cannabis odor" was detected outside of this facility and is barely recognizable within 25 to 100 feet of the greenhouses. Consequently, this cannabis operation or one similar in size, construction, cultivation and odor control measures, should not adversely affect the surrounding community.

Submitted by,

Melanie Bosarge

Melanie Bosarge
Bosarge Environmental, LLC

APPENDIX

EXHIBIT 1

Nasal Ranger Olfactometer Calibration Certificate

CERTIFICATE OF CALIBRATION

for the

Nasal Ranger® Field Olfactometer

Serial Number : 90201429 Calibration Date : 7/15/2019

Dial D/T	Actual D/T	% Variance
60	60.02	0.0%
30	30.03	0.1%
15	15.07	0.5%
7	7.00	0.0%
4	4.00	0.0%
2	2.00	0.0%

This document certifies this Nasal Ranger® Field Olfactometer, specified by unique Serial Number, was calibrated using a NIST traceable primary gas flow standard by St. Croix Sensory, Inc.

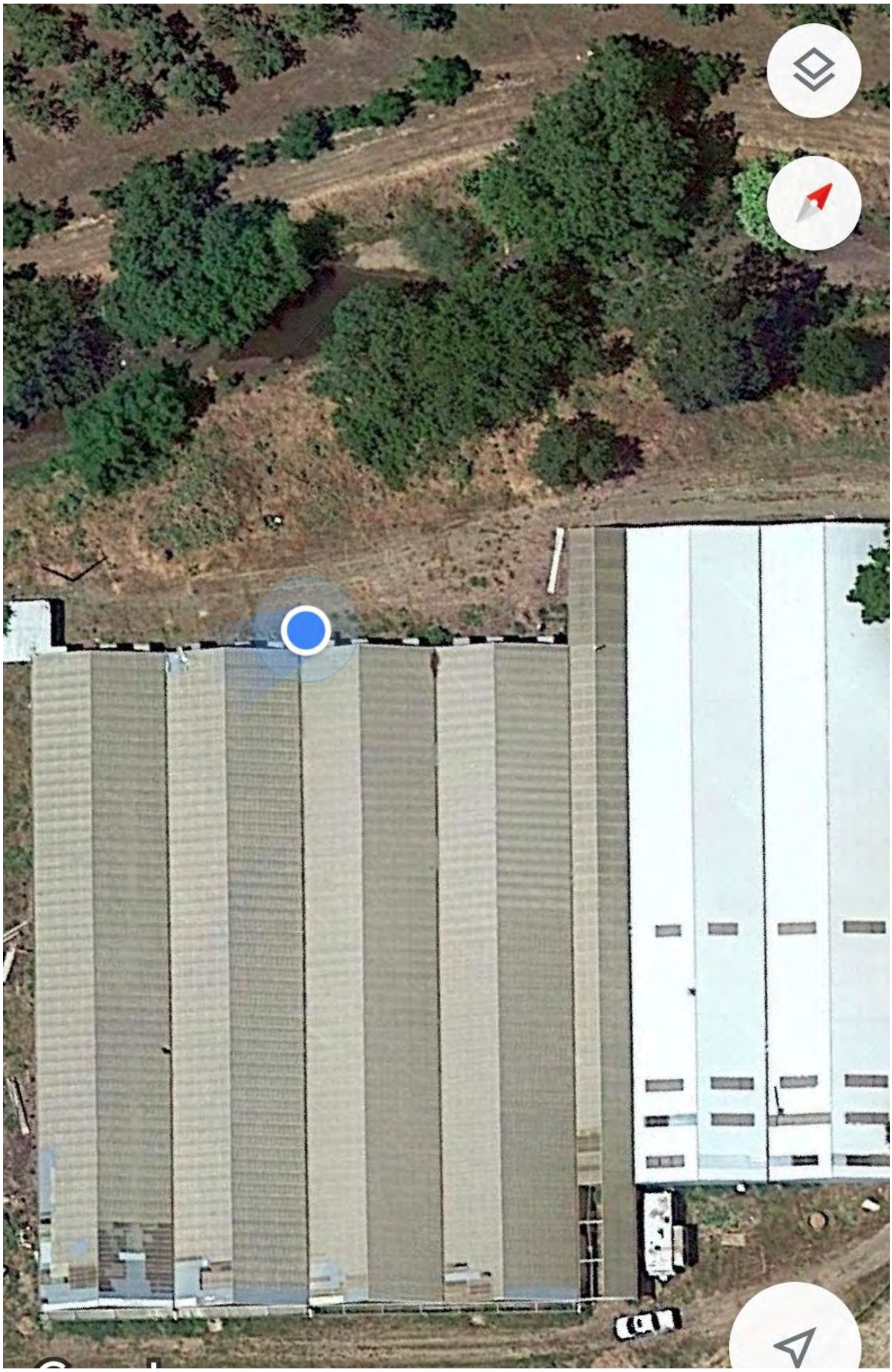
St. Croix Sensory, Inc.
1150 Stillwater Blvd. N.
Stillwater, MN 55082 USA
+1-651-439-0177
info@nasalranger.com

NASAL RANGER®

Calibration Technician

Exhibit 2

Photographs from the California Property



24-0114 Public Comment
PC Rcvd 01-22-24

24-0114 Public Comment
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24-0114 Public Comment
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24-0114 Public Comment
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Exhibit 3

Onsite and Offsite Odor Survey Data Sheets

ROUND 1 - ONSITE
10/1/19 2:50 PM - 3:26 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/1/2019 15:26	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:24	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:22	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:20	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:17	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:14	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:06	C	Test Area 24 Ft From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:04	B	Test Area 12 FT From Exhaust	2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:02	A	Test Area 6 Ft from Exhaust	4	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:54	C	Test Area 24 Ft From Exhaust	2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:52	B	Test Area 12 FT From Exhaust	4	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:50	A	Test Area 6 Ft from Exhaust	7	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92

ROUND 2 - ONSITE
10/1/19 3:36 PM - 4:11 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/1/2019 16:11	M	Front Gate To Property	ND	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:53	E	South Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:49	G	East Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:44	K	North Corner of Greenhouses	ND	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:36	D	West Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95

ROUND 3 - OFFSITE
10/1/19 4:13 PM - 5:06 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	inHg
10/1/2019 17:06	6		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 17:02	10		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:59	11		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:56	12		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:24	9		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:20	8		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:13	1		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94

ROUND 4 - OFFSITE
10/2/19 9:56 AM - 10:30 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 10:30	1		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:28	2		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:24	3		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:21	6		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:19	4		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:17	5		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:15	7		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:12	8		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:08	9		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:04	10		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:00	11		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 9:56	12		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07

ROUND 5 - ONSITE
10/2/19 11:00 AM - 11:45 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 11:45	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:43	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:42	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:40	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:38	D	West Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:36	O	Post Behind House	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:33	P	On Hill Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:31	N	Post by Dumpster	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:27	E	South Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:26	F	South Midpoint of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:24	G	East Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:22	H	East Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:20	I	East Midpoint of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:18	J	North Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:15	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:00	M	Front Gate To Property	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05

ROUND 6 - ONSITE
10/2/19 11:40 AM - 12:24 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 12:24	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:23	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:22	C	Test Area 24 Ft From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:21	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:19	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:05	K	North Corner of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:05	K	North Corner of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:04	L	North Center of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:59	C	Test Area 24 Ft From Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:57	B	Test Area 12 FT From Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:55	A	Test Area 6 Ft from Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:45	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:43	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:42	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:40	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05

ROUND 7 - ONSITE
10/2/19 12:26 PM - 12:51 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 12:51	E	South Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:50	F	South Midpoint of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:48	G	East Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:47	H	East Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:46	I	East Midpoint of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:44	N	Post by Dumpster	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:43	M	Front Gate To Property	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:42	P	On Hill Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:41	O	Post Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:40	J	North Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:33	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:30	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:26	D	West Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03

ROUND 8 - OFFSITE
10/2/19 12:58 PM - 1:28 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 13:28	11		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:25	12		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:21	10		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:19	8		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:18	9		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:16	7		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:14	6		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:12	5		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:10	4		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:06	3		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:04	2		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 12:58	1		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02

ROUND 9 - OFFSITE
10/2/19 6:09 PM - 6:34 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	inHg
10/2/2019 18:34	12		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:31	11		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:29	10		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:27	9		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:25	8		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:22	7		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:20	6		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:18	5		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:16	4		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:14	3		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:12	2		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:09	1		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95

ROUND 10 - OFFSITE
10/3/19 9:42 AM - 10:09 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	inHg
10/3/2019 10:09	1	[redacted]	ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:08	2		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.30
10/3/2019 10:07	3		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:06	4		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:05	5		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:04	6		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:56	12		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:54	11		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:50	10		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:46	9		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:44	8		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:42	7		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00

ROUND 11 - ONSITE
10/3/19 10:11 AM - 10:35 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 10:35	C	Test Area 24 Ft From Exhaust	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:34	B	Test Area 12 FT From Exhaust	4	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:33	A	Test Area 6 Ft from Exhaust	7	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:31	D	West Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:29	L	North Center of Greenhouses	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:27	K	North Corner of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:25	O	Post Behind House	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:23	P	On Hill Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:21	J	North Corner of Whse	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:19	I	East Midpoint of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:17	E	South Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:16	F	South Midpoint of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:15	G	East Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:14	H	East Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:13	N	Post by Dumpster	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:11	M	Front Gate To Property	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00

ROUND 12 - ONSITE
10/3/19 11:20 AM - 11:50 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 11:50	M	Front Gate To Property	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:45	A	Test Area 6 Ft from Exhaust	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:44	B	Test Area 12 FT From Exhaust	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:43	C	Test Area 24 Ft From Exhaust	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:41	D	West Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:39	L	North Center of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:38	K	North Corner of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:35	P	On Hill Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:34	O	Post Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:32	J	North Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:29	N	Post by Dumpster	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:27	I	East Midpoint of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:25	H	East Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:23	G	East Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:21	F	South Midpoint of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:20	E	South Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99

ROUND 13 - OFFSITE
10/3/19 12:00 PM - 12:20 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 12:20	12		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:18	11		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:15	10		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:12	9		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:10	8		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:08	7		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:06	6		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:05	5		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:04	4		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:03	3		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:02	2		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:00	1		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98

ROUND 14 - OFFSITE
10/3/19 3:40 PM - 4:10 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	inHg
10/3/2019 16:10	1		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:08	2		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:06	3		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:04	4		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:02	5		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:00	6		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:52	12		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:50	11		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:48	10		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:44	9		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:42	8		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:40	7		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90

Exhibit 4

Onsite and Offsite Odor Data Maps


M
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K
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C
B
A
H
D
X
G
F
Google
Report a map error


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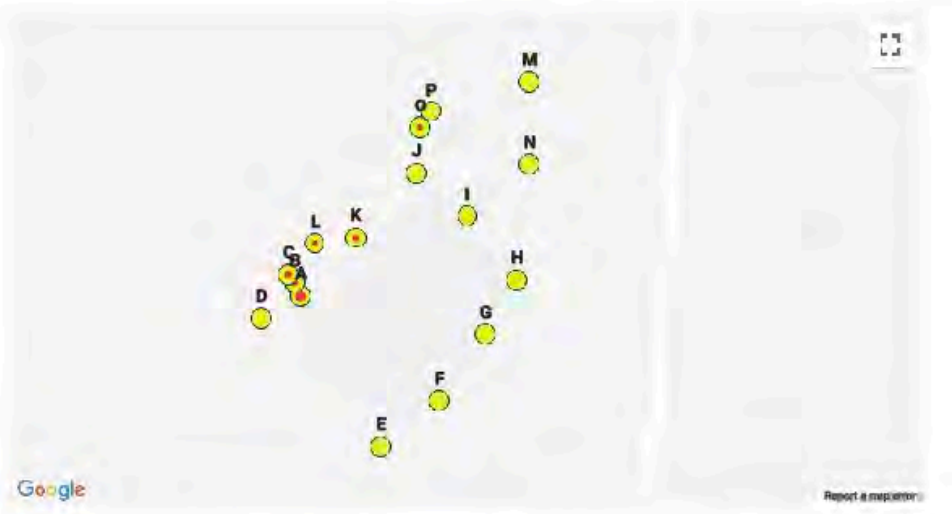
D
C
B
A
Google
Map data ©2019 Imagery ©2019 , Maxar Technologies, U.S. Report a map error

Odor DT Criteria (Eclipse Key)				Date Range: 10/1/2019 thru 10/3/2019
Avg. Log	Avg.	Eclipse Symbol	Description	Any Time of Day
0.000	= ND		Full Sun	Assessment Type: Inspection
0.001-0.301	< 2		1/4 Eclipse	(DT)
0.301-0.845	>= 2		1/2 Eclipse	Include Non-Detect
0.846-	>= 7		Full Eclipse	



Odor DT Criteria (Eclipse Key)				Date Range: 10/1/2019 thru 10/3/2019
Avg. Log	Avg.	Eclipse Symbol	Description	Any Time of Day
0.000	= ND		Full Sun	Assessment Type: Inspection
0.001-0.301	< 2		1/4 Eclipse	(DT)
0.301-0.845	>= 2		1/2 Eclipse	Include Non-Detect
0.846-	>= 7		Full Eclipse	

Odor DT Criteria (Eclipse Key)				Date Range: 10/1/2019 thru 10/3/2019
Avg. Log	Avg.	Eclipse Symbol	Description	Any Time of Day
0.000	= ND		Full Sun	Assessment Type: Inspection
0.001-0.301	< 2		1/4 Eclipse	(DT)
0.301-0.845	>= 2		1/2 Eclipse	Include Non-Detect
0.846-	>= 7		Full Eclipse	

...ATION (√) X VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)

GEOLOGIC LOG

Permit Date 5-28-02

No. 807059

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

DEPTH TO FIRST WATER 81 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION (Describe material, grain size, color, etc.)
0	4	Topsoil
4	81	Firm Decomposed Granite
81	96	FX'D Gray Granite w/Decom Gran
96	116	Gray Granite
116	117	FX
117	127	GR Gran
127	128	FX
128	136	GR Gran
136	137	FX
137	173	GR Gran
173	174	FX
174	205	GR Gran
205	206	FX
206	231	GR Gran
231	232	FX
232	266	GR Gran
266	267	FX
267	323	GR Gran
323	324	FX
324	381	GR Gran
381	382	FX
382	402	GR Gran
402	403	FX
403	457	GR Gran
457	458	FX
458	600	GR Gran

TOTAL 4 G.P.M.

WELL OWNER

Name David HARDE

Mailing Address 5540 Perry Creek Rd

CITY Somerset STATE CA ZIP 95684

WELL LOCATION

Address 5540 Perry Creek Rd

City Somerset

County El Dorado

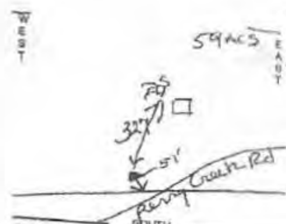
APN Book ___ Page ___ Parcel 93-030-41

Township 9N Range 12E Section 19

Latitude DEG. MIN. SEC. NORTH Longitude DEG. MIN. SEC. WEST

LOCATION SKETCH

NORTH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (√)

X NEW WELL

MODIFICATION/REPAIR

— Deepen

— Other (Specify)

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

MONITORING

PLANNED USE(S) (√)

WATER SUPPLY

X Domestic

— Public

X Irrigation

— Industrial

— "TEST WELL"

— CATHODIC PROTECTION

— OTHER (Specify)

DRILLING METHOD AIR ROTARY FLUID WATER

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 45 (Ft.) & DATE MEASURED 7-13-02

ESTIMATED YIELD* 4 (GPM) & TEST TYPE AIR LIFT

TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN 600 (Ft.)

*May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING 600 (Feet)

TOTAL DEPTH OF COMPLETED WELL 600 (Feet)

DEPTH FROM SURFACE Ft.	to Ft.	BORE HOLE DIA. (Inches)	TYPE (√)	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
+1	80	10-5/8		PVC	6	F480	0
80	100	10-5/8		PVC	6	F480	1/16"
0	400	6		PVC	4	F480	0
400	600	6		PVC	4	F480	1/16"

ANNULAR MATERIAL DEPTH FROM SURFACE Ft.	to Ft.	CEMENT (√)	BENTONITE (√)	FILL (√)	FILTER PACK (TYPE/SIZE)
0	25	X			

ATTACHMENTS (√)

— Geologic Log

— Well Construction Diagram

— Geophysical Log(s)

— Soil/Water Chemical Analyses

— Other

ATTACH ADDITIONAL INFORMATION IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

ARROW WELL DRILLING
P.O. Box 523
Placerville, CA 95667

Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE

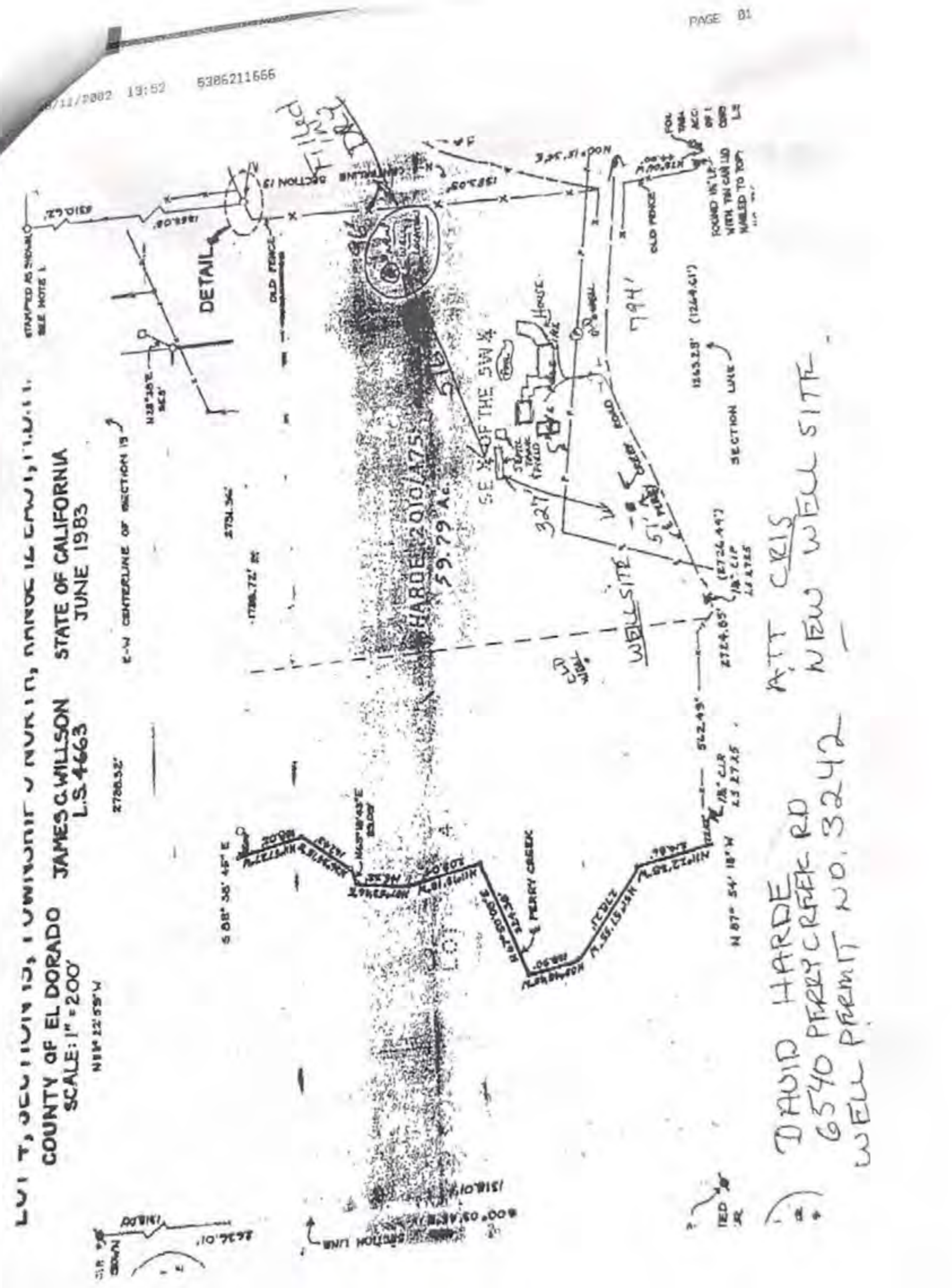
8-15-02 DATE SIGNED

453362 C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

CCUP21-0002 Harde
Well and Septic
Exhibit I


/11/2002 13:52 5306211666
PAGE 01
COUNTY OF EL DORADO
SCALE: 1" = 200'
JAMES C. WILLSON
L.S. 4663
STATE OF CALIFORNIA
JUNE 1983
DETAIL
OLD FENCE
HARDE 2010/A75
59.79 Ac.
SE ¼ OF THE SW ¼
WELL SITE
PERRY CREEK
SECTION LINE
Filled in Dry
ATT CRIS
NEW WELL SITE
DAVID HARDE
6540 PERRY CREEK RD
WELL PERMIT NO. 3242

PC 58358

EL DORADO COUNTY DIVISION OF ENVIRONMENTAL HEALTH
360 Fair Lane Placerville, CA 95667
(916) ~~626-2411~~ 621-5300

EL DORADO COUNTY
RECEIVED
NOV 10 1988
COMMUNITY DEVELOPMENT DEPARTMENT

REPORT OF WELL PRODUCTION

Owner of Property: DAVID O. Harde

Address of Owner: 6540 Perry Creek Rd.
Somerset, CA

Location of Property: _____

Assessor's Parcel Number: 093-030-41

Builder: _____

****

TO BE COMPLETED BY WELL DRILLER

Results of four (4) hour well production test: 25 GPM

Date Performed 10-10-88

Depth of well 220 ft. Static water level 12 ft.

