From: Moore, Todd <tmoore@hahnlawyers.com>
Sent: Friday, May 17, 2024 4:02 PM
To: BOS-Clerk of the Board
Cc: Evan R. Mattes; Christopher J. Perry
Subject: CCUP-A24-0002
Attachments: Ltr to EDC Board of Supervisors re Single Source Application 5_21_24(3911420.1).pdf; Assessment of Odor Report_CEQA MND_032524_Draft.pdf; Outdoor odor data aggregated_042324.xlsx; Resume_Schafer_2024.pdf; Schafer_Odor Bio_2013.pdf

Categories: Blue category

Please include the attached correspondence and documents in the record regarding CCUP-A24-0002, set for hearing on May 21, 2024 before the Board of Supervisors.

Thank you.

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May 17, 2024

VIA E-MAIL

El Dorado County Board of Supervisors
330 Fair Lane
Placerville, CA 95667
edc.cob@edcgov.us

Re: CCUP-A24-002/Single Source Commercial Cannabis Appeal

Honorable Members of the Board of Supervisors:

This letter is submitted on behalf of the undersigned and the Committee To Protect River Pines Estates, which is comprised of more than 50 homeowners in the vicinity of the proposed commercial marijuana growing and processing facility. The Committee supports staff's recommendation that the Board should deny the above-reference appeal. California law and sound public policy both require that the appellant's project be placed off-calendar to permit preparation of an EIR or modification of the project to address valid citizen concerns. Alternatively, the Committee encourages the Board to deny the application because it does not comply with setback requirements, imposes odor impacts that exceed applicable thresholds and will exacerbate water scarcity problems in the vicinity of the project.

California Law Requires Preparation Of An EIR Or Denial Of The Project Because There Is Substantial Expert Evidence Of Severe Odor Impacts

Title 14 §15064 of the California Code of Regulations requires preparation of an EIR under the circumstances before the Board of Supervisors. It states "[i]f there is disagreement among expert opinion supported by facts over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant and shall prepare an EIR." This requirement is mandatory, not discretionary.

Counsel for the Committee commissioned a report prepared by Paul Schafer of SCS Engineers, a nationally-recognized expert in cannabis odor measurement and control. It powerfully disputes the baseline odor assumptions underlying the findings of "no impact" in the Initial Study. The appellant's odor study employed an artificially low baseline odor assumption measured at a single site in Yolo County that was smaller than the proposed project and weeks prior to when plant odors are at their peak. The odor measurements were also taken over a short

period of time and did not capture natural variations in odor production that occur throughout the day. More importantly, the applicant's study included no odor measurements for cannabis processing, even though a processing facility is a large component of the project.

Mr. Schafer, on the other hand, compiled measurements from sites comparable to the proposed project during peak odor production. Odor measurements were obtained from open cultivation sites (as proposed in Phase I of the project) and mixed hoop house/open cultivation (as proposed in Phase II of the project) and under varying times and wind conditions. These data demonstrate that the true odor threshold for the project site in either phase of the project will be *many times higher* than assumed by the applicant (up to 506 DT [dilution thresholds] compared to the 20 DT employed by the applicant). Odors for onsite processing, which the applicant assumed produced no odors, were actually the highest odor producers by far (3,213 DT). Employing this more representative and accurate data would result in findings of widespread odor impacts and violations of the County's 7 DT threshold at the nearby property lines. (The proposed project is approximately seven times closer to the nearest property line than county development standards require.) As such, the county cannot legally approve the project under its own commercial cannabis ordinance. Copies of Mr. Schafer's report, tabulation of data collected and curriculum vitae are transmitted with this letter.

In reply, the El Dorado County marijuana cartel claims, without evidence, that Mr. Schafer's analysis "agrees" with the applicant's odor analysis. This contention is specious. Mr. Schafer disputes the applicant's method of measuring odors, the accuracy of the baseline data that underlies the applicant's odor study, and its conclusions of "no impact." It cannot reasonably be said that the reports "agree" in any material respect.