Diameter of well casing 48'x6" + 220'x4" in.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

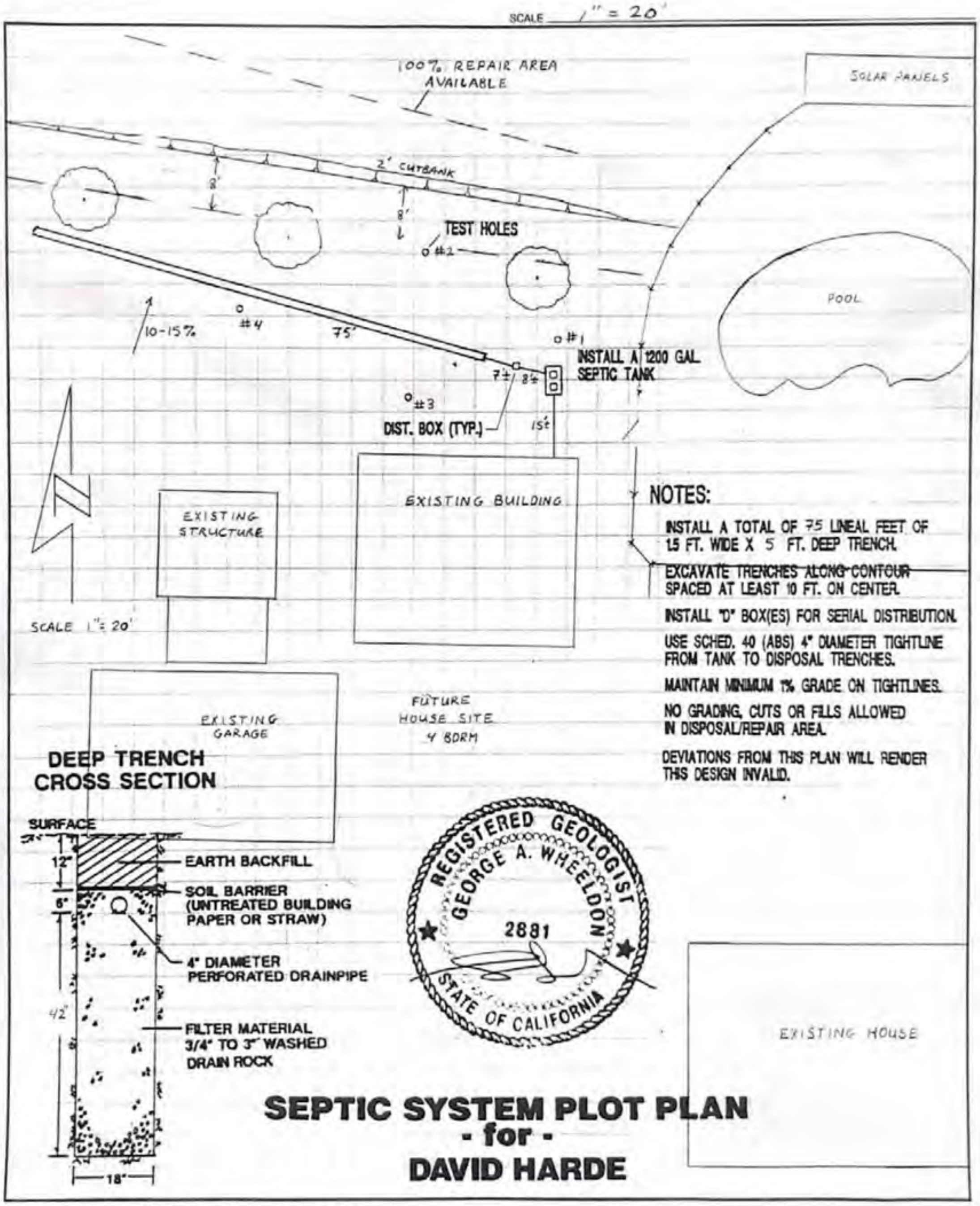
Test Performed by: SAM CRUM

State License Number: 373654

Please complete both sides of this form and return in the enclosed envelope

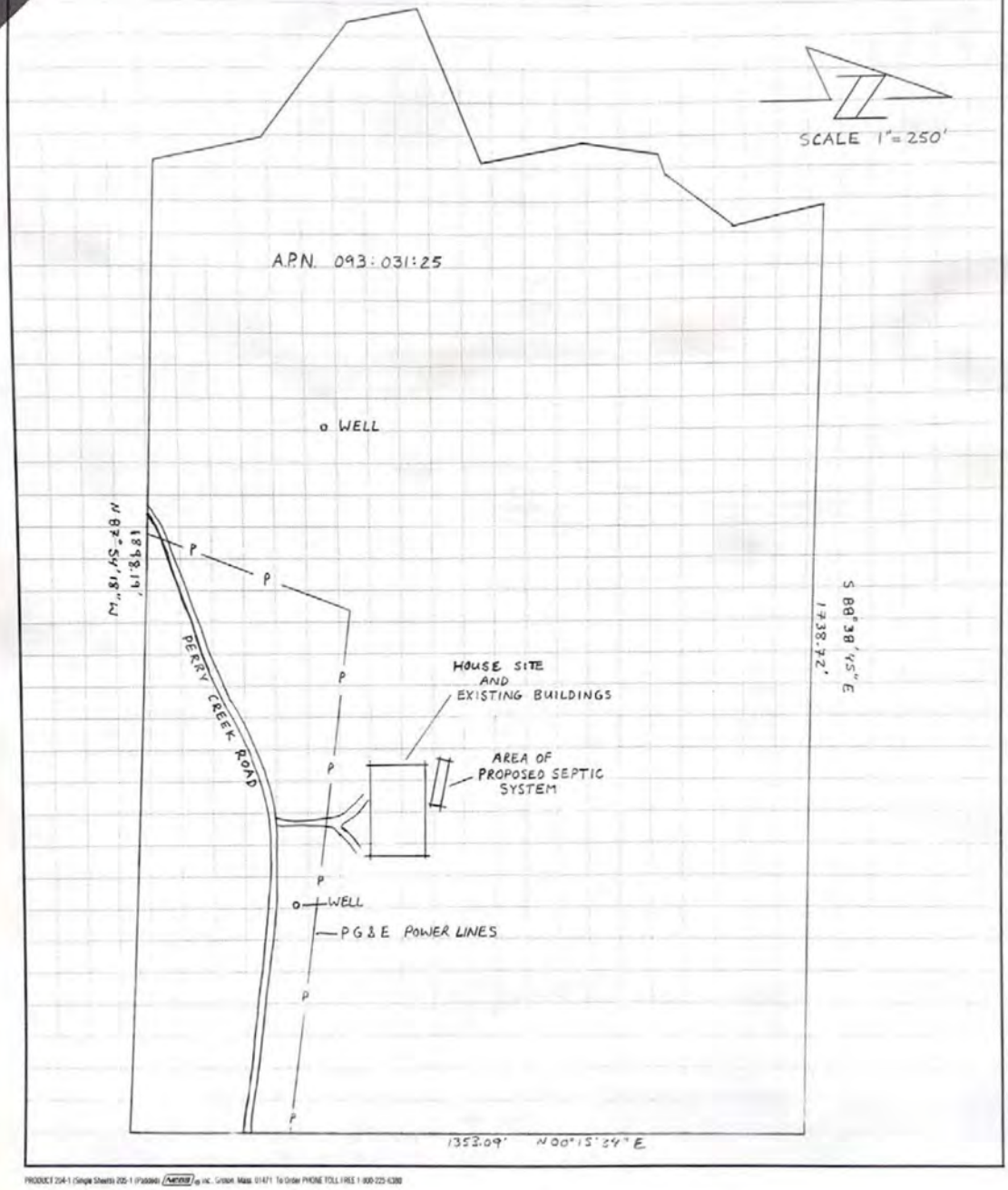
WHEELDON & ASSOCIATES
Geological Consultants
621 Placerville Drive
PLACERVILLE, CALIFORNIA 95667
(916) 622-9579

JOB ____
SHEET NO. ____ OF ____
CALCULATED BY ____ DATE ____
CHECKED BY ____ DATE ____
SCALE 1" = 20'


100% REPAIR AREA AVAILABLE
SOLAR PANELS
2' CUTBANK
8'
8'
TEST HOLES
#2
POOL
10-15%
#4
75'
#1
INSTALL A 1200 GAL. SEPTIC TANK
#3
DIST. BOX (TYP.)
EXISTING STRUCTURE
EXISTING BUILDING
NOTES:
INSTALL A TOTAL OF 75 LINEAL FEET OF 1.5 FT. WIDE X 5 FT. DEEP TRENCH.
EXCAVATE TRENCHES ALONG CONTOUR SPACED AT LEAST 10 FT. ON CENTER.
INSTALL "D" BOX(ES) FOR SERIAL DISTRIBUTION.
USE SCHED. 40 (ABS) 4" DIAMETER TIGHTLINE FROM TANK TO DISPOSAL TRENCHES.
MAINTAIN MINIMUM 1% GRADE ON TIGHTLINES.
NO GRADING, CUTS OR FILLS ALLOWED IN DISPOSAL/REPAIR AREA.
DEVIATIONS FROM THIS PLAN WILL RENDER THIS DESIGN INVALID.
SCALE 1" = 20'
EXISTING GARAGE
FUTURE HOUSE SITE 4 BDRM
DEEP TRENCH CROSS SECTION
SURFACE
12"
EARTH BACKFILL
SOIL BARRIER (UNTREATED BUILDING PAPER OR STRAW)
6"
4" DIAMETER PERFORATED DRAINPIPE
42"
FILTER MATERIAL 3/4" TO 3" WASHED DRAIN ROCK
18"
REGISTERED GEOLOGIST
GEORGE A. WHEELDON
2881
STATE OF CALIFORNIA
EXISTING HOUSE
SEPTIC SYSTEM PLOT PLAN
- for -
DAVID HARDE

LDON & ASSOCIATES
Geological Consultants
621 Placerville Drive
PLACERVILLE, CALIFORNIA 95667
(916) 622-9579

JOB HARDE 94-19
SHEET NO. SITE MAP OF
CALCULATED BY TGLI DATE 5/11/94
CHECKED BY DATE
SCALE 1" = 250'



CCUP2**1**-000**2**/**Harde**
Exhibit **J** - Security Plan

130.41.100.4.F.13 The security plan for the operation that includes adequate lighting, security video cameras with a minimum camera resolution of 1080 pixels and 360 degree coverage, alarm systems, and secure area for cannabis storage. The security plan shall include a requirement that there be at least 90 calendar days of surveillance video (that captures both inside and outside images) stored on an ongoing basis and made available to the County upon request. The County may require real-time access of the surveillance video for the Sheriff's Office. The video system for the security cameras must be located in a locked, tamper-proof compartment. ***The security plan shall remain confidential.***

Exhibit K - Proposed Mitigated Negative Declaration and Intial Study

MITIGATED NEGATIVE DECLARATION

FILE: CCUP21-0002

PROJECT NAME: Harde

NAME OF APPLICANT: David Harde

ASSESSOR'S PARCEL NO.: 093-032-071 **SECTION:** 19 **T:** 9N **R:** 12E

LOCATION: North side of Perry Creek Road, approximately 0.3 mile ortheast of the intersection with Fairplay Road, in the Somerset area of El Dorado County

☐ **GENERAL PLAN AMENDMENT:** **FROM:** **TO:**

☐ **REZONING:** **FROM:** **TO:**

☐ **TENTATIVE PARCEL MAP** ☐
SUBDIVISION (NAME):

☒ **SPECIAL USE PERMIT TO ALLOW:** for the construction and operation of a commercial cannabis cultivation facility consisting of four outdoor cultivation areas totaling 68,000 square feet.

☐ **OTHER:**

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☒ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this Mitigated Negative Declaration. A period of thirty (30) days from the date of filing this mitigated negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Mitigated Negative Declaration was adopted by the _____on _____.

_____
Executive Secretary

Organic Farming Innovations Cannabis Farm

Public Review Draft
Initial Study/Mitigated Negative Declaration

Prepared for:

County of El Dorado Planning and Building Department
2850 Fairlane Court
Placerville, CA 95667

Prepared by:

HELIX Environmental Planning, Inc.
1180 Iron Point Road, Suite 130
Folsom, CA 95630

November 2023

CCUP21-0002 Harde
Proposed Mitigated Negative Declaration and Initial Study
Exhibit K

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TABLE OF CONTENTS

Section **Page**

LIST OF TABLES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ADT	average daily trips
ADP	Administrative Development Permit
AFY	acre-feet per year
AL	Agricultural Lands
Amsl	above mean sea level
APCD	Air Pollution Control District
APN	Assessor's Parcel Number
AST	above-ground storage tank
bcf	billion cubic feet per year
BMP	Best Management Practices
BRA	Biological Resources Assessment
BTU	British thermal units
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulation
CCUP	Commercial Cannabis Use Permit
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
Cf	cubic feet
CFC	California Fire Code
CFR	Code of Federal Regulations
CH_4	methane
CHL	California Historical Landmark
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System

CIWMB	California Integrated Waste Management Board
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	El Dorado County
CPUC	California Public Utilities Commission
CRHP	California Register of Historic Places
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agencies
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	decibels
dBA	decibels with A weighting
DCC	Department of Cannabis Control
DCG	Designated Critical Habitat
DPM	diesel particulate matter
DT	Detection Threshold
DTSC	Department of Toxic Substances Control
EC	Electrical conductivity
EDCAQMD	El Dorado County Air Quality Management District
EIR	Environmental Impact Report
EO	Executive Order
EPS	Environmental Permitting Specialists
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FDCP	Fugitive Dust Control Plan
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHRZ	Fuel Hazard Reduction Zone
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FPA	Forest Practices Act
FPR	Forest Practice Rules
Ft	feet
GHG	greenhouse gas
GWh	gigawatt hours
GWP	Global Warming Period

H2S	hydrogen sulfide
HAPs	hazardous air pollutants
HCP	habitat conservation plan
HR	House of Representative
HRA	Historical Resources Associates
HVAC	heating, ventilation, and air conditioning units
Hz	Hertz
in/sec	inches per second
IPM	Integrated pest management
IS/MND	Initial Study and Mitigated Negative Declaration
kW	kilowatt
kWh	kilowatt hours
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MDR	Medium Density Residential
Memo	Memorandum
mPa	micro-Pascals
MR	Mineral Resource
MRZ	Mineral Resource Zone
MS4s	municipal separate storm sewer systems
MT	Metric tons
N_2O	Dinitrogen oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEHRP	National Earthquake Hazards Reduction Program
NF_3	nitrogen trifluoride
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHT	National Historic Trails
NHTSA	National Highway Traffic Safety Administration
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NOA	naturally occurring asbestos
NPDES	National Pollutant Discharge Elimination System

NPPA	Native Plant Protection Act of 1977
NRHP	National Register of Historic Places
NRT	National Recreation Trails
NSAQMD	Northern Sierra Air Quality Management District
NSF	National Science Foundation
NST	National Scenic Trails
NTS	National Trails System
NWI	National Wetland Index
O3	ground-level ozone
OEHHA	Office of Environmental Health Hazard Assessment
ORMP	Oak Resources Management Plan
OS	Open Space
OSHA	Occupational Safety and Health Administration
OSTR	On-site Transportation Report
PA	Planned Agriculture
PFC	perfluorocarbons
PG&E	Pacific Gas & Electric
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PPV	peak particle velocity
PRC	Public Resources Code
QSD	Qualified SWPPP Developer
RCRA	Resource Conservation and Recovery Act of 1976
RE	Residential Estates
RMP	risk management plan
RMS	root mean square
ROG	reactive organic gases
RPA	Registered Professional Archaeologist
RPF	Registered Professional Forester
RR	Rural Residential
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
sf	square feet
SF_6	sulfur hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMAQMD	Sacramento Metropolitan Air Quality Management District

SMP	Site Management Plan
SO_2	sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SR	State Route
SRA	State Responsibility Areas
SUV	sports utility vehicle
SWPPP	Stormwater Pollution Prevention Program
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	Tribal Cultural Resources
THP	Timber Harvest Plan
TPZ	Timber Production Zone
TWA	time weighted average
UBC	Uniform Building Code
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Travelled

EL DORADO COUNTY PLANNING SERVICES

2850 FAIRLANE COURT

PLACERVILLE, CA 95667

INITIAL STUDY

ENVIRONMENTAL CHECKLIST

Project Title: Commercial Cannabis Use Permit CCUP21-0002/Organic Farming Innovations Cannabis Farm	
Lead Agency Name and Address: El Dorado County, 2850 Fairlane Court, Placerville, CA 95667	
Contact Person: Evan Mattes, Senior Planner	**Phone Number:** (530) 621-5355
Applicant's Name and Address: David Harde, 6540 Perry Creek Road, Somerset, CA 95684	
Project Agent's Name and Address: Same as applicant.	
Project Engineer's Name and Address: N/A	
Project Location: The project site is located in southwestern El Dorado County at 6540 Perry Creek Road, Somerset, CA. The project site is located south of the community of Somerset, and it is generally situated north and south of Perry Creek Road.	
Assessor's Parcel Number (APN): 093-032-071	**Acres:** 57.29 acres
Sections: USGS Aukum Quad 7.5-minute Quadrangle, Section 19 of Township 9N, Range 12E	
General Plan Designation: Agricultural Land (AL)	
Zoning: Planned Agriculture, 20-acre Minimum (PA-20)	
Description of Project: The project applicant is seeking a Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation operation within an approximately 7-acre cannabis premises. The cannabis premises includes four (4) outdoor cannabis cultivation areas with the following square footage: Area A-1 is 43,000 square feet (sf), Area B-1 is 10,000 sf, Area B-2 is 10,000 sf, and Area B-3 is 5,000 sf. Total square footage for outdoor cannabis cultivation is 68,000 sf. Additionally, the project would include support infrastructure such as a 1,500-sf greenhouse for immature plant canopy, a 1,500-sf compost area, a 160-sf chemical and secure storage building, a 1,152-sf drying storage building, two processing and harvest buildings (1,760-sf building in Phase 1 and 1,750-sf building in Phase 2), a 143-sf secure storage vault, a 117-sf office and shipping records building, and extensive fencing. The applicant would acquire power from a connection with an existing Pacific Gas & Electric (PG&E) infrastructure and would add grid-tied solar power. Processing would be done on site.	

Surrounding Land Uses and Setting:			
	Zoning	**General Plan**	**Land Use/Improvements**
Project Site	PA-20	AL	Agricultural and Vineyard Operation, Wooded Land
North	Rural Land, 40 acre minimum (RL-40)	Open Space (OS)	Undeveloped, Wooded Land
South	RL-10, Residential Estates, 5 acre minimum (RE-5)	Rural Residential (RR), and Medium Density Residential (MDR)	Agriculture, Residential and Commercial, Wooded Land
East	PA-20	AL	Agriculture, Wooded Land
West	RL-10, RE-5	RR	Mt. Aukum Road, Residential, Wooded Land

Environmental Setting: The project site consists of gently rolling hills and relatively flat terrain with wooded land and existing vineyards/vegetative crops. Dominant vegetation in the subject parcel (or property) includes grasslands and oak woodlands. Vegetation communities within the property are typical of the lower Sierra Nevada foothills. Perry Creek runs south to north along the western edge of the property and is located over 500 feet (ft) from the cannabis premises. The property also includes a water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Elevations within the cannabis premises range from 2,110 to 2,190 ft above mean sea level (amsl). Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. The property is bordered to the north by undeveloped, wooded land; to the east by agricultural, wooded land; to the south by residential and commercial space, agricultural and wooded land; and to the west by Mt. Aukum Road, residential and wooded land. The project site contains three terrestrial vegetation communities: Oak Woodland, Annual Grassland, and Cultivated/Planted Orchards. These vegetation communities are discussed in further detail in Section 7.IV, Biological Resources.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

1. El Dorado County – Grading permit, building permits, Commercial Cannabis Operating Permit
2. Pioneer Fire Protection District – Building plan review
3. Department of Cannabis Control (DCC) – CalCannabis Cultivation License, Type 13 transport-only Distribution License
4. State Water Resources Control Board – Notice of Availability under the Cannabis General Order, NPDES General Permit Order 2009-0009-DWQ, Cannabis General Order WQ 2019-0001-DWQ
5. California Department of Fish and Wildlife – General Permit, Lake or Streambed Alteration Agreement

1.0 INTRODUCTION

This document is an Initial Study and Mitigated Negative Declaration (IS/MND) that has been prepared in accordance with the California Environmental Quality Act (CEQA) for the proposed Organic Farming Innovations Cannabis Farm (proposed project). This IS/MND has been prepared in accordance with the CEQA Public Resources Code (PRC) Sections 21000 et seq., and the State CEQA Guidelines. Pursuant to the State CEQA Guidelines Section 15367, El Dorado County (County) is the lead agency for CEQA compliance.

An Initial Study is conducted by a CEQA lead agency to determine if a project may have a significant effect on the environment. In accordance with the State CEQA Guidelines Section 150649(a)(1), an Environmental Impact Report (EIR) must be prepared if the Initial Study indicates that the proposed project may have a potentially significant impact on the environment. According to State CEQA Guidelines Section 15070, a Negative Declaration or Mitigated Negative Declaration shall be prepared when either:

a) The Initial Study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or

b) The Initial Study identified potentially significant effects, but:

    1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

    2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If revisions are incorporated into the proposed project in accordance with the State CEQA Guidelines Section 15070(b), a Mitigated Negative Declaration should be prepared and adopted by the lead agency. This document includes revisions in the form of mitigation measures; therefore, a Mitigated Negative Declaration is the appropriate CEQA-compliance document for the proposed project.

1.1 Project Location and Surrounding Land Uses

The proposed project would be located on a 57.29-acre property in the southern El Dorado County area at 6540 Perry Creek Road, Somerset, California. See Figure 1 for the regional vicinity map and Figure 2 for the aerial map of the project site (Note: All Figures are in Appendix A). The property consists of one parcel: Assessor's Parcel Number (APN) 093-032-071 (57.29 acres), but construction and operation of the cannabis cultivation would occur on an approximately 7-acre cannabis premises (See Figure 3 for the site plan). The total area of disturbance from construction of the proposed project would total approximately 2 acres. The cannabis premises, as well as all

cannabis-related infrastructure, would be located north of Perry Creek Road. The project site is currently accessible via one existing gravel driveway on the southern end of the property, north of Perry Creek Road. The property contains an existing residence and driveway, three (3) wells, an 8,500-gallon water tank, PG&E grid power, a septic system, vineyards/agricultural crops, property fence lines, a pool, and two (2) barns. The property is designated for Agricultural Land (AL) in the County's General Plan, and it is within the Planned Agriculture, 20-acre minimum (PL-20) zone district.

The project site consists of gently rolling hills in the northern cannabis premises and relatively flat terrain in the southern portion of the cannabis premises. The site includes wooded lands and existing vineyards/vegetative crops. Dominant vegetation in the property includes grasslands, oak woodlands, and cultivated/planted orchards. Perry Creek runs south to north along the western edge of the property and is located over 500 ft from the proposed cannabis premises. The property also includes a water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. The property is bordered to the north by undeveloped, wooded land; to the east by agricultural, wooded land; to the south by residential and commercial space, agricultural and wooded land; and to the west by Mt Aukum Road, residential and wooded land. The project site contains four terrestrial vegetation communities: Oak Woodland, Annual Grassland, and Cultivated/Planted Orchards.

2.0 PROJECT DESCRIPTION

Organic Farming Innovations Cannabis Farm is applying for a Commercial Cannabis Use Permit (CCUP21-0002) for the construction and operation of a commercial cannabis cultivation facility. The proposed project would include the cultivation of 68,000-sf of mature outdoor cannabis canopy grown in four areas. Construction of the proposed project would occur in two phases: Phase I and Phase II. Phase I would include the installation of Area A-1 which includes 43,000 sf of outdoor cannabis canopy grown north of the existing vineyards. Phase II would include the installation of Area B-1 which includes 10,000 sf of outdoor cannabis canopy, Area B-2 which includes 10,000 sf of outdoor cannabis canopy, and Area B-3 which includes 5,000 sf of outdoor cannabis canopy. The total cannabis canopy in Phase I would be 43,000 sf and the total cannabis canopy in Phase II would be 25,000 sf. Construction of Phase I would occur immediately upon project approval and upon acquisition of the required permits from the County and State and would take approximately three months to complete. Construction of Phase II is anticipated to be implemented between two to four years after project approval. See Figure 3 for the project site plan.

<u>Phase I</u>

Phase I would consist of the construction and installation of:

- Area A-1 covering approximately 43,000 sf of outdoor canopy planted north of the existing vineyards;
- Greenhouse for immature plants (1,500-sf; 30 ft by 50 ft);
- Compost area (1,500-sf; 30 ft by 50 ft);
- Security cameras, DVR storage, alarm sensors, motion detection lights, new fencing and gates;
- A circulation access driveway for vehicles fire trucks and parking;
- Convert existing building to a chemical storage cabinet (160-sf; 10 ft by 16 ft);
- Convert existing building for processing, harvesting, and packaging (1,760-sf; 40 ft by 44 ft);
- Convert existing building for drying storage (1,152-sf; 36 ft by 32 ft);
- Convert existing building to a secure storage vault (143-sf; 11 ft by 13 ft);
- One (1) 5,000-gallon water tank; and
- Two (2) Fire hydrants.

Phase II

Phase II would consist of the construction and installation of:

- Area B-1 covering approximately 10,000 sf of outdoor canopy;
- Area B-2 covering approximately 10,000 sf of outdoor canopy;
- Area B-3 covering approximately 5,000 sf of outdoor canopy;
- Convert existing building for office/ shipping records storage (117-sf; 9 ft by 13 ft);
- Construct building for processing, harvest storage, and product packaging (1,750-sf; 35 ft by 50 ft); and
- A 14.49-kilowatt (KW) photovoltaic system (grid-tied solar panels) on a ground mount.

The components of the proposed project are described in more detail below.

Cannabis Cultivation Areas

Phase I of the proposed project would include installation of Area A-1, totaling 43,000 sf of outdoor mature cannabis canopy. The cannabis would be grown north of the existing grape vineyard within the cannabis premises. A 6 ft-tall mesh fence would be added to the northern and western boundaries of Area A-1 to limit visibility of the cultivation area. Phase II would include the installation of Area B-1: 10,000 sf of outdoor cannabis, Area B-2: 10,000 sf of outdoor cannabis canopy, and Area B-3: 5,000 sf of outdoor cannabis canopy, totaling 25,000 sf of outdoor mature cannabis canopy. For both Phase I and Phase II, seeds would be initially grown in 4-inch pots within the 1,500-sf immature plant greenhouse. The seeds would germinate and then the healthy plants would be transferred to the four (4) outdoor mature cannabis cultivation areas. The cannabis plants in Areas A-1 and B-1 through 3 would be planted in the native soil until full-term maturity.

The project site would include full-term cultivation, and ancillary cultivation activities such as processing, harvest storage, and product packaging. The cannabis cultivation areas would not require any grading preparation.

Support Infrastructure

Phase I would include the construction of a 1,500-sf greenhouse for immature plant propagation and a 1,500-sf compost area. An existing 160-sf building would be converted for a chemical storage cabinet, and an existing 1,152-sf building would be converted for harvest drying and storage. These proposed support structures would be located in the southwestern corner of the cannabis premises. Additionally, an existing 1,760-sf building would be converted for processing, harvesting, and packaging area would be also located in the southwestern corner of the cannabis premises. An existing 143-sf building would be converted for a secure storage vault and would be installed just outside the cannabis premises, but within the property boundary. A 5,000-gallon tank would be installed just north of the cannabis premises.

Phase II would include the conversion of an existing 117-sf building for an office and shipping records storage located just outside the cannabis premises, but within the property boundary. Phase II would also include the construction of a 1,750-sf building for processing, harvesting, and packaging adjacent to the existing 1,760-sf building that is used for the same purpose.

The proposed project is estimated to demand approximately 1.2 million gallons of water per year for cannabis cultivation. Three (3) wells exist on the project site. One well is located west of the cannabis premises, and two (2) are located south of the cannabis premises. The two wells located south of cannabis premises, a southwestern well and a southeastern well, are adjacent to Perry Creek Road. Of the two southern wells, the southwestern well was most recently constructed on November 10, 1988, and provides approximately 25 gallons of water per minute. The information on the western well and the southeastern well is currently unknown.

The project would include a proposed 5,000-gallon water tank to hold water from the existing wells for agricultural use. An existing 8,500-gallon water tank is located next to the proposed water tank, just outside the cannabis premises but within the property boundary. The property also includes an existing water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Two (2) fire hydrants would be installed at the entrance of the property for as-needed fire suppression services, as well.

Energy and Lighting

The property currently utilizes PG&E grid power. During Phase I, renewable energy would be purchased from PG&E's Solar Choice or Regional Renewable Choice. Phase II would install a 14.49 KW photovoltaic system (grid-tied solar panels) to provide renewable power for the project site. The 14.49 KW photovoltaic system would be installed on a ground mount located just south of the cannabis premises. All cannabis cultivation areas would be outdoor and would not require lighting. All lighting for security purposes would be directed downward and would not spill

outside the property where the project site is located. A solar battery trailer unit would be used as backup, for emergency power outages only.

Employees, Daily Trips, and Hours of Operation

The owner/applicant and their family, approximately three (3) full-time employees, would be the primary workers and would manage day-to-day operations. Up to five (5) seasonal temporary employees would be proposed for the project. The hours of operation for the project site would be 8:00 am to 7:00 pm. There would be an estimated four (4) delivery vehicles per week on-site during the build-out of Phase I and Phase II. Approximately three (3) trips per year would deliver soil amendments and other fertilizers on-site via Lopez Trucking, and up to two (2) box truck deliveries would be delivered per week during harvest season. The applicant is applying for a Type 13 transport-only Distribution License from the Department of Cannabis Control (DCC). Type 13 distributors can move cannabis and cannabis products between cultivation, manufacturing, or distribution premises.

An On-Site Transportation Review (OSTR) prepared by Prism Engineering (Appendix B) and a Vehicles Miles Traveled (VMT) Memorandum prepared by Prism Engineering (Appendix C) were both prepared on December 3, 2020, for the proposed project. Both the OSTR and the VMT Memorandum (Memo) concluded that the project would generate a maximum of 24 daily trips during the busiest harvest season but would generate far fewer trips on most days. The number of daily trips was calculated using a maximum of three (3) full-time employees and up to five (5) seasonal employees. In total, with employee daily trips and delivery vehicles, the project would generate a maximum of 33 trips under the busiest harvest season but would generate far fewer trips on most days. The maximum trips during project buildout and during harvest season would be less than the 100 daily trips threshold set forth by the County of El Dorado Policy TC-Xe (Prism Engineering 2020a).

Security Plans

There is one existing driveway entrance and one proposed driveway entrance off Perry Creek Road. Both entrances would have secure gates 45 ft north of Perry Creek Road to prevent unauthorized individuals from accessing the property. The cannabis premises would be surrounded by a 6 ft-high field game fence with at least a single barbed wire strand along the top. Two secured gates would be located on the southern side of the cannabis premises to prevent unauthorized entry. Cameras, alarm sensors, and lights would monitor potential trespass access points around the cannabis premises and the property. The applicant, their family, and the seasonal employees would be the only people authorized to access the property. Any potential temporary employees, government personnel with business on-site presenting valid identification, and any other visitors would be escorted through the limited access areas of the site by the project applicant.

Site Access/Parking

The property and cannabis premises would be accessed from two gravel entrance driveways that would connect and create a cul-de-sac turnaround, north of Perry Creek Road. Both driveway entrances would have gates 45 ft north of Perry Creek Road to prevent unauthorized access. The proposed western gravel driveway entrance would connect to an existing eastern gravel driveway entrance. The proposed western driveway would lead all the way up to the southern entrance gate of the cannabis premises. The existing eastern gravel driveway would lead to an 1,800-sf (30 ft by 60 ft) parking area, east of the cul-de-sac turnaround. A garage associated with the existing residence would be wide enough (about 40 ft by 20 ft) to accommodate up to 4 parked cars.

The proposed western gravel driveway constructed in Phase I, would connect to an existing eastern gravel driveway to create a cul-de-sac that would facilitate turnarounds, as needed, for emergency vehicles. According to the OSTR, the cul-de-sac driveway would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have a 45 ft outside radius for vehicle turnaround, which would easily accommodate a 32 ft typical fire truck. Both the western and eastern gravel driveways would be greater than 12 ft in width and would have a vertical clearance of greater than 15 ft. The proposed gravel driveway and cul-de-sac would require less than 250 cubic yards of grading.

Hazardous Materials, Cannabis Waste, and Wastewater

The existing farm is a certified organic agricultural operation. All cannabis waste would be stored and disposed of in accordance with applicable County and State regulations. A 1,500-sf compost area would be located within the cannabis premises. The cannabis waste generally would have no economic value and it would be chipped and composted on-site.

Conventional solid waste would be disposed of in accordance with applicable County and State regulations. A self-haul solid waste container would be located just north of the cul-de-sac. The applicant may also self-haul cannabis waste to one or more of the following:

- A staffed, fully permitted solid-waste or transformation facility
- A staffed, fully permitted composting facility or staffed composting operation
- A staffed, fully permitted in-vessel digestion facility of staffed in-vessel digestion operation
- A staffed, fully permitted transfer/processing facility or staffed transfer/processing operation
- A staffed, fully permitted chip-and-grind operation

Hazardous materials proposed for on-site use would include minor amounts of diesel fuel as well as soil amendments, which would be handled and used in accordance with the California Department of Food and Agriculture. Organic soil amendments would be stored and applied to cannabis cultivation areas in a manner to prevent exposure to rain and wind that would cause the movement of nutrients or environmental contaminants outside of cultivation areas. A 160-sf chemical secure storage building would be located within the cannabis premises and would hold fuel and organic chemicals as needed for the growing of the cannabis. Wastewater would be managed by an existing septic system, and full-time and seasonal employees would use the restroom located inside the existing residence.

Pest Management Plan

The applicant provided a Pest Management Plan that would be implemented for the proposed project and it is included as Appendix D of this Initial Study. The applicant would use an integrated pest management (IPM) plan which has five primary components: monitoring, physical control, environmental control, biological control, and chemical control. The principal areas for monitoring would be pests, pH, and Electrical Conductivity (EC). Physical Control would be grouped into four categories: exclusion, mulching, cover crops, and companion plants. Environmental control would fall into three categories: nutrient management, irrigation, humidity, and temperature. Biological control would increase populations of predators to combat pests and diseases. Lastly, chemical control would be products classified as pesticides or fungicides. The products would follow all guidelines from the California Department of Pesticide Regulation under the document “Legal Pest Management Practices for Cannabis Growers in California”. The Pest Management Plan includes 36 active ingredients that are acceptable for use on cannabis.

Construction Schedule and Equipment

Construction of Phase I would occur immediately upon project approval and upon acquisition of the required permits from the County and State and would take approximately three months to complete. Construction of Phase II is anticipated to be implemented between two to four years after project approval. The total area of disturbance associated with project construction would be approximately two acres. However, the proposed project would require less than 250 cubic yards of grading for the proposed gravel driveway and cul-de-sac. According to Appendix D of the California Emissions Estimator Model (CalEEMod) Users’ Guide, a project with a construction area between two and three acres would be expected to require one rubber-tired dozer, one tractor/loader/backhoe, and one grader (CAPCOA 2017), and it is estimated that each piece of equipment would operate for eight hours per day during project construction.

3.0 PUBLIC REVIEW AND REQUIRED APPROVALS

This IS/MND is being circulated for public and agency review for a 30-day period. Written comments on the IS/MND should be submitted by mail or e-mail to the following:

Evan Mattes, Senior Planner
2850 Fairlane Court
Placerville, CA 95667
Evan.Mattes@edcgov.us

Following the close of the written comment period, the IS/MND will be considered by the lead agency (El Dorado County) in a public meeting and will be adopted if it is determined to be in compliance with CEQA.

Public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement) include the following:

- **El Dorado County** – Grading permit, building permits, Commercial Cannabis Operating Permit;
- **Pioneer Fire Protection District**– Building plan review;
- **California Department of Cannabis Control** – CalCannabis Cultivation License, Type 13 transport-only Distribution License;
- **State Water Resources Control Board** – Notice of Availability under the Cannabis General Order, NPDES General Permit Order 2009-0009-DWQ, Cannabis General Order WQ 2019-0001-DWQ and
- **California Department of Fish and Wildlife** – General Permit, Lake or Streambed Alteration Agreement

4.0 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: _____ Date: 11-28-2023

Printed Name: Evan Mattes, Senior Planner For: El Dorado County

Signature: _____ Date: 11/28/23

Printed Name: Chris Perry, Assistant Director Planning and Building For: El Dorado County

5.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

6.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and

    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

I. Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			**X**	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				**X**
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

Environmental Setting

The project property is situated in the northern-central Sierra Nevada foothills. The Sierra Nevada foothills lie between the western edge of the Sierra Nevada and the eastern border of the Central Valley. The project site consists of gently rolling hills in the northern cannabis premises and relatively flat terrain in the southern portion of the cannabis premises. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. The site includes wooded lands and existing vineyards/vegetative crops. Dominant vegetation in the property includes grasslands, and oak woodlands. The property contains an existing residence and driveway, three (3) wells, an 8,500-gallon water tank, PG&E grid power, a septic system, vineyards/agricultural crops, property fence lines, a pool, and two (2) barns. The site can be accessed via an existing gravel driveway, north of Perry Creek Road that leads to the existing residence.

The property is bordered to the north by undeveloped, wooded land; to the east by agricultural, wooded land; to the south by residential and commercial space, agricultural and wooded land;

and to the west by Mt Aukum Road, residential and wooded land. The setting is rural residential, and all views of the proposed cultivation areas would be obscured by fencing and vegetation from Perry Creek Road.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the proposed project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans 2022). The State highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

There are no officially designated State scenic corridors in the vicinity of the project site.

Title 3 Section 8304(c) of the California Code of Regulations states: "All outdoor lighting used for security purposes shall be shielded and downward facing."

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply, in particular districts, based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a State highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities.

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the County's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include (United States) U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the County, and those portions of State Route (SR) 88 along the southern border of the County.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the United States Forest Service (USFS), which, under the Wild and Scenic Rivers Act, may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

Impact Analysis:

a. **Scenic Vista:** A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape (such as an area with remarkable scenery or a resource that is indigenous to the area) for the benefit of the public. The project property is adjacent to wooded lands to the north, east, and west, and is adjacent to residential properties to the south and west. These features surrounding the property have not been identified as scenic vistas nor is the project site visible from public viewpoints (El Dorado County 2018). Therefore, while the proposed project would introduce a new cannabis cultivation facility to the project site, it would not result in a substantial adverse effect to a scenic vista. Impacts would be **less than significant**.

b. **Scenic Resources:** US-50 is classified as an officially designated scenic highway in El Dorado County from Placerville to South Lake Tahoe (Caltrans 2022) and is located approximately nine air miles north of the project site. Therefore, the proposed project would not be visible from any designated or eligible scenic highway, and the project would have **no impact** on scenic resources within the proximity of a State scenic highway.

c. **Visual Character:** The proposed project would result in the construction of an outdoor commercial cannabis cultivation facility. The proposed project would include 68,000 sf of mature outdoor canopy grown in Areas A-1, B-1, B-2, and B-3. Cannabis plants in these areas would be grown directly in the soil. The cannabis premises would also include a 1,500-sf greenhouse for immature propagation, a 1,500-sf compost area, a 160-sf building for chemical and secure storage, a 1,152-sf building for drying and storage, a 1,750-sf building for processing, packaging, and harvest storage, a 143-sf secure storage vault, and a 117-sf building for an office and shipping records. The project also includes a 5,000-gallon water storage tank, two (2) fire hydrants, and a 14.49-KW photovoltaic system (grid-tied solar panels) on a ground mount. The proposed driveway and cul-de-sac would connect to an existing eastern gravel driveway and would require less than 250 cubic yards of grading. The cannabis premises would be surrounded by a six ft-high field game fence with at least a single barbed wire strand along the top. Existing fencing is located directly north of Perry Creek Road, along the southern end of the existing vineyards/crops

being grown. Both the six-foot high field game fencing and the existing fencing, as well as vegetation, would limit the visibility of the cultivation areas from Perry Creek Road.

The proposed development may result in a change to the visual character of the site by developing portions of undeveloped, sparsely wooded land on the property. However, the project site is surrounded by other wooded and privately owned lands and is generally not visible from public vantage points. Area A-1 within the cannabis premises would be slightly visible from Perry Creek Road; however, cannabis plants would be obscured by 6 ft-tall field game fencing along the southern cannabis premises boundary, as well as existing fencing along Perry Creek Road. No other cultivation area within the cannabis premises would be visible from Perry Creek Road. Additionally, the proposed greenhouse for immature propagation and the proposed compost area would not be visible from Perry Creek Road. All other project-related structures are existing and would be converted for cannabis-related purposes. Therefore, the construction of the proposed project would not substantially degrade the character of the site or its surroundings or degrade the quality of views from publicly accessible vantage points, and impacts would be **less than significant**.

d. **Light and Glare**: The proposed project would result in the development of a new outdoor cannabis cultivation facility. All proposed cannabis cultivation areas would be outdoor and would not require lighting. Potential sources of light and glare include new lighting for security purposes and possible exterior lighting associated with the immature plant greenhouse. All security lighting and potential lighting associated with the greenhouse would be shielded and downward facing. All security lighting, including cameras and censors would activate only when motion sensors detect movement as a means to deter and observe any potential intruders. The hours of operations for the proposed project would be from 8:00 am to 7:00 pm, so the potential for any nighttime light or glare related to project operations would be minimized. The project would also install a 14.49 KW photovoltaic system (grid-tied solar panels) to provide renewable power for the project site. The 14.49 KW photovoltaic system would be installed on a ground mount. To limit reflection, solar panels would be constructed of dark, light-absorbing materials and would be given an anti-reflective coating or textured surface which can reduce reflectivity.

The introduction of new sources of light and glare may contribute to nighttime light pollution and result in impacts to nighttime views in the area. However, with the implementation of the design standards discussed above and the requirement for the project to comply with County design standards and El Dorado County Code of Ordinances (County Code) Section 130.14.170 (Outdoor Lighting), impacts from the introduction of new light and glare would be **less than significant.**

FINDING: The proposed project would result in less than significant or no impacts to scenic vistas, scenic resources, the visual character of the project site, and from new light and glare sources. Additionally, with adherence to the County Code (Section 130.14.170 – Outdoor Lighting), any potential aesthetic impacts from nighttime light pollution would be less than significant.

II. Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?			**X**	
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			**X**	
d. Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Environmental Setting

According to the custom Soil Resource Report for this project (NRCS 2022), the following soil map units occur on the project property:

- Chaix very rocky coarse sandy loam, 9 to 50 percent slopes (CcE): covers 6.2 percent of the property;
- Chawanakee very rocky coarse sandy loam, 9 to 50 percent slopes (ChE): covers 50.8 percent of the property;
- Holland Coarse sandy loam, 9 to 15 percent slopes (HgC): covers 43.0 percent of the property.

According to the Farmland Mapping and Monitoring Program (FMMP), Farmland of Statewide Importance, Farmland of Local Importance, and Grazing Land have been identified on the project property (CDC 2022a).

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2019a). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2019a):

Prime Farmland: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the State's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

The project site is classified as Farmland of Statewide Importance, Farmland of Local Importance, and Grazing Land (CDC 2022a).

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2019b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

On September 13, 2022, the El Dorado County Board of Supervisors adopted Resolution 139-2022, rescinding Resolution 188-2002 which governed Williamson Act implementation in the County. This action revised the criteria for the establishment of agricultural preserves to indicate that commercial cannabis cultivation could be a compatible use. Commercial Cannabis Cultivation on a parcel that has a pre-existing Williamson Act contract is a compatible use if all the following requirements are met:

a. Commercial cannabis cultivation shall not be used to qualify a parcel for a Williamson Act Contract.

b. The commercial cultivation of cannabis in compliance with all other laws, including Division 10 of the Business and Professions Code and EDC Ordinance Code Chapter 130.42.

c. The contracted parcel that is proposing to be used to cultivate commercial cannabis continues to meet the County of El Dorado's criteria for establishing an agricultural preserve in this Resolution and El Dorado County Zoning Ordinance Code Section 130.40.060.

d. The Agricultural Commission reviews the application for a Commercial Cannabis Use Permit for outdoor or mixed-light cultivation to determine whether it qualifies for the above standards.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and charged the politically appointed Board of Forestry to oversee their implementation. CAL FIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on non-federal timberland, with limited exceptions.

Local Laws, Regulations, and Policies

El Dorado County General Plan Agriculture and Forestry Element

Adopted in 2004 and amended in 2015, this element sets the County's priorities for the continued viability of agricultural and forestry activities. Goals of this element include agricultural land conservation, agricultural production, forest land conservation, and sustainable and efficient forest production (El Dorado County 2015a).

Impact Analysis:

a. **Farmland Mapping and Monitoring Program:** According to the FMMP, Farmland of Statewide Importance, Farmland of Local Importance, and Grazing Land have been identified on the project property (CDC 2022a). However, the project would involve the cultivation of cannabis, which is consistent with the agricultural designation of the site. According to Senate Bill 94, Cannabis: Medical and Adult-Use, cannabis is considered an agricultural product in California (California Legislative Council 2017). Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland) to non-agricultural use. Impacts would be **less than significant**.

b. **Agricultural Uses:** The project property is zoned as PA-20 and is under a Williamson Act Contract. Resolution 139-2022 was adopted on September 13, 2022, by the County Board of Supervisors to establish compatible uses for Williamson Act Contracted lands. According to Resolution 139-2022, cannabis cultivation is allowed on a parcel zoned PA-20 with County approval of a CCUP. The project site also includes existing vineyards that will exceed over $13,500 of gross revenue as required in Resolution 139-2022. Therefore, the proposed project would not conflict with existing zoning for agricultural use and would not conflict with the requirements of a property under a Williamson Act Contract. Therefore, the impacts would be **less than significant**.

c.-d. **Loss of Forest land or Conversion of Forest land:** The project site contains three vegetation communities: Oak Woodland, Annual Grassland, and Cultivated/Planted Orchards. The site is not zoned or designated as Timber Production Zone (TPZ) or another forest land use. Sixty-five (65) oak trees would be impacted by the proposed project, but

no commercial tree species are proposed for removal (14 CCR Section 895.1). Impacts to non-commercial oak resources (which are protected by the County Code) are addressed in Section 7.1V, Biological Resources, and in the Oak Resource Technical Report included as Appendix G. In 2021, the Caldor Fire occurred within El Dorado County and the California Department of Fire and Forestry (CAL FIRE) constructed a 12,500-sf (100 ft by 1,250 ft) fire break within the area of the property where the cultivation site is proposed to be located. Therefore, CAL FIRE removed many trees in 2021, most of which were oaks. Therefore, the proposed project would not conflict with the zoning for, or cause rezoning of, forest land or timberland or result in a substantial loss or conversion of forest land, and there would be a **less than significant** impact for questions c) and d).

e. **Conversion of Prime Farmland or Forest Land:** The proposed project would develop project elements related to the cannabis operation in an approximately 7-acre cannabis premises, within a total 57.29-acre property. As stated in question b), the project would comply with criteria outlined in Resolution 139-2022 and would therefore be compatible with Williamson Act contracted land. The project would involve proposed cannabis cultivation operations to an existing vineyard operation. Therefore, the proposed project would not result in a substantial conversion of agricultural or forest land to non-agricultural or non-forest uses, and impacts would be **less than significant.**

FINDING: The proposed project would not conflict with existing zoning for agricultural use, TPZ, or other forest land, impact any properties under a Williamson Act contract, or result in a substantial loss or conversion of agricultural land or forest land. The project would meet all criteria in Resolution 139-2022 to ensure compatibility with Williamson Act contracted lands. Less than significant impacts would occur for impacts related to Agriculture and Forestry Resources.

III. Air Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
c. Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?		**X**		

A project-specific Odor Analysis was prepared for this project and is included as Appendix E to this Initial Study (EPS 2022).

Regulatory Setting:

Criteria air pollutants are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and State standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for the following criteria air pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM_{10}), particulate matter of aerodynamic radius of 2.5 micrometers or less ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), ground-level ozone (O_3), sulfur dioxide (SO_2), and lead. Of these criteria pollutants, particulate matter and ground-level O_3 pose the greatest threats to human health. The California Air Resources Board (CARB) sets standards for criteria pollutants in

California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide (H_2S), sulfates, and vinyl chloride.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

The proposed project is located within the Mountain Counties Air Basin (MCAB), which is comprised of seven air districts: the Northern Sierra Air Quality Management District (NSAQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and El Dorado County Air Quality Management District (EDCAQMD).

Air quality in the project site is regulated by the EDCAQMD. CARB and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. The EDCAQMD regulates air quality through the federal and State Clean Air Acts, district rules, and its permit authority.

The USEPA and State also designate regions as “attainment” (within standards) or “nonattainment” (exceeds standards) based on the ambient air quality. El Dorado County is in nonattainment status for both federal and State O3 standards, for the State PM10 standard, and for the federal 24-hour PM 2.5 standard and is in attainment or unclassified status for all other pollutants (CARB 2019).

California Code of Regulations Title 3:

Section 8304(e) states:

> [All licensees shall comply with all of the following environmental protection measures:] Requirements for generators pursuant to section 8306 of this chapter.

Section 8306 provides requirements for stationary and portable generators greater than 50 horsepower. It requires compliance with the appropriate Airborne Toxic Control Measure for stationary or portable generators and includes certificates or permits that are acceptable to prove compliance. Additional compliance options are provided for generators below 50 horsepower by 2023, including limiting hours of operation, meeting certain emergency use requirements, or filter and engine requirements.

Impact Analysis:

a. **Air Quality Plan:** As mentioned previously, the MCAB is currently in non-attainment for O_3 (State and federal ambient standards), PM_{10} (State ambient standard), and $PM_{2.5}$ (federal ambient 24-hour standard). The Sacramento Regional 2008 NAAQS (National Ambient Air Quality Standards) 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (Ozone Attainment Plan) was developed for application within the Sacramento region, including the MCAB portion of El Dorado County (EDCAQMD et al. 2017). The EDCAQMD and other Sacramento region air districts have submitted a $PM_{2.5}$ Implementation/Maintenance Plan and Re-Designation Requests to fulfill CAA requirements to re-designate the region from nonattainment to attainment of the $PM_{2.5}$ NAAQS (EDCAQMD et al. 2013).

Projects within the MCAB portion of the County must demonstrate Ozone Attainment Plan consistency with the following four indicators:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), or projected emissions of ROG and NOx from a project are equal to or less than the emissions anticipated for the site if development under the existing land use designation;
2. The project does not exceed the "project alone" significance criteria;
3. The project would be consistent with the control measures for emissions reductions in the Ozone Attainment Plan; and
4. The project complies with all applicable district rules and regulations.

Regarding the first criterion for compliance with the Ozone Attainment Plan, the proposed project does not include uses that would generate a long-term increase in population or require a change in land use designations applied to the project site. Therefore, the project would be consistent with the regional growth forecasts and would not conflict with or exceed the assumptions of the Ozone Attainment Plan.

Regarding the second criterion, as discussed above, MCAB is currently in non-attainment for O_3 (State and federal ambient standards), PM_{10} (State ambient standard), and $PM_{2.5}$ (federal 24-hour ambient standard). As discussed in item b), below, the project would not result in a cumulatively considerable net increase of ozone precursors (ROG or NO_x), PM_{10}, or $PM_{2.5}$.

The third criterion is consistency with control measures in the Ozone Attainment Plan. Most of the control strategies in the Ozone Attainment Plan include measures in the categories of transportation and stationary sources. The non-regulatory control measures include on-road and off-road mobile incentive programs, and an emerging/voluntary urban forest development program. These are followed by regulatory control measures, which include indirect source rules and a variety of stationary and area-wide source control measures. The Statewide control measures for reducing mobile source emissions include the following : new engine standards,

reducing emissions from in-use fleet, requiring the use of cleaner fuels, supporting the use of alternative fuels, and pursuing long-term advanced technology measures. The project would not conflict with or hinder any of the control measures for emissions reductions in the Ozone Attainment Plan.

The final criterion is compliance with EDCAQMD rules and regulations. The EDCAQMD has adopted rules designed specifically to address a variety of potential air quality impacts due to construction and operational related emissions. Rules designed to control air pollutant emissions which may be applicable to the project include:

- Rule 210 related to the discharge of air contaminants;
- Rule 223 related to fugitive dust;
- Rule 223-1 related to construction related fugitive dust;
- Rule 223-2 related to asbestos; and
- Rule 224 relates to application of cutback or emulsified asphalt for paving.

Notably, pursuant to Rule 223-1, any activities associated with grading and construction would require a Fugitive Dust Control Plan (FDCP). Such a plan would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level.

In summary, the project would not conflict with the growth assumptions for the region, would be consistent with all control measures of the Ozone Attainment Plan, and would comply with applicable EDCAQMD rules. Based on these considerations, the project would not conflict with or obstruct implementation of an applicable air quality plan. Impacts would be **less than significant**.

b. **Air Quality Standards and Cumulative Impacts:** The following discussion evaluates the potential for the project's construction and operational emissions to result in a considerable contribution to the region's cumulative air quality impact.

Construction

Construction of the project would potentially result in the addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment. Pollutants would also result from off-site trucks hauling construction materials and worker vehicles commuting to and from the project site.

The EDCAQMD has adopted screening criteria for determining the significance of a project's construction period ozone precursor and particulate matter emissions in Chapter 4 of the Guide to Air Quality Assessment (EDCAQMD 2002).

> Screening of Construction Equipment Based on Fuel Use: If the average daily diesel fuels use for one quarter (3 months) would be less than 337 gallons (from Table 4.1

in the Guide to Air Quality Assessment), Reactive Organic Gases (ROG) and Nitrogen Oxides (NO_X) emissions from construction equipment may be deemed not significant. If ROG and NOX emissions from diesel equipment are deemed not significant based on fuel usage in Table 4.1, then exhaust emissions of CO and PM10 from construction equipment, and exhaust emissions of all constituents from worker commute vehicles, may also be deemed not significant.

Screening of Fugitive Dust Emissions Based on Incorporation of Mitigation Measures: Mass emissions of fugitive dust PM10 need not be quantified, and may be assumed to be not significant, if the project includes mitigation measures that will prevent visible dust beyond the project property lines, in compliance with Rule 403 of the South Coast Air Quality Management District (included in Appendix C-1 of the Guide to Air Quality Assessment).

The construction equipment required for the project has not been determined at the time of this analysis. The California Emissions Estimator Model (CalEEMod), developed by the California Air Pollution Control Officers Association (CAPCOA) and the California air districts for estimating typical development project emissions, contains lists of equipment required for each activity of typical project construction based on project size. As described in Section 3.0 Project Description, construction of cannabis-related project elements in Phase I and Phase II would disturb approximately 2.0-acres. The project would require less than 250 cubic yards of grading for the cul-de-sac and driveway to achieve the desired elevations of the site.

The most intense use of heavy construction equipment typically occurs during the grading activity. According to Appendix D of the CalEEMod Users' Guide, a project with a construction area between 2 and 3 acres would be expected to require one rubber-tired dozer one tractor/loader/backhoe, and one grader (CAPCOA 2017) and it is estimated that each piece of equipment would operate for 8 hours per day. Per El Dorado County Noise requirements, construction activities are restricted to the hours between 7:00 a.m. and 7:00 p.m. during weekdays and between 8:00 a.m. and 5:00 p.m. on weekends and federally recognized holidays. The rubber-tired dozer would be the most fuel use intensive piece of construction equipment used during grading. A Caterpillar 824K Wheeled Dozer (405 horsepower) operating under medium intensity burns between 10.5 and 12.1 gallons of diesel per hour (Caterpillar 2018). Conservatively, assuming that all equipment used during grading would burn 12.1 gallons per hour, the average daily diesel fuel use would be approximately 290 gallons, less than the 377 gallons per day screening level. Therefore, project construction emissions of ROG, NO_X and other exhaust constituents would be less than significant.

The EDCAQMD Rule 223-1 requires any construction or construction related activities, including the project construction, to submit a Fugitive Dust Control Plan to the EDCAQMD prior to the start of any construction activity for which a grading permit was issued by El Dorado County (EDCAQMD 2005). The project would require less than 250

cubic yards of grading for the cul-de-sac and driveway to achieve the desired elevations of the site, therefore a Fugitive Dust Control Plan is required.

The Fugitive Dust Control Plan must identify the project's potential sources of fugitive dust and Best Management Practice (Rule 223-1, Table 1 through 4) or other effective measures for fugitive dust control. As a Condition of Approval, the County would require implementation of all applicable fugitive dust mitigation measures included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment. Some of the requirements of these mitigation measures may overlap with the requirements of the EDCAQMD Rule 223-1. With adherence to this Condition of Approval, the project's construction-period emissions of fugitive dust PM_{10} and $PM_{2.5}$ would be less than significant.

Operation

The EDCAQMD has adopted screening criteria for determining the significance of a project's operational ozone precursor emissions in Chapter 5 of the Guide to Air Quality Assessment (EDCAQMD 2002):

> For development projects whose only operational emissions come from increased vehicular traffic, screening based on project size or activity may be used to determine whether the project will exceed the threshold of significance for total emissions from project operation. Table 5.2 of from the Guide to Air Quality Assessment provides size or activity cut-points for various types of land uses that the EDCAQMD has determined, based on conservative assumptions, would, if exceeded, result in emissions above the EDCAQMD's thresholds of significance for ROG and NO_X.

The project's proposed commercial cannabis cultivation facility is not included in Table 5.2 of the Guide to Air Quality Assessment. Examples of the development types and sizes in Table 5.2 include 230 single-family residences, 620,000-sf of manufacturing, and 260,000-sf of general office space. The OSTR and the VMT Memo for the project concluded that the project would generate 24 average daily trips. In total, with employee daily trips and delivery vehicles, the project would generate a maximum of 33 trips under the busiest harvest season, far less than the expected trip generation for any of the development types listed in Table 5.2. Therefore, the project's operational emissions of ROG and NO_X would be less than significant.

Impact Conclusion

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be **less than significant**.

c. Sensitive Receptors: The State CEQA Guidelines (14 California Code of Regulation [CCR] 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Residences, hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The discussion below reviews the significance of emissions within the context of potential impacts to sensitive receptors. The closest off-site residence is located approximately 962[1] ft east of the cannabis premises. Other residences are located over 1,000 ft northwest of the cannabis premises. The cannabis premises would be located approximately 380 ft north from Perry Creek Road, which is the closest public road. Gray's Mart, the closest commercial building, would be located approximately 2,200 ft southwest of the cannabis premises.

Criteria Pollutants

Specific adverse health effects on individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_X) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone are, therefore, the product of emissions generated by numerous sources throughout a region. Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be meaningfully correlated to the incremental contribution from the project.

Toxic Air Contaminants

TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. Health effects from carcinogenic air toxins are usually described in terms of cancer risk. The EDCAQMD recommends an incremental cancer risk threshold of 10 in 1 million (with implementation of best available control technology for toxins). "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard California Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2020). In addition, some TACs have non-carcinogenic effects. EDCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects. The TAC that would potentially be emitted during

[1] The project-specific Odor Report notes that the nearest sensitive receptor is 650 ft east of the cannabis premises. However, the project site plan has been revised to relocate the proposed cannabis cultivation areas away from the eastern property boundary. As revised, the proposed cannabis premises would be located 962 feet west of the nearest sensitive receptor which is an off-site residence.

construction activities associated with development of the proposed project would be diesel particulate matter (DPM).

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as DPM. Almost all DPM are 10 microns or less in diameter and 90 percent of DPM is less than 2.5 microns in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, the CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. Due to the relatively short period of construction, the substantial distance to the nearest sensitive receptor, and minimal exhaust PM_{10} emissions generated, project construction would not expose sensitive receptors to substantial concentrations of naturally occurring asbestos (NOA).

Asbestos dust is a known carcinogen and is classified as a TAC by CARB. NOA most commonly occurs in ultramafic rock (i.e., igneous, and metamorphic rock with low silica content) that has undergone partial or complete alteration to serpentine rock (or serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, is associated with ultramafic rock, particularly near geologic faults. Some areas of El Dorado County are known to contain NOA and earthmoving activities in these areas could result in potentially significant levels of NOA in fugitive dust. El Dorado County provides a map which shows the locations of known areas of NOA, areas likely to contain NOA, and buffer zones for known and likely NOA areas (El Dorado County 2015b). The project site is not located within any area known or likely to contain NOA, or within any NOA buffer zone. In addition, the project would be required to comply with the EDCAQMD Rule 223-2 (Fugitive Dust - Asbestos Hazard Mitigation) which requires either a site-specific Geologic Evaluation, or an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the project owner/operator, a professional geologist, or the Air Pollution Control Officer prior to or during construction activity. Therefore, the project construction would not expose sensitive receptors to substantial concentrations of NOA.

Operation of the project would not result in any non-permitted direct emissions of TACs (e.g., those from a stationary source such as diesel generators) or result in substantial diesel vehicle trips (i.e., delivery trucks). Therefore, the project would not result in exposure of sensitive receptors in the vicinity of the project site to substantial TAC concentrations due to operations.

In summary, the project would not expose sensitive receptors to substantial pollutant concentrations, including DPM and NOA, and the impact would be **less than significant**.

d. Objectionable Odors: The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the

impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress, and generate citizen complaints.

Common sources of odors include wastewater treatment plants, landfills, transfer stations, composting facilities, refineries, chemical plants, and food processing plants (EDCAQMD 2002). The proposed project would construct a 68,000-sf outdoor cannabis cultivation facility. During project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from the tailpipes of construction equipment. However, such odors would be short term, would disperse rapidly from the project site, and generally occur at concentrations that would not affect substantial numbers of people. The proposed project would require less than 250 cubic yards of grading for the proposed gravel driveway and cul-de-sac. According to Appendix D of the CalEEMod Users' Guide, a project with a construction area between two and three acres would be expected to require one rubber-tired dozer, one tractor/loader/backhoe, and one grader (CAPCOA 2017), and it is estimated that each piece of equipment would operate for 8 hours per day during project construction. As construction of the proposed project would be short-term and temporary, odors from project construction would be less than significant.

There is an increased potential for odor emanating from project operation due to the strong fragrance of cannabis in the Fall months. The odor from the project operation would be temporary and limited to harvest season, approximately two months. The El Dorado County Cannabis Ordinance has specific requirements that would assist in reducing odor emanating from the site, including setbacks, fencing, and screenings. Cannabis cultivation is required to be setback a minimum of 800 feet from the property line of the site or public right-of-way, as required by the El Dorado County Cannabis Ordinance, Section 130.41.200 and shall be located at least 300 feet from the upland extent of riparian vegetation of any watercourse. The applicant is seeking a setback reduction waiver from the County as the commercial cannabis is setback less than 800 ft on the eastern and southern property lines. The commercial cannabis would be located over 500 ft from riparian vegetation and any watercourse.

An Odor Analysis was prepared by Environmental Permitting Specialists (EPS) in October of 2022 for the proposed project and is included as Appendix E to this Initial Study. EPS used an air dispersion model, 1 year (2019) of hourly wind and temperature data at Somerset and on-site measurements of odor intensity at other locations to conduct this analysis. Data from four (4) other outdoor cannabis and hemp cultivation facilities and one Tedlar bag sample were reviewed as part of the current analysis. Odor measurements taken at a 0.75-acre outdoor cultivation site in Yolo County were used as baseline odors to predict odors at the property lines. The results of the analysis indicated the odor intensity at the eastern property line would exceed the County's threshold of 7 detection threshold (DT). The odor intensity of the southern, northern, and western property lines would not exceed the County's threshold of 7 DT. In order to reduce impacts to odor

intensities along the eastern boundary line, Mitigation Measure AQ-01 would be implemented. With implementation of Mitigation Measure AQ-01, odor intensities along the eastern boundary line are not expected to exceed the 7 DT threshold, therefore, impacts associated with odors would be **less than significant with mitigation.**

Mitigation Measure AQ-01: Odor Control System

The project shall require odor mitigation along approximately 350 ft of the eastern portion of the property. Prior to construction of the cannabis cultivation facility, the applicant shall implement one of two options for mitigating odors: using a misting system that sprays the odor neutralizer across the property lines or use a fan that flows the neutralizer across and towards the canopy. It is recommended the applicant shall use fan-based mitigation. The applicant shall install three to six fans along the eastern portion of the property, and the amount of neutralizer that shall be dispensed shall be adjusted to ensure the odors are neutralized. The effectiveness of the system shall be confirmed by measuring the odor intensity using the Nasal Ranger olfactometer. If cannabis-related odor levels are detected at a level above the county limit of 7 DT, Cannabis Cultivation activities on-site would be halted and project impacts and mitigation would be reassessed as necessary.

Monitoring Requirement: The mitigation measure compliance shall be demonstrated prior to commencement of any commercial cannabis activities.

Monitoring Responsibility: El Dorado County Planning and Building Department

FINDING: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard or expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant. With adherence to the EDCAQMD applicable rules and the Odor Control Plan, as well as implementation of Mitigation Measure AQ-01, *Odor Control System*, the proposed project would have less than significant impacts on air quality and odors.

IV. Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		**X**		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		**X**		
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			**X**	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				**X**

The biological resources section is based on the project-specific Biological Resources Assessment (BRA) prepared by Greg Matuzak Environmental Consulting, LLC (Matuzak 2022) to assess the

project's potential impact to federal and State special status plants and wildlife species and their habitats. The BRA is included as Appendix F of this Initial Study. The results of the BRA are summarized in this section.

Environmental Setting:

For this assessment, the project area is defined as the cannabis premises. The project property (or subject parcel) is located in the northern-central Sierra Nevada foothills. The Sierra Nevada foothills lie between the western edge of the Sierra Nevada and the eastern border of the Central Valley. The foothills form a belt 10 to 30 miles wide that ranges from 500 to 5,000 feet in elevation in a series of northwest to north-northwest aligned ridges that decline in elevation from northeast to southwest. Many rapidly flowing rivers and streams run westerly in deeply incised canyons with bedrock channels to the Central Valley and eventually to the Pacific Ocean. Alluvial fans, floodplains, and terraces are not extensive; and all but the largest streams are generally dry during the summer. Dominant vegetation communities include grasslands, and oak woodlands.

The terrain within the subject parcel is typical of the lower Sierra Nevada foothills that normally vary between flat ridges and valleys to gently and moderately sloping hillsides. The project area elevation ranges from approximately 2,110 to 2,190 ft amsl.

The western edge of the subject parcel contains Perry Creek, which is mapped on United States Geological Survey (USGS) and the National Wetland Index (NWI). A water well fed pond is also mapped on USGS and the NWI; however, both the existing pond and Perry Creek are located west of the project area. No aquatic features or habitats are located within or directly adjacent to the project area.

Reconnaissance-level biological resources field surveys were conducted on foot for the entirety of the project area by Greg Matuzak, Principal Biologist, on July 21st, 2020. Follow up reconnaissance-level biological resources field surveys were not required or conducted by Greg Matuzak given the initial site visit and field surveys were conducted during the required blooming period for potential special-status plant species that have a potential to occur within the project area.

Vegetation communities within the subject parcel are typical of the lower Sierra Nevada foothills. The Biological Resources Assessment identified the following vegetation communities on the property:

- **Oak Woodland**: Oak woodland is the dominant habitat type within the subject parcel. Interior live oak trees (Quercus wislizeni) are the dominant species within this habitat type and the only native oak trees identified within the subject parcel within and directly adjacent to the existing residence and proposed cultivation areas. Ponderosa pine (Pinus ponderosa) is also located within this habitat type. No native oak trees will be removed as part of the development of the proposed Project. The proposed cultivation area, accessory areas, and access road to the cultivation area are all located within open,

disturbed areas dominated by non-native annual grassland species; therefore, this habitat type (native oak trees) would be avoided, and no trees would be removed. In 2021, CAL FIRE developed a 100 foot by 1,250-foot fire break to protect the subject parcel during the Caldor Fire. The proposed canopy would be located within the cleared area where CAL FIRE removed many trees to create the fire break.

- **Annual Grassland**: Annual grassland including the following dominant species: slender wild oat (Avena barbata), ripgut brome (Bromus diandrus), softchess (Bromus hordeaceus), medusahead (Taeniatherum caput-medusae) and yellow-star thistle (Centaurea solstitialis). Most native grasslands in El Dorado County have been replaced by non-native invasive plants and the majority of the annual grassland habitat identified within the subject parcel is dominated by non-native annual grassland species and many are considered invasive. There is minimal annual grassland within the subject parcel; however, it is located within and adjacent to the Phase II canopy area given the open and disturbed nature of the areas where proposed Project Phase II disturbance-related development would occur within the project parcel.

- **Cultivated/Planted Orchards**: Extensive plantings of English walnut (Juglans regia) are located directly adjacent to the area along the access to the residence and adjacent to the proposed chemical storage cabinet, processing and harvest storage building, immature plant greenhouse, and the proposed compost area. The subject parcel includes other cultivated and planted orchards, including a large vineyard located directly to the east of the existing residence and buildings.

El Dorado County regulates impacts to oak trees and woodlands through the Oak Resources Management Plan (ORMP) and the Oak Conservation Ordinance (no. 5061). The purpose of the ORMP is to define mitigation requirements for impacts to oak resources (oak woodlands, individual native oak trees, and Heritage Trees) and to outline strategies for oak woodland conservation. The proposed project would impact 65 oak trees (see Appendix G for the Oak Resources Technical Report).

Special-status species were considered for the property based on a current review of the California Natural Diversity Database (CNDDB), database information provided by the United States Fish and Wildlife Service (USFWS) and California Native Plant Society (CNPS), as well as the reconnaissance-level biological resources surveys.

No USFWS Designated Critical Habitat (DCH) has been mapped by USFWS for any federally listed species within the vicinity of the subject parcel. The CNDDB reported one special-status habitat north/northwest of the subject parcel within the Middle Fork of the Consumnes River: the Central Valley Drainage Hardhead/Squawfish Stream. However, the CDFW sensitive habitat community of hardhead and squawfish species are not known to occur within Perry Creek. As Perry Creek is not located within or adjacent to the project area and this sensitive habitat community is not known to occur, this sensitive stream habitat and sensitive species would not be impacted by the development of the proposed project.

The project area is not located within any of the required habitats for the previously documented special-status plant species. Additionally, no special-status plant species have been previously mapped within the CNDDB within 3 miles of the subject parcel.

In El Dorado County, native oak woodlands are a protected habitat. In 2021, the Caldor Fire occurred within El Dorado County and CAL FIRE constructed a 12,500-sf (100 ft by 1,250 ft) fire break within the property where the cultivation site would be located. Therefore, CAL FIRE removed many trees, most of which were oak trees.

Based on the results of the database searches, three (3) special-status wildlife and fish species were identified as previously occurring within three miles of the subject parcel: Great Gray Owl, Foothill yellow-legged frog, and nesting raptors and other migratory bird species.

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 *et seq.*) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The USFWS and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA (16 USC 1539 *et seq*.) provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in "take" of endangered or threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds and their nests and eggs; protected species are on a federal list specific to this act (50 CFR Section 10.13). Most actions that result in take, or the permanent or temporary possession of, a

migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides civil and criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of State water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits State agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is State listed as endangered or threatened or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1607 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. The limit of CDFW jurisdiction is subject to the judgment of the Department; currently, this jurisdiction is interpreted to be the “stream zone,” defined as “that portion of the stream channel that restricts lateral movement of water” and delineated at “the top of the bank or the outer edge of any riparian vegetation, whichever is more landward”.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a State designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2020). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practice Act, which took effect January 1, 1974. The act established the FPRs and charged the politically-appointed Board of Forestry to oversee their implementation. CAL FIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan must be prepared by a Registered Professional Forester for timber harvest on non-federal timberlands, with limited exceptions.

California Code of Regulations Title 3:

Section 8102 states:

> [Each application for a cultivation license shall include the following, if applicable]:
>
> (w) A copy of any final lake or streambed alteration agreement issued by the California Department of Fish and Wildlife, pursuant to sections 1602 or 1617 of the Fish and Game Code, or written verification from the California Department of Fish and Wildlife that a lake and streambed alteration agreement is not required
>
> (dd) If applicable, the applicant shall provide evidence that the proposed premises is not located in whole or in part in a watershed or other geographic area that the State Water Resources Control Board or the Department of Fish and Wildlife has determined to be significantly adversely impacted by cannabis cultivation pursuant to section 8216.

Section 8216 states:

> If the State Water Resources Control Board or the Department of Fish and Wildlife notifies the department in writing that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area pursuant to section 26069, subdivision (c)(1), of the Business and Professions Code, the department shall not issue new licenses or increase the total number of plant identifiers within that watershed or area while the moratorium is in effect.

Section 8304 states:

> All licensees shall comply with all the following environmental protection measures:
>
> (a) Compliance with section 13149 of the Water Code as implemented by the State Water Resources Control Board, Regional Water Quality Control Boards, or California Department of Fish and Wildlife;
>
> (b) Compliance with any conditions requested by the California Department of Fish and Wildlife or the State Water Resources Control Board under section 26060.1(b)(1) of the Business and Professions Code;

(c) All outdoor lighting used for security purposes shall be shielded and downward facing.

Local Laws, Regulations, and Policies

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

The project site is not located in an area subject to these additional provisions (El Dorado County 2003).

<u>El Dorado County</u>

EI Dorado County Code and General Plan Policies pertaining to the protection of biological resources would include protection of rare plants, setbacks to riparian areas, and mitigation of impacted oak woodlands. Policy 7.4.4.4 of the General Plan establishes the native oak tree canopy retention and replacement standards. Impacts to oak woodlands have been addressed in the El Dorado County General Plan EIR, available for review online at https://www.edcgov.us/Government/planning/pages/final_environmental_impact_report_%28eir%29.aspx or at El Dorado County Planning Services offices located at 2850 Fairlane Court, Placerville, CA, 95667. Mitigation in the form of General Plan policies has been developed to mitigate impacts to less than significant levels. The County's oak resources reporting and impact

mitigation requirements are outlined in El Dorado County's Oak Resources Management Plan (ORMP) and codified in County Ordinance No. 5061.

El Dorado County Oak Resources Conservation Ordinance (No. 5061)

The El Dorado County Oak Resources Conservation Ordinance was adopted to establish standards for implementing the County's ORMP. The Ordinance protects native oak resources as oak canopy or as an individual tree and states that an impact is defined for individual native oak trees as the physical destruction, displacement or removal of a tree or portions of a tree caused by poisoning, cutting, burning, relocation for transplanting, bulldozing or other mechanical, chemical, or physical means. For oak woodlands, tree and land clearing apply when they are associated with land development, including, but not limited to, grading, clearing, or otherwise modifying land for roads, driveways, building pads, landscaping, utility easements, fire-safe clearance and other development activities. If a project is determined to have an impact to individual native oak trees or oak woodlands the project is required to mitigate for that impact through one of the following: Pay-in-lieu fee, purchase and deed-restrict oak woodland off-site, or plant replacement oaks on- or off-site.

Impact Analysis:

a. **Special Status Species:** Special-status plant surveys were conducted within the subject parcel during July 2020, which coincides with the blooming period of the special-status plant species that have the potential to occur within the subject parcel. No special-status plants were documented within the subject parcel during the reconnaissance site survey. Therefore, there is a very low likelihood that the subject parcel would contain a protected special-status plant species listed by CNPS based on the results of the July 2020 surveys. However, the CNDDB reported one special-status habitat north/northwest of the subject parcel within the Middle Fork of the Consumnes River: the Central Valley Drainage Hardhead/Squawfish Stream. However, the CDFW sensitive habitat community of hardhead and squawfish species are not known to occur within Perry Creek. As Perry Creek is not located within or adjacent to the project area and this sensitive habitat community is not known to occur, this sensitive stream habitat and sensitive species would not be impacted by the development of the proposed project.

Based on the results of the database searches, three (3) special-status wildlife and fish species were identified as previously occurring within 3 miles of the subject parcel: Great Gray Owl, Foothill yellow-legged frog, and nesting raptors and other migratory bird species.

The Great Gray Owl has been previously documented within 3 miles to the southeast of the subject parcel. The subject parcel does not provide suitable nesting opportunities given the species prefers larger, old growth forested habitat for nesting and large meadows for foraging, neither of which occur within the subject parcel. Therefore, the proposed project would have no impact on the Great Gray Owl.

The Foothill yellow-legged frog has been identified to the north of the subject parcel within the Middle Fork of the Cosumnes River. The species has not been identified within Perry Creek within 3 miles of the subject parcel. However, suitable habitat for the species does not occur within the subject parcel or within or adjacent to the project area. Therefore, the proposed project would have no impact on the Foothill yellow-legged frog.

Given the areas adjacent to the project area contain some medium-sized trees and many of those trees contain suitable habitat for nesting raptors and other protected bird species, potential noise-related impacts could occur to such protected nesting bird species if construction occurs within the breeding season for raptors and MBTA protected bird species. The breeding season for raptors and MBTA protected bird species in the vicinity of the subject parcel is generally from February 1 to August 31. Vegetation clearing should be done outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or mitigation measures. No trees are proposed to be removed as part of the development of the proposed project. However, construction or development activities during the breeding season could disturb occupied nests of raptors and MBTA bird species due to noise. Therefore, with implementation of Mitigation Measure BIO-01, impacts to nesting raptors and other protected bird species would be less than significant.

With implementation of Mitigation Measure BIO-01, the proposed project would have a **less than significant impact with mitigation.**

Mitigation Measure BIO-01: Pre-Construction Survey for Nesting Raptors and other Protected Bird Species

Construction or disturbance activities during the breeding season (February 1 – August 31) could disturb or remove occupied nests of raptors and/or protected bird species. If construction is anticipated during breed season, the applicant shall require pre-construction surveys to be completed by a CDFW-qualified biologist within 14 days prior to disturbance. The nesting survey radius around the proposed disturbance shall be identified prior to the implementation of the protected bird nesting surveys by a CDFW-qualified biologist and shall be based on the habitat type, habitat quality, and type of disturbance proposed within or adjacent to nesting habitat.

If any nesting raptors or protected birds are identified during such pre-construction surveys, trees or shrubs or grasslands with active nests shall not be removed or disturbed. A no-disturbance buffer shall be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified wildlife biologist determines that the young have fledged. The extent of these buffers shall be determined by a CDFW-qualified wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors shall be analyzed by a qualified wildlife

biologist to make an appropriate decision on buffer distances based on the species and level of disturbance proposed in the vicinity of an active nest.

Monitoring Requirement: The mitigation measure shall be noted on all grading and development plans.

Monitoring Responsibility: El Dorado County Planning and Building Department

b, c. **Riparian Habitat and Wetlands:** The BRA determined that no water resources occur within the project area. Natural hydrological sources for the project area include precipitation and surface run-off from adjacent lands. Perry Creek and a water well fed pond are located within the subject parcel and were mapped on USGS and the NWI; however, both the existing pond and Perry Creek are located over 500 ft west of the project area. Therefore, the proposed project would not be subject to permitting requirements under the Clean Water Act and by CDFW (i.e., a Streambed Alteration Agreement is not required). As all water features on the subject parcel are over 500 ft from the project area, potential impacts to any riparian habitat or other sensitive natural community would be **less than significant.**

d. **Migration Corridors:** Wildlife movement corridors typically are associated with ridgelines and valleys, rivers, and creeks supporting riparian vegetation. The proposed project area does provide good cover for movement and foraging for many species. More typical movement corridors are available within undisturbed areas of the subject parcel. Construction of the proposed project may temporarily impede wildlife use of the subject parcel; however, construction would be localized and would not substantially impact wildlife movements. No wildlife nursery sites are located within the proposed project area; however, the proposed project has the potential to impact impacts to nesting raptors and other protected bird species. These potential impacts would be mitigated through the implementation of Mitigation Measure BIO-01. With implementation of Mitigation Measure BIO-01, impacts would be **less than significant with mitigation**.

e. **Local Policies:** The project applicant would comply with the El Dorado County Oak Resources Conservation Ordinance. In 2021, the Caldor Fire occurred within El Dorado County and CAL FIRE constructed a 12,500-sf (100 ft by 1,250 ft) fire break within the area of the subject parcel where the proposed project is proposed to be located. Due to the fire break, CAL FIRE removed many trees, most of which were oak trees.

The proposed project would impact 65 oak trees, of which 27 are dead, dying, or diseased trees. Therefore, 38 trees require mitigation for this project, and this site contains an oak woodland of black oaks and interior live oaks. The site does not have any valley oaks or heritage oaks that are in good health. An Oak Resources Technical Report was prepared in compliance with the County's Oak Resources Conservation Ordinance (Oak Ordinance; County Code Chapter 130.39) and is included as Appendix G to this Initial Study. The results of the Oak Resources Technical Report conclude that approximately 0.44 acre of oak woodland on-site would be impacted which is less than 50% of the oak woodland on-

site and would require mitigation at a 1:1 ratio. The total number of inches for individual oak tree mitigation for this project is 409 inches of non-heritage oak tree impacts.

Trees within the oak woodland may be removed entirely or impacted by construction activities within the root protection zone (RPZ). Project activities that would impact oak woodlands include clearing trees to make room for cultivation. The County's oak resources reporting and impact mitigation requirements are outlined in El Dorado County's ORMP and codified in County Ordinance No. 5061. In accordance with County Ordinance No. 5061, the project applicant is required to mitigate for impacts to individual native oak trees and oak woodland through one of the following: pay-in-lieu fee, purchase and deed restrict oak woodland off-site, or plant replacement oaks on- or off-site. Therefore, compliance with the County's ORMP (Ordinance No. 5061) would reduce potential impacts to **less than significant**.

Adopted Habitat Conservation Plans: The project area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan, and there would be **no impact**.

FINDING: No special status species or sensitive habitat were identified on the project site. Implementation of Mitigation Measure BIO-01, *Pre-Construction Survey for Nesting Raptors and other Protected Bird Species*, would avoid any potential impacts to nesting raptors, nesting birds, or other bird species. Compliance with the County's ORMP (codified in County Ordinance No. 5061) would reduce impacts to protected oaks tree and oak woodland on the project site. For this Biological Resources evaluation, impacts would be less than significant with mitigation.

V. Cultural Resources

Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			**X**	
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?			**X**	
c. Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

A Cultural Resources Study was prepared for the project by Historic Resource Associates (HRA 2020). The report documented results of a records search of the North Central Information Center (NCIC), consultation with the Native American Heritage Commission (NAHC), and an intensive pedestrian survey of the project site which are summarized below. The Cultural Resources Study is included as Appendix H.

Environmental Setting:

For this assessment, the project area is identified as the cannabis premises. According to the 2000 USGS 7.5' Aukum, California Topographic Quadrangle Map (Figure 1), the project site is located at an elevation of approximately 2,150 ft amsl. The topography of the property is characterized by level to gently sloping topography flanked by grasslands and oak woodlands.

The subject parcel is in the Sierra Nevada foothills, south of Somerset, the nearest post office. Because of its elevation the project site would have been conducive to permanent habitation since snow is infrequent. Hence, native groups could exploit resources in the region nearly year-round. Precontact groups in the region in which the subject parcel is located would have subsisted primarily on freshwater fish, deer, acorns, and small game animals harvested from the surrounding water sources and foothills.

Prehistoric Overview

The earliest inhabitants of the foothill region near Somerset occupied the area from 4000 to 1500 years BP, have been identified as the Martis Tradition (Elston et al. 1977:171). Data collected from Garden Valley indicate an additional temporal sequence in an area now under Bullards Bar

reservoir in Yuba County (Humphreys 1969). Similarities between the Martis artifact assemblages and those of the Mesilla assemblages recovered from the nearby Oroville reservoir have been noted by Markley and Henton (1985) and Kowta (1988). According to Heizer and Elsasser (1953) the Martis phase, named after the Martis Valley, is characterized by the wide-spread use of basalt for stone tools, large, roughly shaped projectile points of the Martis type (Heizer and Elsasser 1953), atlatl weights, manos, millingstones, bowl mortars, cylindrical pestles, and many flake scrapers (Moratto 1984:295). Martis is considered a series of phases, which may be of Great Basin origin, but which is distributed from the western Great Basin to the Central Valley. Its distribution roughly coincides with the ethnographic territories of the Maidu and the Washo peoples. Although probably not ancestral to the Washo, Martis may represent Maidu prehistory, including Nisenan (Moratto 1984:302-303).

The artifact assemblages of the Martis Complex typically include stemmed, corner-notched, side-notched and leaf-shaped projectile points, primarily made of basalt. These points were apparently used to tip spears and darts. Scrapers, blades, choppers, gravers and punches or drills include other edge-bearing artifacts. For grinding or milling, the mano and milling slab were widely used during the Martis phase. Both California and Great Basin elements may be observed at Martis sites (Meals 2003:2).

On the western slopes of the Sierra Nevada, the Mesilla Complex (before 3000 BP to 2000 BP) was followed by the Bidwell Complex (2000 BP to 1200 BP). The Bidwell Complex adopted traits from the Central California tradition. The Sweetwater Complex (1200 BP to 400 BP) differed considerably from the former traditions in its increasing reliance on acorn grinding mortar and pestle technology and the use of small corner-notched projectile points. This has been interpreted to indicate the arrival of a Maiduan-speaking population from the south (Kowta 1988:147-152).

Generalizing over the entire west slope of the Northern Sierra Nevada, Moratto (1984) postulated that by 1000 B.C., the area was settled by groups of people of unknown origins who possessed both Martis and Central Valley traits. During this period, the bow and arrow were introduced, at approximately 600 A.D. - 800 A.D., and the mortar and pestle were more intensively used after 1400 A.D. (Moratto 1984:303). By 1 A.D., permanent villages were established. The greater sedentism, coupled with population growth, encouraged the development of a settlement pattern of secondary villages and seasonal camps (Moratto 1984:303). The primary villages became the political, social, and ceremonial centers for communities by 1500 A.D. (Moratto 1984:303). This pattern closely resembles the settlement system of the Nisenan, the ethnographic group which inhabited the area near the project.

Ethnographic Context

The project area is in territory generally believed to have been occupied in aboriginal and historic times near the southern territorial boundary of the Southern Maidu or Nisenan and the northern territorial boundary of the Northern Sierra Miwok (Levy 1978). In the area of the western slope of the Sierra, the territory of the Miwok, like the Nisenan, their neighbors to the north, crossed several plant communities, making available to them a wide variety of plant resources. Numerous

mineral resources, including steatite, quartz, quartzite, quartz crystals, chert, greenstone, rhyolite, and slate were available to Miwok living in the foothills. Through trade, minerals, such as obsidian, that were not available locally were obtained. Gold never played a role in commerce and trade among the Miwok or Nisenan, although after the discovery of gold in 1848, both Miwok and Nisenan participated in gold mining.

Animals hunted included deer, rabbits, and other small game. Mule deer (Odocoileus hemionus) were hunted in drives, with the use of fire, decoys, snares or deadfalls. Rabbits (Lepus) were killed with sticks or blunted arrows, trapped, snared, or rounded up with the use of nets or fire. Fish were poisoned with soaproot (Chlorogalum pomeridianum) and turkey mullein or caught by hand in shallow water (Wilson and Towne 1978:389-390). Weirs, nets, harpoons, traps and gorgehooks were also used to catch fish. Grasshoppers, ants, lizards, and frogs were also eaten, and salt was obtained from springs located near Cool (Heizer and Treganza 1972:340).

Tools, including arrow and spear points, knives, and scrapers, were made of basalt, chalcedony, jasper, or obsidian. Preferred basketry materials were willow (Salix) and redbud (Cercis occidentalis), but the roots of yellow pine (Pinus ponderosa) and bracken fern (Pteridophyta aquilinum) were also used. Clothing and adornment was not elaborate. Steatite and whole olivella shell bead necklaces were among the items traded from the Patwin and Maidu. Males often wore a breechcloth, and women a skirt of wire grass (Wilson and Towne 1978:391-392). Shortly after the discovery of gold in January 1848, the vicinity was overrun with white miners and by the late nineteenth century, when the placer gold excitement abated, the area was used largely for timber harvesting, small-scale farming, and grazing livestock.

Historic Context

The historic context of the project area is directly linked to the Gold Rush of the 1850s, as well as the economic and agricultural development of El Dorado County, particularly the area surrounding the mining community of Fairplay. The history of the project area is directly linked to the Gold Rush of the 1850s, the economic and agricultural development of El Dorado County, and commerce and trade between Carson Valley, Grizzly Flats, Somerset, Fair Play, and other mining camps along the forks of the Cosumnes River. In January 1848, gold was discovered in Coloma. One year later, thousands of would-be gold seekers arrived in the "diggins." Between 1848 and 1850, Coloma, which was chosen as the county seat, was the center of economic activity in El Dorado County. The first businesses in town were Captain Shannon and Cady`s New York store, S.S. Brook's store, and John Little's Emporium. Sutter's Mill continued to whip saw lumber for the growing community, but Marshall found running the mill amidst the excitement of the gold discovery futile. By the early 1850s the mill discontinued operation. Coloma's demise as the central commercial center in El Dorado County came in 1854, when the county seat was moved to Placerville. Placerville also became the principal city on the Emigrant Roads leading over the Sierra, and, subsequently, after the discovery of gold and later silver near Virginia City, miners, freighters, teamsters, and others traveled back and forth over the Sierra through Placerville.

Fair Play, the nearest historic community to the project area, was located near Perry Creek, a tributary to the Middle Fork of the Consumnes River. In 1853, N. Sisson and Charles Staples settled in the area. According to local tradition, the towns' name arose from an incident in which an appeal for fair play forestalled a fight between two miners (Gudde 1969: 106). In 1853 the camp was mentioned as a prosperous little mining town with several stores and hotels (Alta, December 21, 1853). Illustrated on Doolittle's map of 1868, Fair Play became a post office (1862) and trading center for drift and hydraulic mines in the area. By the 1880s, agriculture prevailed, but a 10-stamp mill was still in operation (Gudde 1975: 113). Based upon historic documents and maps, no improvements are noted within the project area. Gold placer mining occurred to the north in Perry Creek and nearby tributaries.

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);

B. Are associated with the lives of persons significant in our past (persons);

C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or

D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding and affords certain protections under CEQA. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

B. Are associated with the lives of persons important to local, California, or national history.

C. Embody the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values.

D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a Statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological, and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

PRC (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California PRC stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The

descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and State CEQA Guidelines

Section 21083.2 of the State CEQA Guidelines requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided in the State CEQA Guidelines under Section 21083.2.

Section 15064.5 of the State CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- Listed in, or determined to be eligible for listing in, the CRHR (PRC Section 5024.1[k]);
- Included in a local register of historic resources (PRC Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of PRC Section 5024.1(g); or
- Determined by a lead agency to be historically significant.

State CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and PRC Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

State CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

California Code of Regulations Title 3:

Section 8304(d) states:

> [All licensees shall comply with all of the following environmental protection measures:] (d) Immediately halt cultivation activities and implement section 7050.5 of the Health and Safety Code if human remains are discovered.

Impact Analysis:

a. **Historic Resources:** A Cultural Resources Study was prepared for the project by Historic Resource Associates (HRA 2020). The report documented results of a records search of the NCIC, consultation with the NAHC, and an intensive pedestrian survey of the project site which are summarized below.

There has been one previous intensive cultural resource survey that encompassed the entire project area (Waechter 1984). The study was conducted under federal guidelines due to the project being licensed by the Federal Energy Regulatory Commission (FERC). As a result of the cultural resource survey, one (1) prehistoric archaeological site was identified within the subject parcel: CA-ELD-512, consisting of four shallow bedrock mortars on two separate granitic outcrops located along a rock knoll immediately above or west of Perry Creek. Waechter determined that the prehistoric bedrock mortars were not a significant resource, as per federal regulations. No cultural artifacts were identified within or near the bedrock mortars. In addition, Waechter identified two isolates: Isolate A, consisting of a dry-laid rock wall near Perry Creek, and Isolate B, consisting of a small base fragment of glazed earthenware, most likely a Chinese soy sauce jug. The owner of the parcel had previously found two small stemmed triangular projectile points near his residence.

According to the site files at the NCIC, there were no NRHP, CRHR, National Historic Landmark (NHL), or California Historic Landmark (CHL) listed sites within the proposed project area. It has been determined that the precontact sensitivity of the project footprint is moderate, due to the identification of bedrock mortars near Perry Creek and several isolated prehistoric artifacts near the current residence. However, the project site or footprint has been cleared of timber, cultivated, and planted with a vineyard. The current survey did not reveal any new cultural resource sites, features, or artifacts.

A pedestrian survey of the project site was completed by Dana E. Supernowicz, M.A., Registered Professional Archaeologist (RPA) on July 5, 2020. Ground surfaces within the project area were observed to have been disturbed by past development. No cultural materials, topographic anomalies, or other features that may indicate historic or

precontact use were observed. Historic Resource Associates has notified the NAHC of the impending project and has requested any information related to sacred sites within the subject parcel. No prehistoric or historic cultural resource properties were identified by this survey effort in the project footprint and no further archaeological work is recommended for the project. Standard Conditions of Approval (below) imposed by the County on the project would address the accidental discovery of any previously unidentified resources during construction and result in project impacts that are **less than significant**.

b. **Archeological Resources:** Based on the absence of significant historical resources/unique archaeological resources/historic properties within the project footprint, the report recommends archaeological clearance for the project as presently proposed. Standard Conditions of Approval (below) imposed by the County on the proposed project would address the accidental discovery of any previously unidentified resources during construction and result in project impacts that are **less than significant**.

c. **Human Remains:** The Cultural Resources Study prepared for the project, which included a records search and an intensive pedestrian survey of the site, did not find evidence of potential human remains (HRA 2020). In the unlikely event that human remains are discovered during construction, the County's standard Conditions of Approval (below) requiring compliance with CEQA Guidelines Section 15064.5(e) would result in project impacts that are **less than significant**.

Conditions of Approval:

- Heritage Resources: In the event a heritage resource or other item of historical, archaeological, or paleontological interest is discovered during grading and construction activities, the project proponent shall ensure that all such activities cease within 50 feet of the discovery until an archaeologist or paleontologist can examine the find in place and determine its significance. If the find is determined to be significant and authenticated, the archaeologist or paleontologist shall determine the proper method(s) for handling the resource or item. Grading and construction activities may resume after the appropriate measures are taken or the site is determined not to be of significance.

- Discovery of Human Remains: In the event of the discovery of human remains, all work is to stop, and the County coroner shall be immediately notified pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.98 of the Public Resources Code. If the remains are determined to be Native American, the Coroner must contact the Native American Heritage Commission within 24 hours. The treatment and disposition of human remains shall be completed consistent with guidelines of the Native American Heritage Commission.

FINDING: With the implementation of standard Conditions of Approval imposed by the County, the proposed project would have a less than significant impact on Cultural Resources.

VI. Energy

Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Result in potential significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?			**X**	

Environmental Setting:

This section provides an evaluation of existing energy production and consumption conditions, as well as potential energy use and related impacts from the proposed project. The following discussion is consistent with and fulfills the intent of Appendix F Energy, from the State CEQA Guidelines.

The unit of energy used in this section are the British thermal units (BTU) and kilowatt hours (kWh). A BTU is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (°F) at sea level. Because the other units of energy can all be converted into equivalent BTU, the BTU is used as the basis for comparing energy consumption associated with different resources. A kilowatt hour (kWh) is a unit of electrical energy, and one kWh is equivalent to approximately 3,413-BTU, considering initial conversion losses (i.e., from one type of energy, such as chemical, to another type of energy, such as mechanical) and transmission losses. Natural gas consumption is described typically in terms of cubic feet or therms; one cubic foot of natural gas is equivalent to approximately 1,050-BTU, and 1-therm represents 100,000 BTU.

California Energy Overview:

Electricity

California's electricity needs are satisfied by a variety of entities, including investor-owned utilities, publicly owned utilities, electric service providers and community choice aggregators. In 2020, the California power mix totaled 277,764 gigawatt hours (GWh). In-State generation accounted for 194,127 GWh, or 70 percent, of the State's power mix. The remaining electricity came from out-of-State imports (CEC 2022a). Table 1 below provides a summary of California's electricity sources as of 2021.

Natural Gas

Natural gas provides the largest portion of the total in-State capacity and electricity generation in California, with nearly 45 percent of the natural gas burned in California used for electricity generation in a typical year. Much of the remainder is consumed in the residential, industrial, and commercial sectors for uses such as cooking, space heating, and as an alternative transportation fuel. In 2012, total natural gas demand in California for industrial, residential, commercial, and electric power generation was 2,313 billion cubic feet per year (bcf/year), up from 2,196 bcf/year in 2010 (CEC 2022b).

Table 1
California Electricity Sources 2021

Fuel Type	Percent of California Power (%)
Coal	3.0
Large Hydro	9.2
Natural Gas	37.9
Nuclear	9.3
Oil	0.0
Other (Petroleum Coke/Waste Heat)	0.2
Renewables (excluding Large Hydro)	33.6
Unspecified	6.8

Source: CEC 2022a

Transportation Fuels:

Transportation accounts for a major portion of California's energy budget. Automobiles and trucks consume gasoline and diesel fuel, which are nonrenewable energy products derived from crude oil. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles (SUVs). In 2015, 15.1 billion gallons of gasoline were sold in California (CEC 2022c). Diesel fuel is the second most consumed fuel in California, used by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats, and farm and construction equipment. In 2015, 4.2 billion gallons of diesel were sold in California (CEC 2022d).

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Independence and Security act of 2007

House of Representatives Bill 6 (HR 6), the federal Energy Independence and Security Act of 2007, established new standards for a few equipment types not already subjected to a standard, and updated some existing standards. Perhaps the most substantial new standard that HR 6 established is for general service lighting that is being deployed in two phases. First, phased in

between 2012 through 2014, common light bulbs were required to use about 20 to 30 percent less energy than previous incandescent bulbs. Second, by 2020, light bulbs must consume 60 percent less energy than today's bulbs; this requirement would effectively phase out the incandescent light bulb.

Energy Improvement and Extension Act of 2007

The formerly entitled "Renewable Energy and Job Creation Act of 2008," or Division B of HR 1424, was signed into law by President Bush in October 2008. The signed bill contains $18 billion in incentives for clean and renewable energy technologies, as well as for energy efficiency improvements.

State Laws, Regulations, and Policies

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every two years, and to provide an update in the year between reports. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2019 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

California Building Standards Code (California Code of Regulations, Title 24)

The 2019 Building Energy Efficiency Standards, comprising Title 24, Parts 1 and 6, of the California Code of Regulations, are mandatory Statewide. Local government agencies may adopt and enforce energy efficiency standards for newly constructed buildings, additions, alterations, and repairs provided the California Energy Commission finds that the standards will require buildings to consume no more energy than permitted by Title 24, Part 6. Such local standards may include adopting the requirements of Title 24, Part 6 before their effective date, requiring additional energy conservation measures, or setting stricter energy budgets. Title 24, Part 11 contains additional energy measures that are applicable to the project under the California Green Building Standards Code (CALGreen).

California Code of Regulations Title 3:

Section 8306 provides requirements for stationary and portable generators greater than 50 horsepower. It requires these to comply with the appropriate Airborne Toxic Control Measure for stationary or portable generators and includes certificates or permits that are acceptable to prove compliance. Additional compliance options are provided for generators below 50

horsepower by 2023, including limiting hours of operation, meeting certain emergency use requirements, or filter and engine requirements.

Local Laws, Regulations, and Policies

El Dorado County General Plan

The El Dorado County General Plan Public Services and Utilities Element encourages energy efficiency development within the County by imposing two policies:

- *Policy 5.6.2.1*- Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

- *Policy 5.6.2.2*- All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Impact Analysis:

a. **Energy Consumption:** The proposed project would involve the construction of a cannabis cultivation facility. While construction activities would result in the temporary consumption of energy resources in the form of vehicle and equipment fuels (gasoline and diesel fuel) and electricity/natural gas (directly or indirectly), such consumption would be short-term and temporary and would thus not have the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources. Regarding the long-term operation of the project, the property currently utilizes PG&E grid power. However, during Phase I, renewable energy would be purchased from PG&E's Solar Choice or Regional Renewable Choice and Phase II would install a 14.49 KW photovoltaic system (grid-tied solar panels) to provide renewable power for the project site. The 14.49 KW photovoltaic ground-mounted system would be installed. A solar battery trailer unit would be used as backup, for emergency power outages only. The project is expected to source all electricity for operation from solar installed on-site and use of a solar battery trailer unit would be limited to power outage events, and if the solar energy system is limited by undetermined weather conditions. The project would be subject to Statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, which contains additional energy measures that are applicable to the project under CALGreen. Prior to project approval, the project applicant would be required to ensure that the project would meet Title 24 requirements applicable at that time, as required by State regulations through their plan review process. Therefore, with the development of a renewable energy source and the inherent increase in efficiency of building code regulations, the project would not result in a wasteful use of energy. Impacts related to energy use would be **less than significant**.

b. **Energy Plans and Efficiency Standards:** Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's

building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every three years) to incorporate and consider new energy efficiency technologies and methodologies. Title 24 also includes Part 11, CALGreen. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and State-owned buildings, as well as schools and hospitals. The proposed project would meet Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Overall, the project would not conflict with existing energy standards and regulations; therefore, impacts during construction and operation of the project would be **less than significant**.

FINDING: With installation of solar renewable energy to power on-site operations and conformance with Statewide mandatory energy requirements as outlined in Title 24, Parts 6 and 11 of the California Code of Regulations, the project would have a less than significant impact on energy resources.

VII. Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?				**X**
iv) Landslides?			**X**	
b. Result in substantial soil erosion or the loss of topsoil?			**X**	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?			**X**	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	

Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			**X**	

Environmental Setting

The property is situated in the northern-central Sierra Nevada foothills. The Sierra Nevada foothills lie between the western edge of the Sierra Nevada and the eastern border of the Central Valley. The foothills form a belt 10 to 30 miles wide that ranges from 500 to 5,000 ft in elevation in a series of northwest-to-north-northwest aligned ridges that decline in elevation from northeast to southwest. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. According to the custom Soil Resource Report for this project (NRCS 2022), the following soil map units occur on the project property:

- Chaix very rocky coarse sandy loam, 9 to 50 percent slopes (CcE): covers 6.2 percent of the property;
- Chawanakee very rocky coarse sandy loam, 9 to 50 percent slopes (ChE): covers 50.8 percent of the property;
- Holland Coarse sandy loam, 9 to 15 percent slopes (HgC): covers 43.0 percent of the property.

CcE has a “well drained” drainage class and a “medium” runoff class. ChE has a “somewhat excessively drained” drainage class and a “medium” runoff class. HgC has a “well drained” drainage class” and a “low” runoff class.

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake

risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2016) are to:

1. Develop effective measures to reduce earthquake hazards;

2. Promote the adoption of earthquake hazard reduction activities by federal, State, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";

3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and

4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active

faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code Sections 2690–2699.6) establishes Statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the SHMA addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the SHMA, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Paleontological Resources

The CEQA lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological resource management is also addressed in PRC Section 5097.5, “Archaeological, Paleontological, and Historical Sites.” This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that State agencies may undertake surveys, excavations, or other operations as necessary on State lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on State-owned or State-managed lands.

Impact Analysis:

a. Seismic Hazards:

i) **Rupture of Fault:** Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities.

There are no earthquake faults delineated on Alquist-Priolo Fault Zone maps within the project property (CDC 2022b). Since the project property is not traversed by a known active fault and is not within 200 ft of an active fault trace, surface fault rupture is not considered to be a significant hazard for the project site. The project would not expose people or structures to substantial adverse effects from a fault rupture. Potential impacts from implementation of the proposed project related to fault rupture would be **less than significant.**

ii) **Ground Shaking:** The potential for seismic ground shaking in the project site would be considered low for the reason stated under question i) above. Any potential impacts due to seismic impacts are addressed through compliance with the Uniform Building Code (UBC). All existing structures are currently built to meet the construction standards of the UBC for the appropriate seismic zone. The project does not propose the construction of any new structures. All existing infrastructure would be repurposed for cannabis-related use. Project impacts would be **less than significant**.

iii) **Ground Failure:** Because the project site is relatively flat and is considered an area with low potential for seismic activity, there is minimal to no potential for seismic-related ground failure, including liquefaction (CDC 2022b). There would be **no impact**.

iv) **Landslide:** The project site consists of gently rolling hills and relatively flat terrain with wooded land and existing vineyards/vegetative crops. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. These relatively flat slopes would have low landslide potential. The project would require less than 250 cubic yards of grading for the cul-de-sac and driveway to achieve the desired elevations of the site. The proposed grading would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance. Therefore, potential impacts related to landslides would be **less than significant**.

b. Soil Erosion: All grading activities on-site would be required to comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance including the implementation of pre- and post-construction best management practices (BMPs). BMPs to be employed include, but are not limited to, hydroseeding areas disturbed during grading and

construction, protection of drain inlets with inlet filter bags, and installation of silt fences and straw waddles as appropriate. This would serve to limit the amount of exposed soil and slow water movement, reducing the amount of soil particles and other contaminants potentially mobilized by stormwater. Further, waddles and vegetation would help filter out contaminants before stormwater reaches any watercourses. Although the proposed grading activities would not exceed 250 cubic yards of graded material, provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance would be met. Project impacts would be **less than significant**.

c. **Geologic Hazards:** According to the NRCS custom Soil Resource Report for the proposed project, the site is composed of three (3) soils classifications, the Chaix, Chawanakee, and Holland soil series (NRCS 2022). All three (3) soils series have erosive qualities as they are well drained with limited clay materials (NRCS 2022). Additionally, as mentioned under iii) and iv), the project site is relatively flat and is considered an area with low seismic activities; therefore, is not susceptible to landslides and liquefaction. Project impacts would be **less than significant**.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The following soils were mapped on the project site: Chaix very rocky coarse sandy loam, 9 to 50 percent slopes (CcE); Chawanakee very rocky coarse sandy loam, 9 to 50 percent slopes (ChE); and Holland Coarse sandy loam, 9 to 15 percent slopes (HgC). These three soils are classified as well-drained or somewhat excessively drained and do not have significant clay materials, meaning the soils have shrink-swell capabilities and the potential to be expansive. The proposed project would include the construction of one new 1,750-sf building for processing and harvest storage during buildout of Phase II. The proposed building would be designed and constructed by a qualified engineer, and with County issuance of building permits following the building plan check review, any potential impacts from development on potentially expansive soils would be **less than significant**.

e. **Septic Capability:** The proposed project would utilize an existing septic system that serves the residence. The property is located in a rural area of El Dorado County where residents rely on septic systems for sewage. Any issues with soil conditions were accounted for during the design process of the existing septic system and leach field to ensure that the septic system and leach field perform at an acceptable level. This impact would be **less than significant**.

f. **Paleontological Resource:** No previous surveys conducted in the project area have identified paleontological resources or other geologically sensitive resources, nor have testing or ground disturbing activities performed to date uncovered any paleontological resources or geologically sensitive resources on-site. Additionally, the project site is not located within the Mehrten Formation. Standard Condition of Approval 1, included in

Section 7.V, Cultural Resources, imposed by the County on the project would address the accidental discovery of any previously unidentified paleontological resources during construction and result in project impacts that are **less than significant**.

FINDING: A review of the soils and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. The proposed project would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance. For this Geology and Soils resource section, impacts would be less than significant or have no impact.

VIII. Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Environmental Setting:

Cumulative greenhouse gas (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria air pollutants and TACs are pollutants of regional and local concern (see Section 7.III, Air Quality, above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO_2), methane (CH_4), and nitrous oxides (N_2O). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of CO_2 equivalents; therefore, CO_2 is the benchmark having a global warming potential of 1. CH_4 has a global warming potential of 25 and thus has a 25 times greater global warming effect per metric ton of CH_4 than CO_2. N_2O has a global warming potential of 298. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2e per year). Other GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). While these compounds have significantly higher global warming potentials (ranging in the thousands), these typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary man-made source of CO_2 is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH_4 are natural gas systems losses (during production, processing, storage, transmission, and distribution), enteric fermentation (digestion from livestock), and landfill off-gassing. The primary source of man-made N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70 percent of countywide GHG emissions). A distant second are residential sources (approximately 20 percent), and

commercial/industrial sources are third (approximately 7 percent). The remaining sources are waste/landfill (approximately 3 percent) and agricultural (<1 percent) (EDCAQMD 2020).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

Executive Order (EO) S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 provided initial direction on creating a comprehensive multi-year program to limit California's GHG emissions to 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)) and to update the plan at least once every 5 years.

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. Senate Bill (SB) 32 was adopted in 2016, which codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030.

Impact Analysis:

a. GHG Emissions: The project would result in GHG emissions associated with short-term construction and long-term operations.

Construction

Construction GHG emissions would be generated by vehicle engine exhaust from construction equipment, including a rubber-tired dozer, a tractor/loader/backhoe, and a grader, as well as from on-road hauling trucks, and worker commuting trips. Construction for the proposed project would be short-term and temporary. All construction equipment and commercial trucks would be maintained to meet current emissions standards as required by CARB. Neither the EDCAQMD nor El Dorado County have adopted criteria or guidance for determining the significance of a project's construction GHG emissions.

Operation

A project's operational GHG sources would be mobile emissions from vehicles traveling to and from the project site; energy sources from the onsite burning of natural gas or propane and the offsite generation of electricity; water sources from the energy required to source, treat, and convey water used by the project; and solid waste sources from emissions associated with the collection, disposal, and decomposition of solid waste. For most development projects, mobile emissions are the dominant source of GHGs.

Neither the EDCAQMD nor El Dorado County have adopted criteria or guidance for determining the significance of a project's operational GHG emissions. Because the project site is located within the western third of El Dorado County near the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) jurisdictional boundary, the guidance and screening criteria from the SMAQMD for a land use development project's GHG emissions were used in this analysis. The SMAQMD provides a table of operational screening levels with land uses and sizes below which a project's operational GHG emissions would not be expected to result in GHG emissions that would have a significant effect on the environment. A cannabis cultivation facility is not included in the Operational Screening Levels table. However, the relative size of land uses in the table can indicate whether the project's mobile GHG emissions would be significant. According to Section 7.XVII, Transportation, project would generate in total, with employee daily trips and delivery vehicles, a maximum of 33 trips under the busiest harvest season but would generate far fewer trips on most days. For comparison, in transportation planning, the trip generation for typical single-family residences is 9 to 10 daily trips (504 to 560 daily trips for 56 residences). Therefore, the project trip generation of 33 daily trips would be far less than the expected trip generation for any of the development types listed in the SMAQMD Operational Screening levels table.

The property currently utilizes PG&E grid power. During Phase I, renewable energy would be purchased from PG&E's Solar Choice or Regional Renewable Choice. Phase II would install a 14.49 KW photovoltaic system (grid-tied solar panels) to provide renewable power for the project site. The 14.49 KW photovoltaic system would be installed on a ground mount. A solar battery trailer unit would be used as backup, for emergency power outages only. The project would source water from three (3) existing wells and would be stored in one (1) proposed 5,000-gallon water tank and one (1) existing 8,500-gallon

water tank. Therefore, the project would not generate significant GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be **less than significant**.

b. **GHG Reduction Plans:** The CARB Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other State agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations. Under the Scoping Plan, however, there are several State regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other State agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high global warming period (GWP) GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. The Scoping Plan recommends strategies for implementation at the Statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. To the extent that these regulations are applicable to the project or its uses, the project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

The project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in SB 32 and EO S-3-05, respectively. EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes for a Statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that Statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis; CARB forecasts that compliance with the current Scoping Plan puts the State on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update states the following (CARB 2014):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to

> levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the State is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the Second Update, which states (CARB 2017):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The project would be consistent with the applicable strategies and measures in the Scoping Plan and is consistent with, and would not impede, the State's trajectory toward the above-described Statewide GHG reduction goals for 2030 or 2050. In addition, since the specific path to compliance for the State in regard to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the project would be speculative and cannot be identified at this time. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40 percent reduction target by 2030 and EO S-3-05's 80 percent reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the State on its trajectory toward meeting these future GHG targets.

Based on the above considerations, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be **less than significant**.

FINDING: The proposed project would result in less than significant impacts to GHG emissions, and the project would not conflict with State or local GHG reduction plans or regulations.

IX. Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
h. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			**X**	

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, State, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, State, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and EDCAQMD.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual States are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original

legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each State can implement its own health and safety program.

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed (if required). The code provides specific guidance regarding FAA notification requirements.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the State's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced

through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other State agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. In addition, business plan information is provided electronically to a Statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.

Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material

safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible radiofrequency RF energy exposure limits for workers (Title 8 CCR Section 5085[b]) and requires warning signs where RF energy might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and CAL FIRE administer State policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

California Highway Patrol (CHP), along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

California Code of Regulations Title 3:

Section 8102(q) states:

> [Each cultivation license application shall include the following, if applicable:] Evidence that the applicant has conducted a hazardous materials record search of the EnviroStor database for the proposed premises. If hazardous sites were encountered, the applicant shall provide documentation of protocols implemented to protect employee health and safety;

Section 8106(a)(3) states:

> (a) The cultivation plan for each Specialty Cottage, Specialty, Small, and Medium licenses shall include all of the following:
> (3) A pest management plan which shall include, but not be limited to, the following:
> (A) Product name and active ingredient(s) of all pesticides to be applied to cannabis during any stage of plant growth;
> (B) Integrated pest management protocols, including chemical, biological, and cultural methods the applicant anticipates using to control or prevent the introduction of pests on the cultivation site; and
> (C) A signed attestation that states the applicant shall contact the appropriate County Agricultural Commissioner regarding requirements for legal use of pesticides on cannabis prior to using any of the active ingredients or products included in the pest management plan and shall comply with all pesticide laws.

Section 8304(f) states:

> [All licensees shall comply with all of the following environmental protection measures:] Compliance with pesticide laws and regulations pursuant to section 8307 of this chapter.

Section 8307 contains requirements regarding compliance with pesticide laws and regulations. It also contains measures to protect pollinators, water bodies, and wildlife.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the State Responsibility Areas (SRAs) in El Dorado County, as established by CAL FIRE. The classification system provides three classes of fire hazards: Moderate, High, and Very High. The County's Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by State law. The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Impact Analysis:

a. **Hazardous Materials:** The proposed project would involve cultivation and propagation of cannabis and construction of various buildings to support the cultivation operation. Hazardous materials proposed for on-site use would include minor amounts of diesel fuel as well as soil amendments, which would be handled and used in accordance with the California Department of Food and Agriculture. Organic soil amendments would be stored and applied to cannabis cultivation areas in a manner to prevent exposure to rain and wind that would cause the movement of nutrients or environmental contaminants outside of cultivation areas. A 160-sf chemical secure storage area would be located within the cannabis premises and would hold fuel and organic chemicals as needed for the growing of the cannabis that will be grown organically.

Any use of hazardous materials would be required to comply with all applicable federal, State, and local standards associated with the handling and storage of hazardous materials. The proposed project would also be subject to the requirements of the SWRCB Cannabis General Order. The SWRCB Cannabis General Order program has "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which include the following requirements:

- Cannabis cultivators shall not apply restricted materials, including restricted pesticides or herbicides, or allow restricted materials to be stored at the cannabis cultivation site. Cannabis cultivators shall implement integrated pest management strategies where possible to reduce the need and use of pesticides or herbicides and the potential for discharges to waters of the State.

- Cannabis cultivators shall keep and use absorbent materials designated for spill containment and spill cleanup equipment on-site for use in an accidental spill of fertilizers, petroleum products, hazardous materials, and other substances which may degrade waters of the State.

- Implementation of SPCC and have appropriate cleanup materials available onsite.

With appropriate storage, handling, and application BMPs that comply with the requirements of the federal, State, and local regulations, it is not anticipated that the use of these materials at the facility would pose a significant hazard. The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and therefore, impacts would be **less than significant**.

b. **Hazardous Conditions:** As discussed under question a), minor amounts of diesel fuels and soil amendments would be stored and used at the site. All potentially hazardous

materials would be properly stored in a secured and designated area. A 160-sf chemical secure storage area would be located within the cannabis premises and would hold fuel and organic chemicals as needed for the growing of the cannabis that will be grown organically. Use of such materials would be required to comply with all applicable local, State, and federal standards associated with the handling and storage of hazardous materials, including the standard conditions contained in the SWRCB Cannabis General Order. Standard conditions include implementation of spill prevention, control, and countermeasures and the maintenance of appropriate cleanup materials on-site.

With implementation of appropriate storage, handling, and application BMPs discussed under question a), it is not anticipated that the use of these materials would pose a significant hazard. In the event of reasonably foreseeable upset and accident conditions, it is unlikely that these hazardous materials would be released in a manner that would create a significant hazard to the public or the environment. Project impacts would be **less than significant**.

c. **Hazardous Materials near Schools:** The closest school is Pioneer Union School, located 1.3 miles southwest of the project site. The project would include minor amounts of diesel fuels and soils amendments that would be stored and locked in a 160-sf chemical secure storage area. The project would be required to ensure that hazardous chemicals and solid wastes are handled per County, State, and federal regulations. The project would require appropriate storage, handling, and application BMPs to ensure no significant hazard would be posed to the Pioneer Union School. With the appropriate measures on potentially hazardous materials, the proposed project would have **a less than significant impact.**

d. **Hazardous Sites:** The following databases were reviewed for the proposed project and surrounding area to identify potential hazardous contamination sites: the California DTSC EnviroStor database (DTSC 2022a); California DTSC's Hazardous Waste and Substances Site List (DTSC 2022b); and the U.S. EPA's Superfund National Priorities List (USEPA 2022). Based on review of these databases, the project site is not included on a list of or near any hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, there would be **no impact**.

e. **Aircraft Hazards, Private Airstrips:** According to the County's Zoning Map and the El Dorado County Airport Land Use Compatibility Plan, the project site is not within any airport safety zone or airport land use plan area (EDC ALUC 2012). The closest airport is Perryman Airport-7CL-9 located 11.6 miles north of the project site. The project site is not located in the vicinity of a public or private airstrip. As such, the project would not be subject to any land use limitations contained within any adopted Comprehensive Land Use Plan, and there would be no immediate hazard for people working in the project site or safety hazard resulting from airport operations and

aircraft over-flights in the vicinity of the project site**.** Therefore, there would be **no impact**.

f. **Emergency Plan:** The Pioneer Fire Protection District requirements would be incorporated as Conditions of Approval that address site access, adequate fire flow, vegetation and fuel modification, and sprinkler and fire alarm requirements. No applicable emergency plan would be affected by the project as proposed. According to the OSTR (Appendix B), the cul-de-sac would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have 45 ft outside radius for vehicle turnaround, which would easily fit a 32 ft typical fire truck. Both driveways would be greater than 12 ft in width and would have a vertical clearance of greater than 15 ft. The proposed project would allow for adequate emergency ingress/egress and drive-aisle widths for interior circulation. Impacts would be **less than significant**.

g. **Wildfire Hazards:** The project site is within a "High" Fire Hazard Severity Zone (FHSZ) of a SRA (CAL FIRE 2023). Given that the project is located in an SRA, the California Department of Fire and Forestry (CAL FIRE) would respond to wildland fire incidents from their El Dorado Station 43, located approximately 16.5 miles (27-minute drive) northwest of the project site at 5660 Mother Lode Dr, Placerville, CA. Additional response would be provided by the Pioneer Fire Protection District, whose nearest station is Station 38, located 1.8 miles (approx. 4-minute drive) southwest of the project site at 7061 Mt Aukum Road, Somerset, CA. If needed, staff and additional resources could respond from other District stations including Station 32, located 4.0 miles (approx. 7-minute drive) north of the project site at 4770 Sand Ridge Road, Placerville, CA. The degree of hazard in wildland areas depends on variables like temperature, wind, and moisture, the amount of dryness and arrangement of vegetation, slope steepness, and accessibility to human activities, accessibility of firefighting equipment, and fuel clearance around structures. The County's General Plan Safety Element precludes development in areas of high wildland fire hazard unless such development can be adequately protected from wildland fire hazards as demonstrated in a Fire Safe Plan and approved by the local Fire Protection District and/or CAL FIRE. A project-specific Fire Safe Plan was prepared by CDS Fire Prevention Planning in December 2020 (CDS 2020) (see Appendix I).

The applicant would take several measures to reduce potential wildfire hazards as recommended by the Fire Safe Plan. The plan would require the new and existing access driveways to be 12 ft in width to meet the fire department requirements. Additionally, Pioneer Fire Protection District would be required to perform all necessary fire inspections as required by the Fire Code and County Building requirements. A minimum 30 ft Fuel Hazard Reduction Zone (FHRZ) would be required around the residence, proposed buildings, and outdoor canopy areas and would be maintained annually by June 1. All trees would be pruned up to 8 ft above the ground, and no cannabis plants would be placed within 15 ft of tree trunks to avoid overhanging branches. All landscaped vegetation around the residence would be

irrigated and kept free of dead material. There would be no vegetation within 20 ft of the driveways, except for maintained low grass. All grass would be cut to a 2-inch stubble or disked. The landowner entered into a contract with the NRCS to perform timber stand improvement and hazard reduction throughout the property. Emphasis would be given to the northern and western sides of the property. These measures would be included as Conditions of Approval for the proposed project. Impacts would be **less than significant**.

FINDING: The proposed project would not expose the public or environment to hazards relating to the use, storage, transport, or disposal of hazardous materials. Additionally, conformance with the Fire Safe Plan and the County's Conditions of Approval would minimize potential wildfire hazards impacts. Therefore, impacts would be less than significant, or no impact would occur for hazards and hazardous materials.

X. Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			**X**	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			**X**	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or -off-site?			**X**	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			**X**	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			**X**	
f. Otherwise substantially degrade water quality?			**X**	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			**X**	

Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			**X**	
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			**X**	
j. Inundation by seiche, tsunami, or mudflow?			**X**	

Environmental Setting

Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Perry Creek runs south to north along the western edge of the property and is located over 500 ft from the cannabis premises. The property also includes a water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. The geology of the Western Slope portion of El Dorado County, which the proposed project site is within is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Existing demand for groundwater in the vicinity of the site is low given the rural and undeveloped nature of much of the surrounding land. The project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1025E, revised September 25, 2008 (FEMA 2008).

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the proposed project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES), which is officially administered by USEPA. In California, USEPA has delegated its authority to the SWRCB, which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acres are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The General Permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a stormwater pollution prevention program (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of BMPs that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB 2018). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are

issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (CVRWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The proposed project site falls under the jurisdiction of the CVRWQCB. The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The Phase II NPDES permit became effective on July 1, 2013. By July 1, 2015, this State-mandated permit required the County to address storm water runoff from new development and redevelopment projects, both during construction and after construction occurs.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of BMPs to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the State into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the State's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine

RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates Statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Applicants for a cannabis cultivation license are required to provide to CDFA a final copy of proof of a lake or streambed alteration agreement issued by CDFW or written verification that an agreement is not necessary (3 CCR Section 8102(v)).

California Code of Regulations Title 3:

Section 8102 states, in part:

> Each application [for a cultivation license] shall include the following, if applicable:
>
> (p) For all cultivator license types except Processor, evidence of enrollment in an order or waiver of waste discharge requirements with the State Water Resources Control Board or the appropriate Regional Water Quality Control Board. Acceptable documentation for evidence of enrollment can be a Notice of Applicability letter. Acceptable documentation for a Processor that enrollment is not necessary can be a Notice of Non-Applicability;
>
> (v) Identification of all of the following applicable water sources used for cultivation activities and the applicable supplemental information for each source pursuant to section 8107 of this chapter:
>
> (1) A retail water supplier;
>
> (2) A groundwater well;
>
> (3) A rainwater catchment system;
>
> (4) A diversion from a surface waterbody or an underground stream flowing in a known and definite channel.
>
> (w) A copy of any final lake or streambed alteration agreement issued by the California Department of Fish and Wildlife, pursuant to sections 1602 or 1617 of the Fish and Game Code, or written verification from the California Department of Fish and Wildlife that a lake and streambed alteration agreement is not required;

(dd) If applicable, the applicant shall provide evidence that the proposed premises is not located in whole or in part in a watershed or other geographic area that the State Water Resources Control Board or the Department of Fish and Wildlife has determined to be significantly adversely impacted by cannabis cultivation pursuant to section 8216.

Section 8107(b) states,

If the water source is a groundwater well:

(1) The groundwater well's geographic location coordinates in either latitude and longitude or the California Coordinate System; and

(2) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. If no well completion report is available, the State Water Resources Control Board may request additional information about the well.

Section 8216 states:

If the State Water Resources Control Board or the Department of Fish and Wildlife notifies the department in writing that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area pursuant to section 26069, subdivision (c)(1), of the Business and Professions Code, the department shall not issue new licenses or increase the total number of plant identifiers within that watershed or area while the moratorium is in effect.

Section 8304 (a and b) states:

All licensees shall comply with all of the following environmental protection measures:

(a) Compliance with section 13149 of the Water Code as implemented by the State Water Resources Control Board, Regional Water Quality Control Boards, or California Department of Fish and Wildlife;

(b) Compliance with any conditions requested by the California Department of Fish and Wildlife or the State Water Resources Control Board under section 26060.1(b)(1) of the Business and Professions Code;

Section 8307 contains requirements regarding compliance with pesticide laws and regulations. It also contains measures to protect pollinators, water bodies, and wildlife.

Impact Analysis:

a. **Water Quality Standards:** There is potential for the proposed project to result in degradation of water quality during both the construction and operational phases. The cannabis premises is setback over 500 ft from Perry Creek, the nearest watercourse, so it would not likely cause degradation of water quality due to runoff from the development or operation of the cultivation operation. During construction, localized indirect impacts to water resources could occur from construction equipment, and increased erosion and sedimentation due to soil disturbance. During operation, localized impacts could occur due to a discharge of sediment or other pollutants, fertilizers, pesticides, and human waste. The project proponent would be required to enrolled under the SWRCB Cannabis General Order WQ 2019-0001-DWQ. One of the requirements of the Cannabis General Order is to prepare a Site Management Plan (SMP), which includes identifying potential sources of water quality violations or waste discharge requirements, corrective actions including implementing and monitoring BMPs, and documenting water usage and timing to ensure the water use is not impacting water quality objectives and beneficial uses. Waddles and/or other erosion control measures would be installed around the canopy and compost areas, as necessary, to prevent soil erosion. The project applicant would be required to prepare and implement an SMP.

The project would disturb one (1) or more acre of soil, and therefore, would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009 DWQ. Under the General Permit, the applicant would be required to file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters.

The project would utilize an existing onsite septic system to dispose of wastewater. The existing system would be sufficient to treat the amount of water use projected for the proposed project. The project's septic system required approval from the County Environmental Management Department to ensure wastewater disposal does not impact water quality. With the implementation of the General Permit Order 2019-0001 DWQ and General Permit Order 2009-0009 DWQ, impacts would be **less than significant**.

b. **Groundwater Supplies:** The proposed project would be estimated to demand approximately 1.2 million gallons of water per year for cannabis cultivation. Three (3) wells exist on the project site. One well is located west of the cannabis premises, and two are located south of the cannabis premises. The two wells located south of cannabis premises, a southwestern well and a southeastern well, are adjacent to Perry Creek Road. Of the two southern wells, the southwestern well was most recently constructed on November 10, 1988, and provides approximately 25 gallons of water per minute. The information on the western well and the southeastern well is currently unknown.

Additionally, the project would include a proposed 5,000-gallon water tank to hold water from the existing wells for agricultural use. An existing 8,500-gallon water tank is located adjacent to the proposed water tank, just outside the cannabis premises but within the property boundary. The property also includes an existing water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Two (2) fire hydrants would be installed at the entrance of the property. Based on the existing and proposed project elements, there is adequate water supply to irrigate the proposed project, and the proposed project would not introduce substantial impervious surfaces that would interfere with groundwater recharge in the area of the proposed project. Therefore, impacts to groundwater supplies and recharge would be **less than significant**.

c-f. **Drainage Patterns:** The project site consists of gently sloping hills and relatively flat terrain with wooded land and existing vineyards/vegetative crops. Perry Creek runs south to north along the western edge of the property and is located over 500 ft from the cannabis premises. The property also includes a water well fed pond greater than 500 feet from the cannabis premises that would be used for fire suppression, if needed. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property.

During operation, localized impacts could occur due to a discharge of sediment or other pollutants, fertilizers, pesticides, and human waste. The project proponent would be required to enrolled under the SWRCB Cannabis General Order WQ 2019-0001-DWQ. One of the requirements of the Cannabis General Order is to prepare a SMP, which includes identifying potential sources of water quality violations or waste discharge requirements, corrective actions including implementing and monitoring BMPs, and documenting water usage and timing to ensure the water use is not impacting water quality objectives and beneficial uses.

As the proposed project would disturb approximately 2 acres, the project proponent would also be required to obtain coverage under the SWRCB Cannabis General Order Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (WQ 2009-0009-DWQ). The Construction General Permit requires the development of a SWPPP by a certified QSD.

The project would be required to conform to the El Dorado County Grading, Erosion, and Sediment Control Ordinance (County Code Section 110.14). This includes the use of BMPs to minimize degradation of water quality during construction. BMPs shall include, but not be limited to, covering exposed areas with hydroseed or approved mulch; installing straw wattles; and minimizing the slope of ditches and drainage channels. This would serve to limit the amount of exposed soil and slow water movement, reducing the amount of soil particles and other contaminants potentially mobilized by stormwater. Further, waddle

and vegetation would help filter out contaminants before stormwater reaches any watercourses.

With the implementation of the General Permit Order 2019-0001 DWQ, General Permit Order 2009-0009 DWQ, and conformance with County Code, impacts would be **less than significant** for questions c), d), e), and f).

g-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1025E, revised September 25, 2008, and would not result in the construction of any structures that would impede or redirect flood flows (FEMA 2008). No dams are located near the project site that could result in potential hazards related to dam failures. The project site would not be at risk for tsunami impact as the site is approximately 115 miles inland from the coast. According to USGS, mudflows or debris flows start on steep slopes and travel to canyon bottoms, stream channels, and areas near the outlets of canyons during intense rainfall. Debris flows commonly begin in swales on steep slopes, making areas downslope from the swale particularly hazardous (USGS 2000). As discussed above, the project site consists of gently rolling hills and relatively flat terrain with wooded land and existing vineyards/vegetative crops. Elevations within the cannabis premises range from 2,110 to 2,190 ft amsl. Perry Creek runs south to north along the western edge of the property and is located over 500 ft from the cannabis premises. Drainage within the property site generally runs south to north, and eventually flows into the Middle Fork Cosumnes River which lies north of the property. Due to the high elevation, flat project site and lack of wetlands, the proposed project would not be at significant risk of exposure to mudflows. The project is not located near a lake or large body of standing water, so there is no risk of seiche. Therefore, impacts would be **less than significant** for questions g), h), i), and j).

FINDING: With adherence to federal, State, and local regulations, the proposed project would have a less than significant impact on hydrology and water quality.

XI. Land Use Planning

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Physically divide an established community?				**X**
b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	

Environmental Setting:

The project property is zoned Planned Agriculture, minimum 20 acres (PA-20) and designated for Agricultural Land (AL) in the El Dorado County General Plan. The intent of the PA zone is to regulate and promote the development of agricultural enterprises and land uses whether encumbered by a farmland conservation contract or not. This zone is utilized to identify those lands most capable of supporting horticulture, aquaculture, ranching, and grazing, based on existing land use, soil type, water availability, topography, and similar factors. Minimum lot size designators are applied to this zone based on commodity type, soil type, surrounding land use pattern, and other appropriate factors. The designator represents the number of acres in the following increments: 10, 20, 40, 80, and 160.

The AL designation is applied to lands described in Policy 8.1.1.8. A maximum of two residential dwellings used to support agricultural use are allowed. The AL designation may be applied to Rural Regions only.

Regulatory Setting:

California State law requires that each city and county adopt a general plan "for the physical development of the city and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the city or county for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was adopted in 2004. The County's 2013-2021 Housing Element was adopted in 2013.

Impact Analysis:

a. **Divide Established Community:** The proposed project would involve the development of a cannabis cultivation facility with ancillary uses located on a privately-owned property within a rural area in southwestern El Dorado County. The project property is not within or in the vicinity of an established community. Further, the proposed project would not develop any new roadways or involve any development that could divide an established community. Therefore, the project would have **no impact**.

b. **Land Use Consistency:** The proposed project would conform to both the PA-20 zoning and AL land use designation. The proposed cannabis operation is compatible with Resolution 139-2022 and meets the criteria for compatible uses on Williamson Act Contracted lands. Additionally, Commercial Cannabis businesses in unincorporated County of El Dorado are required to apply for and obtain a CCUP. The commercial cannabis is not setback a minimum of 800 ft from the eastern and southern property lines as required by the El Dorado County Cannabis Ordinance, Section 130.41.200. The applicant is seeking a waiver from the County to allow for a reduction in the setback requirement. The commercial cannabis premises is setback over 300 ft from all watercourses, as required by the El Dorado County Cannabis Ordinance, Section 130.41.200. Therefore, with County approval of the CCUP and with a setback reduction waiver, the proposed project would be in conformance with the County Code, and impacts would be **less than significant**.

FINDING: The proposed project would not divide an established community, and with County approval of a CCUP, would be in conformance with the County Code. Therefore, less than significant or no impact to land use and planning goals would occur.

XII. Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				**X**
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Environmental Setting:

The southwestern portion of El Dorado County is divided into three, 15-minute quadrangles (Folsom, Placerville, and Camino) mapped by the State of California Division of Mines and Geology showing the location of mineral resources zones (MRZs) (CDC 2001). Those areas which are designated MRZ-2a contain discovered mineral deposits that have been measured or indicate reserves calculated. Land in this category is considered to contain mineral resources of known economic importance to the County and/or State. Review of the mapped areas of the County indicates that the project site does not contain any mineral resources of known local or Statewide economic value.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the proposed project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and

extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified as MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

Local Laws, Regulations, and Policies

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 of the General Plan shows the MRZ-2 areas within the County based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the County's important mineral resource deposits are concentrated in the western third of the County. The proposed project site is not located within this region.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County. Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

Impact Analysis:

a, b. Mineral Resources. The project site is not mapped as being within an MRZ by the CDC or in the County General Plan (CDC 2001). **No impact** would occur for questions a) and b).

FINDING: No impacts to mineral resources are expected either directly or indirectly from implementation of the proposed project.

XIII. Noise

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	
b. Generation of excessive groundborne vibration or groundborne noise levels?			**X**	
c. For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**

A project-specific Acoustic Assessment was prepared by Earth Groovy Products LLC and is included as Appendix J to this Initial Study (Earth Groovy Products, LLC 2021).

Existing Noise Setting:

The project property is located in rural El Dorado County, approximately 8.5 miles east of SR 49 and 2.5 miles south of the community of Somerset. The site is not located near a major State or federal highway. The ambient noise environment in the immediate project vicinity is defined primarily by sparse traffic on the local roadway network, intermittent aircraft overflight, and natural sounds coming from wildlife, wind, and the Middle Fork Cosumnes River. The existing maximum agricultural sound generators are a gaggle of guard geese and a farm tractor (Earth Groovy Products, LLC 2021).

Background:

Noise Terminology and Metrics

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol LEQ, with a specified duration.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this wide range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA. The threshold of hearing for the human ear is about 0 dBA, which corresponds to 20 mPa.

Because decibels are logarithmic units, SPL cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dBA—rather, they would combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1 dBA changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000 Hertz [Hz]–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dBA are generally not perceptible. It is widely accepted, however, that people begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dBA increase is generally perceived as a distinctly noticeable increase, and a 10 dBA increase is generally perceived as a doubling of loudness.

Groundborne Vibration Terminology and Metrics

Groundborne vibration consists of rapidly fluctuating motions or waves transmitted through the ground with an average motion of zero. Sources of groundborne vibrations include natural phenomena and anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints. Generally, a PPV of less than 0.08 in/sec does not produce perceptible vibration. At 0.10 PPV

in/sec, continuous vibrations may begin to annoy people, and it is the level at which there is a risk of architectural damage (e.g., cracking of plaster) to historical buildings and other vibration-sensitive structures. A level of 0.30 PPV in/sec is commonly used as a threshold for risk of architectural damage to standard dwellings (Caltrans 2013).

Regulatory Setting:

California Code of Regulations Title 3:

Section 8304(e) states:

> All licensees shall comply with all of the following environmental protection measures:
>
> (e) Requirements for generators pursuant to section 8306 of this chapter

Section 8306 provides requirements for stationary and portable generators greater than 50 horsepower. It requires these to comply with the appropriate Airborne Toxic Control Measure for stationary or portable generators and includes certificates or permits that are acceptable to prove compliance. Additional compliance options are provided for generators below 50 horsepower by 2023, including limiting hours of operation, meeting certain emergency use requirements, or filter and engine requirements.

El Dorado County General Plan

The El Dorado County General Plan Public Health, Safety, and Noise Element contains Goal 6.5: "Ensure that County residents are not subjected to noise beyond acceptable levels." The following objective and policies from the General Plan would be applicable to the project (El Dorado County 2004):

Objective 6.5.1: Protection of Noise-Sensitive Development. Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.

Policy 6.5.1.2 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 at existing or planned noise sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.7 Noise created by newly proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise sensitive uses.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m. and 5:00 p.m. on weekends, and on federally recognized holidays. Further, the standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to public projects to alleviate traffic congestion and safety hazards.

Table 6-2, Noise Level Performance Protection Standards for Noise Sensitive Land Uses Affected by Non- Transportation Sources, of the General Plan establishes noise level standards for sensitive land uses. For rural areas, the noise standard limits are: 50 dBA L_{EQ} and an L_{MAX} of 60 dBA from 7:00 a.m. to 7:00 p.m.; 45 dBA L_{EQ} and an L_{MAX} of 55 dBA from 7:00 p.m. to 10:00 p.m.; and 40 dBA L_{EQ} and an L_{MAX} of 50 dBA from 7:00 a.m. to 7:00 p.m.

Table 6-4, Maximum Allowable Noise Exposure for Non-Transportation Noise Sources in Rural Centers – Construction Noise, of the General Plan establishes construction noise level standards (that occurs outside the hours specified in Policy 6.5.1.11) of: 55 dBA L_{EQ} and an L_{MAX} of 75 dBA from 7:00 a.m. to 7:00 p.m.; 50 dBA L_{EQ} and an L_{MAX} of 65 dBA from 7:00 p.m. to 10:00 p.m.; and 45 dBA L_{EQ} and an L_{MAX} of 60 dBA from 7:00 a.m. to 7:00 p.m.

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100 feet away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, heating, ventilation, and air conditioning units (HVAC) units, schools, hospitals, commercial land uses, other outdoor land use, etc.

El Dorado County Municipal Code

The El Dorado County Municipal Code, Chapter 9.16, Noise, defines and prohibits loud or raucous noise:

Section 9.16.040 – Loud and raucous noises—Definitions.

Loud and raucous noise means:

1. Any noise made by the motor of any automobile, truck, tractor, motorcycle, or aircraft of any kind not reasonably required in the operation thereof under the circumstances and shall include, but not be limited to, backfiring, motor racing, and the buzzing by airplanes;

2. The sound of the discharge of any explosive except by or with the permission of any appropriate State or local licensing agency;

3. The human voice or any record or recording thereof when amplified by any device whether electrical or mechanical or otherwise to such an extent as to cause it to unreasonably carry on to public or private property or to be heard by others using the public highways, public thoroughfares, or public buildings;

4. Any sound not included in the foregoing, which is of such volume, intensity, or carrying power as to interfere with the peace and quiet of persons upon public or private property or other users of the public highways, thoroughfares, and buildings.

Section 9.16.040 – Loud and raucous noises—Prohibited.

> Except as otherwise provided in this chapter, it is unlawful for any person to willfully make, emit, or transmit or cause to be made, emitted, or transmitted any loud and raucous noise upon or from any public highway or public thoroughfare or from any aircraft of any kind whatsoever, or from any public or private property to such an extent that it unreasonably interferes with the peace and quiet of another's private property.

The El Dorado County Municipal Code, Chapter 130, Zoning, is the El Dorado County Zoning Ordinance and establishes the following regarding noise:

Chapter 130.37 of the County Zoning Ordinance complies with General Plan Goal 6.5 (Acceptable Noise Levels), and supplements County Code Chapter 9.16 (Noise) by establishing standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses. Per Chapter 130.37, "The following noise sources shall be exempt from the standards of this Chapter: I. Construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order." Table 130.37.060.1 contains noise standards for projects which require an acoustic analysis.

Impact Analysis:

a. Generation of Noise:

Construction

Construction of the project would generate noise from the use of standard construction equipment, including one rubber-tired dozer, one tractor/loader/backhoe, and one grader, and from vehicles commuting to and from the project site. Chapter 130.37 of the County Zoning Ordinance complies with General Plan Goal 6.5 (Acceptable Noise Levels), and supplements County Code Chapter 9.16 (Noise) by establishing standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses. Per Chapter 130.37, "The following noise sources shall be exempt from the standards of this Chapter I. Construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order." Table 130.37.060.1 contains noise standards for projects which require an acoustic analysis (El Dorado County 2018). The applicant would maintain compliance with the relevant requirements of Chapter 130.37, and construction of the project would not result in the generation of a substantial temporary increase in ambient noise levels in excess of the standards established in the General Plan Noise Element. Contract provisions would be used with construction contractors that would require them to comply with county noise standards while constructing project components. Therefore, construction noise impacts would be less than significant.

Operation

Sources of noise resulting from long-term operation of the project would include worker commute vehicles traveling to and from the project site (during peak times of year when temporary workers are hired), trucks used for occasional supply deliveries or product shipments, and from greenhouse ventilation fans.

Climate control and air circulation within the proposed greenhouse would be performed by four Dayton 6FHX8 3-13/16-inch blowers. Each blower is rated by the manufacturer to produce 64 dB. The combined sound generation would be 70 dB. The location of the blowers on each side of the greenhouse would likely cause better dispersion of the sound and the actual sound level would likely be less than 70 dB. The fans would run when necessary to create an environment conducive to plant propagation. The fans would not trigger worker hearing protection. OSHA requires employers to implement a hearing conversation program when noise exposure is at or above 85 dB averaged over 8 working hours, or an 8-hour time-weighted average (TWA). It would take approximately 35 ft for the sound to attenuate below ambient level pursuant to the Inverse Square Law. For every doubling of distance from the sound source, the sound level reduces by 6 dB. It is possible for the fan sound to be barely detectable at 35 ft from the greenhouse. The closest property lines to the greenhouse are over 500 ft to the east and south. The closest off-site residencies are approximately 770 ft away from the greenhouse. Noise generated

by fans or other unknown sources would be monitored for compliance with County noise and worker protection standards.

In total, with employee daily trips and delivery vehicles, the project would generate a maximum of 33 trips under the busiest harvest season but would generate far fewer trips on most days. The number of employee daily trips was calculated using a maximum of three (3) full-time employees and up to five (5) seasonal employees. The maximum daily trips during project buildout and during harvest season would be less than the 100 daily trips threshold set forth by the County of El Dorado Policy TC-Xe (Prism Engineering 2020a). In typical noisy environments, changes in sound levels of 1 to 2 dBA are generally not perceptible. A sound level change of 3 dBA is considered a barely perceptible increase and a sound level change of 5 dBA is considered a readily perceptible increase (Caltrans 2009). Due to the logarithmic nature of the decibel scale, a doubling of sound levels is an increase in 3 dBA. Therefore, in order for traffic noise to increase by 3 dBA (a barely perceptible increase), the traffic volume would have to double. The project's addition of up to 33 vehicles a day would be insignificant to the 2,174 average daily trips (ADT) from the intersection of Fairplay Road and Mt. Aukum Road, as outlined in the OSTR. This intersection is located just southeast of the project site. Therefore, the addition of 33 ADT at full buildout would not result in a significant increase in ambient noise level.

Impact Summary

With adherence to the County Condition of Approval to restrict the hours of construction, the project would not result in a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance. Additionally, all operational noise would comply with County, State, or federal noise standards. The addition of 33 daily trips would not cause a significant increase in ambient noise level at the project site. Impacts would be **less than significant**.

b. **Excessive Groundborne Vibration and Noise Levels:** Construction activities known to generate excessive groundborne vibration, such as pile driving, may be conducted to implement the proposed project. The activities that would cause noise would be made from a rubber-tired dozer, one tractor/loader/backhoe, and one grader. A possible source of vibration during project construction activities would be a grader used during grading of the driveway and cul-de-sac. The closest vibration sensitive land use would be a residence located approximately 962 ft east of the construction activity. At this distance, groundborne vibration from the project's construction equipment would be lessened. Once operational, the project would not be a source of groundborne vibration. Therefore, the project would not result in generation of excessive groundborne vibration levels, and the impact would be **less than significant**.

c. **Aircraft Noise:** The project is not located within an airport land use plan or in the immediate vicinity of a private airstrip. The closest airport is Perryman Airport-7CL-9 located 11.6 miles north of the project site. Therefore, the project would not expose

people residing or working in the project site to excessive noise levels from airports, and there would be **no impact**.

FINDING: With adherence to the County Condition of Approval to restrict construction hours, the project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards. The project would not result in generation of excessive groundborne vibrations levels, as grading would be short-term and temporary. The project would not expose people residing or working in the project site to excessive noise levels from airports.

XIV. Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?				**X**
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

Regulatory Setting:

No federal or State laws, regulations, or policies apply to population and housing and the proposed project.

Local Laws, Regulations, and Policies

The El Dorado County General Plan (adopted 2004) limits residential density on lands designated for AL. A maximum of two residential dwellings used to support agricultural use are allowed. In October of 2013, the El Dorado County Board of Supervisors adopted the 2013-2021 Housing Element to the Adopted General Plan.

Impact Analysis:

a. **Population Growth:** The proposed project does not include the construction of any new homes. It is not anticipated that the proposed project would create a substantial number of new jobs that would induce unplanned population growth in the area as the owner/applicant and their family would serve as the three (3) full-time employees. The applicant already lives in the existing residence on-site. For short and infrequent busy seasons, such as harvest, the applicant may temporarily hire five (5) employees to assist work, but it is assumed the individuals already live in the area and would temporarily commute to the project site. As such, the proposed project would not induce substantial population growth or result in a demand for new housing. **No impact** would occur.

b. **People or Housing Displacement:** There is an existing residence on-site that would house the owner/applicant and their family that would serve as the three (3) full-time

employees. No existing house or residents would be displaced as the on-site residents would be employed as part of the proposed project. **No impact** would occur.

FINDING: There proposed project would not induce substantial growth either directly or indirectly and would not displace housing or residents. No impact would occur to population and housing.

XV. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Fire protection?			**X**	
b. Police protection?			**X**	
c. Schools?			**X**	
d. Parks?			**X**	
e. Other government services?			**X**	

Regulatory Setting:

No relevant federal laws, regulations, or policies are applicable to this section.

State Laws, Regulations, and Policies

California Fire Code

The California Fire Code (CFC) (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

California Public Resources Code Division 4: Forests, Forestry and Range and Forage Lands

The project is in a High Fire Hazard Severity Zone of a State Responsibility Area. SRAs are defined by California PRC Section 4102 as areas of the State in which CAL FIRE has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where CAL FIRE has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value.

California PRC Sections 4291 et seq. requires that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

California PRC Section 4290 requires CAL FIRE to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within the SRA and lands within very high FHSZs. Additional regulations regarding defensible space can be found in Title 14, Sections 1270.00 *et seq*. of the California Code of Regulations.

Impact Analysis:

a. **Fire Protection:** The proposed project is located within a designated "High" FHSZ in an SRA (CAL FIRE 2023). The Pioneer Fire Protection District would provide structure fire protection services and emergency services to the project site (Pioneer Fire Protection District 2022). Given that the project is located in an SRA, CAL FIRE would respond to wildland fire incidents from their El Dorado Station 43, located approximately 16.5 miles (27-minute drive) northwest of the project site at 5660 Mother Lode Dr, Placerville, CA. Additional response would be provided by the Pioneer Fire Protection District, whose nearest station is Station 38, located 1.8 miles (4-minute drive) southwest of the project site at 7061 Mt Aukum Road, Somerset, CA. If needed, staff and additional resources could respond from other District stations including Station 32, located 4.0 miles (7-minute drive) north of the project site at 4770 Sand Ridge Road, Placerville, CA. Several other staffed stations in the area would be able to provide mutual aid and respond within 15 to 20 minutes if needed for a major incident (Pioneer Fire Protection District 2022). The project would be subject to review by the Pioneer Fire Protection District to ensure all required fire protection measures are incorporated into the building plans.

The project would include a proposed 5,000-gallon water tank to hold water from the existing wells for agricultural use. An existing 8,500-gallon water tank is located next to the proposed water tank, just outside the cannabis premises but within the property boundary. The property also includes an existing water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Two (2) fire hydrants would be installed at the entrance of the property for as-needed fire suppression services, as well. While a new cannabis cultivation facility project could potentially require fire services, it would not result in the need for new fire personnel or facilities, as existing levels of fire service can be provided adequately with existing personnel out of existing facilities. Additionally, fire district fees would be collected as part of the building permit process. Therefore, the impact is **less than significant**.

b. **Police Protection:** Law enforcement services for the project site are provided by the El Dorado County Sheriff's Office. The nearest Sheriff's station is located 14.2 miles (a 24-

minute drive) northwest of the project site at 200 Industrial Drive, Placerville, CA. Development of the project site could potentially result in a need for police protection services to respond to any potential incidents that may occur at the site. With the current law enforcement services in the area and the implementation of site security measures, including security fencing, onsite presence, and camera surveillance, the proposed project would not result in a substantial impact to police protection in the area and the impact would be **less than significant**.

c-e. Schools, Parks, and Government Services: Operation of the proposed project would not induce population growth that would substantially contribute to increased demand on schools, parks, or other governmental services that could, in tum, result in the need for new or expanded facilities. Therefore, the project's impact on these services would be **less than significant** for questions c), d), and e).

FINDING: The project would not result in a significant increase of public services to the project. Any increased demand to services would be addressed through the payment of established impact fees and impacts to public services would be less than significant.

XVI. Recreation

	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			**X**	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes four classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The Pacific Coast Trail passes through the Desolation Wilderness area along the western plan area boundary.

2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two NHT alignments that pass through El Dorado County, the California National Historic Trail, and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri to California

before the advent of the telegraph.

3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, State, or private lands. In El Dorado County, there are 5 NRTs.

State Laws, Regulations, and Policies

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the State to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

California Recreational Trail Act

The California State legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through Section16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities

in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5-acres of regional parkland, 1.5 acres of community parkland, and 2.0-acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

Impact Analysis:

a, b. **Parks and Recreational Services:** The proposed project would be located in rural, southwestern El Dorado County. The closest park to the proposed project is Pioneer Park, located approximately 1,900 ft southwest of the project site. The proposed project would not include any increase in permanent population that would contribute to increased demand on recreation facilities or contribute to increased use of existing facilities such that physical deterioration of the facility would occur. The proposed project would employ up to three (3) full-time employees and five (5) seasonal employees during harvest season. While the addition of new employment opportunities could increase the County's population, it is anticipated that the new employees would likely be existing residents of the County or surrounding area that would commute to the project site. The proposed project would have a **less than significant impact** on recreational facilities.

FINDING: No significant impact on park or recreational facilities would result from implementation of the proposed project.

XVII. Transportation

Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d. Result in inadequate emergency access?			**X**	

A project-specific OSTR (Appendix B) and a project-specific VMT Memo (Appendix C) were both prepared by Prism Engineering on December 3, 2020. Results from the OSTR and VMT Memo are summarized in this section.

Environmental Setting:

The property can be accessed from an existing gravel driveway, north of Perry Creek Road. Perry Creek Road is a narrow paved residential access road varying from 20 ft in width down to 14 ft in width across the Perry Creek Bridge. The nearest adjacent driveway to the project driveway is 700 ft to the west and 500 ft to the east. The project site is located approximately 3.5 miles (5-minute drive) north of Somerset.

Both driveway entrances would have gates 45 ft north of Perry Creek Road to prevent unauthorized access. The total distance from the project driveway to SR 49 is 12 miles (20-minute drive).

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the proposed project.

State Laws, Regulations, and Policies

Caltrans manages the State highway system and ramp interchange intersections. This State agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

According to the transportation element of the County General Plan, Level of Service (LOS) for County-maintained roads and State highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F, although none of these are located in the Lake Tahoe Basin. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Impact Analysis:

a. **Conflict with Transportation Plan:** The proposed project would generate an estimated four (4) delivery vehicles per week on-site during the build-out of Phase I and Phase II. Approximately three (3) trips per year would deliver soil amendments and other fertilizers on-site via Lopez Trucking, and up to two (2) box truck deliveries would be delivered per week during harvest season. The applicant is applying for a Type 13 transport-only Distribution License from the DCC. Type 13 distributors can move cannabis and cannabis products between cultivation, manufacturing, or distribution premises (DCC 2023).

Both the OSTR and the VMT Memo concluded that the project would generate a maximum of 24 employee daily trips under the busiest harvest season. The number of employee daily trips was calculated using a maximum of three (3) full-time employees and up to five (5) seasonal employees. In total, with employee daily trips and delivery vehicles, the project would generate a maximum of 33 trips under the busiest harvest season but would generate far fewer trips on most days. The maximum daily trips during project buildout and during harvest season would be less than the 100 daily trips threshold set forth by the County of El Dorado Policy TC-Xe (Prism Engineering 2020a).

The proposed project would not generate outside visitors, as it would not be open to the public. There may be occasional inspections from the Fire Department, or from the local Sheriff (rare), but all other traffic will be the limited employee commute related traffic and occasional errands/deliveries or picking up of product, but not on a regular daily basis. The weekday average peak hour traffic volume on Fairplay Road is only 220 vehicles per hour in the pm peak hour (Prism Engineering 2020a). The project is anticipated to add up to 3 vehicles in a single direction inbound in the am or pm peak hour, or slightly more than 1% difference. Any traffic impact to this existing condition is considered negligible and insignificant since the local street volumes are very low and operate as uncongested traffic.

Given the rural nature and low population density of the area and the low increase in trips, the anticipated bicycle or pedestrian use of public roadways would not be impeded. For context, only three (3) accidents occurred in the project vicinity in the previous five years, and none involved pedestrians or bicycles. Therefore, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be **less than significant**.

b. **Vehicle Miles Travelled (VMT):** Current direction regarding methods to identify VMT and comply with State requirements is provided by the 2021 CEQA Guidelines Section 15064.3. 15064.3(b)(3) provides this direction for small projects:

> Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

Conservatively, after full project buildout is complete and during the most intensive harvesting period of the year, the project would generate a maximum of 33 daily trips under the busiest harvest season but would generate far fewer trips on most days. This includes any expected seasonal workers who will only be utilizing the site for a very limited portion of the year. The proposed project would generate an estimated four (4) delivery vehicles per week on-site during the build-out of Phase I and Phase II. Approximately three (3) trips per year would deliver soil amendments and other fertilizers on-site via Lopez Trucking, and up to two (2) box truck deliveries would be delivered per week during harvest season. Both the OSTR and the VMT Memo concluded that the project would generate a maximum of 24 employee daily trips under the busiest harvest season. The number of employee daily trips was calculated using a maximum of three (3) full-time employees and up to five (5) seasonal employees.

Given the low level of existing traffic volume in the area, and the adequacy of existing infrastructure to accommodate additional volume, the project's impact would be **less than significant**.

c. **Design Hazards:** No design features associated with the proposed project would increase hazards. No changes would be made to existing public roads, and sufficient line of sight and low traffic volumes exist in the area to safely accommodate vehicles travelling to and from the project site. The proposed cul-de-sac would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have a 45 ft outside radius for vehicle turnaround, which would easily fit a 32 ft typical fire truck. Both the western and eastern driveway would be greater than 12 ft in width and would have a vertical clearance of greater than 15 ft. Further, although the project is a farming operation, no farm vehicles or equipment (e.g., tractors) would be transported on public roads, as the site would be a small, self-contained operation. Impacts would be **less than significant.**

d. **Emergency Access:** The proposed project site would have adequate access for emergency vehicles. Phase I would include a proposed circulation access driveway for vehicle fire trucks and parking. The proposed western gravel driveway would connect to an existing eastern gravel driveway to create a cul-de-sac that would facilitate turnarounds as needed, including for emergency vehicles. According to the OSTR, the cul-de-sac would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have a 45 ft outside radius for vehicle turnaround, which would easily fit a 32 ft typical fire truck. Both the western and eastern driveway would be greater than 12 ft in width and would have a vertical clearance of greater than 15 ft. The Fire District did not respond with any concerns pertaining to the proposed project's emergency ingress and egress capabilities as it was shown on the submitted site plan. Impacts would be **less than significant**.

FINDING: The proposed project would not exceed traffic or VMT thresholds, introduce hazardous transportation design features, or obstruct emergency vehicle access, and impacts to transportation would result in less than significant or no impacts.

XVIII. Tribal Cultural Resources

Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			**X**	
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

Environmental Setting:

Formal invitations to participate in AB 52 consultation on the proposed project were sent by the County to seven tribal representatives on March 31, 2021. The AB 52 Consultation Records is included as Appendix K to this Initial Study. The representatives included:

- Pamela Cubbler, Colfax-Todds Valley Consolidated Tribe
- Sara Setshwaelo, Ione Band of Miwok Indians
- Cosme Valdez, Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Regina Cuellar, Shingle Springs Band of Miwok Indians
- Don Ryberg, T'si-Akim Maidu
- Gene Whitehouse, United Auburn Indian Community of the Auburn Rancheria
- Darrel Cruz, Washoe Tribe of Nevada and California

Daniel Fonseca with the Shingle Springs Band of Miwok Indians provided a written response via email on May 5, 2021. Mr. Fonseca requested a records search and/or surveys that were done in/around the project site up to and including environmental, archaeological, and cultural

reports. County Senior Planner, Aaron Mount, provided Kara Perry, Site Protection Manager, with a copy of the draft cultural resources report. No further correspondence was received from the Shingle Springs Band of Miwok Indians.

No other tribe representatives provided a response to the County. The tribes did not provide any information about TCRs in the project site to the County, thereby concluding AB 52 consultation.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the proposed project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

- A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Impact Analysis:

a.i),ii) Tribal Cultural Resources. As noted above, formal invitations to participate in AB 52 consultation on the proposed project were sent by the County to seven tribal representatives on March 31, 2021. One of the seven tribes provided a written response requesting a records search and/or surveys that were done in/around the project site up to and including environmental, archaeological, and cultural reports. The tribe was provided with a copy of the cultural resources report and granted permission to set up a site visit with the project applicant, if desired. None of the tribes provided any information about TCRs in the project site to the County, thereby concluding AB 52 consultation.

With adherence to the Condition of Approval referenced in 7.V. Cultural Resources, the potential impact from inadvertent discovery of TCRs would be **less than significant.**

FINDING: With no information about TCRs in the project area to the County, the potential impact from inadvertent discovery of TCRs would be less than significant.

XIX. Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relation of which could cause significant environmental effects?			**X**	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry or multiple dry years?			**X**	
c. Result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?			**X**	
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e. Comply with federal, State and local management and reduction statutes and regulations related to solid waste?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The State, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the CEC to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years, and to provide an update in the year between reports. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2019 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

Title 24–Building Energy Efficiency Standards

The CALGreen (CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR (CBSC 2019). The current

2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2020.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems provide water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

California Code of Regulations Title 3:

Section 8108 includes options for acceptable management of cannabis waste, including onsite composting, collection by a local or contracted waste agency, or self-hauling to certain approved destinations.

Section 8308 includes additional requirements for cannabis waste management, including reporting requirements.

Impact Analysis:

a. **Construction of New/Expansion of Existing Utilities**: The proposed project would be estimated to demand approximately 1.2 million gallons of water per year for cannabis cultivation. Three (3) wells exist on the subject parcel. One well is located west of the cannabis premises, and two (2) are located south of the cannabis premises. The two wells located south of cannabis premises, a southwestern well and a southeastern well, are adjacent to Perry Creek Road. Of the two southern wells, the southwestern well was most recently constructed on November 10, 1988, and provides approximately 25 gallons of water per minute. The information on the western well and the southeastern is currently unknown. Additionally, the project would include a proposed 5,000-gallon water tank to hold water from the existing wells for agricultural use. An existing 8,500-gallon water tank is located next to the proposed water tank, just outside the cannabis premises but within the property boundary. The property also includes an existing water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Two (2) fire hydrants would be installed at the entrance of the property.

Wastewater would be managed by an existing septic system, and workers would use the existing restroom located inside the residence. The property currently utilizes PG&E grid

power. During Phase I, renewable energy would be purchased from PG&E's Solar Choice or Regional Renewable Choice. Phase II would install a 14.49 KW photovoltaic system (grid-tied solar panels) to provide renewable power for the project site. The 14.49 KW photovoltaic system would be installed on a ground mount. A solar battery trailer unit would be used as backup, for emergency power outages only.

The construction of the proposed utilities would involve minor soil disturbance and would not result in significant impacts. The proposed project would not require relocation or expansion of existing utilities. Therefore, the proposed project would have a **less than significant impact**.

b. **Sufficient Water Supply:** The proposed project would be estimated to demand approximately 1.2 million gallons of water per year for cannabis cultivation. Three (3) wells exist on the subject parcel. One well is located west of the cannabis premises, and two (2) are located south of the cannabis premises. The two wells located south of cannabis premises, a southwestern well and a southeastern well, are adjacent to Perry Creek Road. Of the two southern wells, the southwestern well was most recently constructed on November 10, 1988, and provides approximately 25 gallons per minute of water. The information on the western well and the southeastern well is currently unknown. Additionally, the project would include a proposed 5,000-gallon water tank to hold water from the existing wells for agricultural use. An existing 8,500-gallon water tank is located next to the proposed water tank, just outside the cannabis premises but within the property boundary. The property also includes an existing water well fed pond greater than 500 ft from the cannabis premises that would be used for fire suppression, if needed. Two (2) fire hydrants would be installed at the entrance of the property. The well report indicates there is adequate water supply to irrigate the proposed project, and impacts would be **less than significant**.

c. **Wastewater Treatment:** There are no public wastewater treatment systems serving the project site. As discussed above, the proposed project would construct a private wastewater system which would include a septic tank. At final buildout of the proposed project, the site would accommodate three (3) full-time employees and five (5) part-time employees. This impact would be **less than significant**.

d,e. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting, and loading of solid waste and recyclables. On-site solid waste collection would be self-hauled to a manned fully permitted solid-waste landfill or transformation facility for non-organic waste. A 1,500-sf compost area would be located within the cannabis premises. The cannabis waste compost that would

have no economic value would be chipped and composted. Cannabis waste that cannot be composted would be stored on-site in a designated, locked, and secured cannabis waste storage area located within the existing garage to be repurposed prior to being hauled off-site by the project applicant. The project would not produce substantial volumes of waste, and compliance with existing regulations for diversion would minimize the materials sent to local landfills. Impacts would be **less significant** for questions d) and e).

FINDING: No significant utility and service system impacts would be expected with the project, either directly or indirectly, and impacts would be less than significant.

XX. Wildfire

Would the project:				
If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			**X**	
b. Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			**X**	
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities: that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			**X**	
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			**X**	

Environmental Setting:

The property is bordered to the north by undeveloped, wooded land; to the east by agricultural, wooded land; to the south by residential and commercial space, agricultural and wooded land; and to the west by Mt Aukum Road, residential and wooded land. The project site is located in a "High" FHSZ within an SRA (CAL FIRE 2023). Given that the project is located in an SRA, CAL FIRE would respond to wildland fire incidents from their El Dorado Station 43, located approximately 16.5 miles (27-minute drive) northwest of the project site at 5660 Mother Lode Dr, Placerville, CA. Additional response would be provided by the Pioneer Fire Protection District, whose nearest station is Station 38, located 1.8 miles (4-minute drive) southwest of the project site at 7061 Mt Aukum Road, Somerset, CA. If needed, staff and additional resources could respond from other District stations including Station 32, located 4.0 miles (7-minute drive) north of the project site at 4770 Sand Ridge Road, Placerville, CA. Several other staffed stations in the area would be able to provide mutual aid and respond within 15 to 20 minutes if needed for a major incident (Pioneer Fire Protection District 2022).

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to this section, as the project site is on nonfederal land.

State Laws, Regulations, and Policies

The project is located in a "High" FHSZ of a SRA. SRAs are defined by California PRC Section 4102 as areas of the State in which CAL FIRE has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where CAL FIRE has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value.

California PRC Sections 4291 et seq. requires that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

California PRC Section 4290 requires CAL FIRE to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within the SRA and lands within very high FHSZs. Additional regulations regarding defensible space can be found in Title 14, Sections 1270.00 *et seq*. of the California Code of Regulations.

Local Laws, Regulations, and Policies

El Dorado County Municipal Code

El Dorado County Municipal Code Chapter 8.09. - Vegetation Management and Defensible Space contains requirements for wildfire prevention and enforcement of such measures within the unincorporated areas of the county. That chapter reaffirms relevant State statutes and regulations and adds additional requirements and mechanisms of enforcement.

El Dorado County General Plan

The El Dorado County General Plan (El Dorado County 2004) includes the following relevant policies:

Policy 5.7.2.1 Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to

provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 6.2.1.1 Implement Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building permit stage.

Policy 6.2.2.1 Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.2.3.1 As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and firefighting personnel and equipment will be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2 As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.4.1 Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Impact Analysis:

a. **Emergency Response Plan or Emergency Evacuation Plan**: As discussed under question g) in Section 7.IX, Hazards and Hazardous Materials, the project applicant would be required to implement all conditions outlined in the Fire Safe Plan. The Pioneer Fire Protection District requirements would be incorporated as Conditions of Approval that address site access, adequate fire flow, vegetation and fuel modification, and sprinkler and fire alarm requirements. According to the OSTR, the cul-de-sac would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have 45 ft outside radius for vehicle turnaround, which would easily fit a 32 ft typical fire truck. Both driveways would be greater than 12 ft in width and would have a vertical clearance of greater than 15 ft. The proposed project would allow for adequate emergency ingress/egress and drive-aisle widths for interior circulation. With adherence of the Conditions of Approval, impacts would be **less than significant**.

b, d. Because the project site is within a “High” FHSZ of a SRA, a project-specific Fire Safe Plan was prepared for the proposed project and is included as Appendix I to this Initial Study.

The Fire Safe Plan determined implementation of the proposed project would not alter any roadways, access points, or otherwise degrade traffic operations and access to the area in such a way as to interfere with an emergency response or evacuation plan. The proposed project would ensure the proposed access driveway would be at least 12 ft in width and the cul-de-sac would have a minimum width of 15 ft and a maximum width of 30 ft. This cul-de-sac would have 45 ft outside radius for vehicle turnaround, which would easily fit a 32 ft typical fire truck. The OSTR also concluded that the proposed parking lot on-site would provide adequate space for a fire engine to turn around. There is one existing residence on the property, and there are no proposed residences associated with the project. The proposed project would be required to adhere to all fire prevention and protection requirements and regulations of El Dorado County including the El Dorado County Fire Hazard Ordinance and the Uniform Fire Code, as applicable. Pertinent measures include, but are not limited to, the use of equipment with spark arrestors and non-sparking tools during project activities. The project applicant would also be required to develop the project structures to meet 'defensible space' requirements as specified under Objective 6.2.1 of the Safety Element of the El Dorado County General Plan. As a Condition of Approval, a 30 ft minimum Fuel Hazard Reduction Zone (FHRZ) would surround the residence, proposed buildings, and the outdoor canopy areas, and would be annually maintained by June 1. All trees would be pruned up to 8 ft above the ground, and no cannabis plants would be placed within 15 ft of tree trunks to avoid overhanging branches. All landscaped vegetation around the residence would be irrigated and kept free of dead material. There would be no vegetation along the driveways for 20 ft on each side, except for maintained low grass. All grass would be cut to a 2-inch stubble or disked.

The project has been reviewed by Pioneer Fire Protection District and CAL FIRE and it is not anticipated to exacerbate wildfire risks. The proposed project is located on relatively flat terrain and gently rolling hills with elevations within the cannabis premises ranging from 2,110 to 2,190 ft amsl. Less than 250 cubic yards of grading is proposed for the fire truck turnaround; however, all grading would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance (County Code Section 110.14). Therefore, the project would not pose a significant landslide risk in post-fire conditions. Additionally, the project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1025E, revised September 25, 2008 (FEMA 2008). Due to the relatively flat topography of the cannabis premises, the site would not be at risk of post-fire flooding. Therefore, project impacts would be **less than significant** for questions b) and d).

c. **Installation or Maintenance of Infrastructure.** As discussed under question g) in Section 7.IX, Hazards and Hazardous Materials, the Fire Safe Plan noted that a minimum 30 ft FHRZ would be required to surround the residence, proposed buildings, and outdoor canopy areas and would be annually maintained by June 1. All trees would be pruned up to 8 ft above the ground, and no cannabis plants would be placed within 15 ft of tree trunks to avoid overhanging branches. All landscaped vegetation around the residence would be irrigated and kept free of dead material. There would be no vegetation within

20 ft of the existing and proposed driveways, except for maintained low grass. All grass would be cut to a 2-inch stubble or disked. These measures would be included as Conditions of Approval for the proposed project. Impacts would be **less than significant**.

FINDING: As conditioned and with adherence to the County Code and CAL FIRE requirements, wildfire impacts would be less than significant.

XXI. Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			**X**	
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Impact Analysis:

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned or mitigated, and with adherence to County permit requirements, this project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history, pre-history, or tribal cultural resources. Any impacts from the project would be **less than significant** due to the design of the project and required

standards that would be implemented prior to project construction or with the building permit processes and/or any required project specific improvements on the property.

b. Cumulative impacts are defined in Section 15355 of the State CEQA Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

No other cannabis operations or other developments are proposed or anticipated in the vicinity of the project site. Due to the small size of the proposed project, types of activities proposed, and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Section 7.I through 7.XX, there would be no significant impacts anticipated related to aesthetics, agriculture and forestry resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards/hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire that would be cumulatively considerable. Mitigation measures for the proposed project would reduce potential impacts related to air quality and biological resources such that no contributions to cumulative impacts would be expected. Therefore, the proposed project would not contribute to potentially significant cumulative impacts, and impacts would be **less than significant**.

c. As conditioned and in compliance with the County Code, the proposed project would be anticipated to have a less than significant project-related environmental effect on human beings, either directly or indirectly. Impacts would be **less than significant**.

FINDINGS: The proposed project would not result in significant environmental impacts, exceed applicable environmental standards, or significantly contribute to cumulative environmental impacts.

7.0 INITIAL STUDY PREPARERS

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