Evidence Of Water Scarcity Problems Also Compels Preparation Of An EIR Or Denial Of The Project

In addition, staff correctly notes that there is substantial evidence of a fair argument that the proposed project will exacerbate water scarcity problems that are already affecting the proposed site and surrounding residences. "[A] public agency must prepare an EIR whenever substantial evidence supports a fair argument that a proposed project 'may have a significant effect on the environment.' [Citations.]" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1123.)

The Initial Study prepared by the county states that initial well production for the project site was 50 gallons per minute in 1999, which was prior to development of the property for ten acres of wine grape vineyard. After more than a decade of intense irrigation use for wine grapes, the well production fell to only 35 gallons per minute. This represents a decrease of 30% since the intensive agricultural use began.

This troubling decrease in water is not limited to the well serving the proposed marijuana farm site. A domestic well producing 10-12 gallons per minute was drilled at 4881 D'Agostini

Drive in 1999, which is contiguous with the project site. (A copy of this report is contained in Item L for this Agenda Item and is Appendix Exhibit "C" [1999 Well Report].) In 2015, after the nearby vineyard had been in production for approximately 10 years, that production dropped to only 4 gallons per minute, a 60% decrease. (Appendix, Exhibit "D" [2015 Well Report].) None of this decrease was attributable to use at 4881 D 'Agostini Drive because that site had not been developed yet. Several years later, another nearby domestic well located at 4520 D'Agostini Drive, which is across the street from the project site and had been drilled twenty years previously, went dry and had to be replaced with an 800 foot deep new well. (Appendix, Exhibit "E" [confirming e-mail from affected property owner].)

In this particular and unique instance, concerns about the impact of intensive ground water use caused by the project are grounded in facts rather than fears. The county must obtain an EIR to better understand and quantify these critical impacts.

In reply, the marijuana cartel argues that the proposed project will somehow use less water than the existing vineyard. This contention is in error for at least two reasons. First, it is well-established that THC marijuana cultivation is one of the most water-intensive forms of agriculture. It uses more water than famously water-intensive crops such as cotton and rice. (Appendix, Ex. "F.") According to recent scientific studies, outdoor THC cannabis cultivation in California uses .22 gallons of water per day per square foot of cultivation area during the peak growing season between August and September. (Appendix, Ex. "G.")

Second, given that the planned outdoor cultivation area is approximately 87,120 square feet, the estimated water usage of the Project (excluding all needs of its four full time employees for toilets, handwashing, etc.) is nearly 10,000 gallons per acre per day during peak irrigation season. According to University of California irrigation studies, a grape vineyard in California is estimated to require at least 4,500 to 5,000 gallons per acre per day during the dry growing months, less than half of the water usage of marijuana. (Appendix, Ex. "H.") Thus, converting the existing two acre vineyard to marijuana will double the water consumed on those acres even though surrounding residential wells are either steeply decreasing in production or going totally dry. Approving this project under those circumstances would be the height of irresponsibility.

In reply, the marijuana cartel argues that wine grapes use tens of millions of gallons of water compared to marijuana. That is a poor and inapposite comparison. At present, there are less than five acres of land within El Dorado County used for legal marijuana cultivation, compared to thousands of acres dedicated to growing grapes. Of course thousands of acres of grapes use more water than a few acres of marijuana. The appropriate comparison is water used per acre of crop. It is undisputed that marijuana uses much more water per acre than any other crop in the county.

On behalf of the dozens of residents who must live next to the proposed commercial marijuana farm and processing center, I respectfully request that the Board of Supervisors follow the applicable law. The Board cannot adopt a Mitigated Negative Declaration or approve the project on the basis of the record before it. The Board must deny the appeal. More study is required. Alternatively, there is ample evidence that the proposed project will violate setback and odor impact requirements and exacerbate water supply problems and should be denied outright.

Sincerely,

/s/ Todd R. Moore

Todd R. Moore
of HAHN & HAHN LLP

Attachments

TMOORE\77777.00324\3911420.1

March 25th, 2024
File No. 24224153.00

MEMORANDUM

TO: Mr. Todd R. Moore, Hahn & Hahn LLP

FROM: Paul Schafer, Vice President, SCS Engineers

SUBJECT: Review of "Updated Notice of Intent to Adopt A Mitigated Negative Declaration" in Regards to Potential Odor Impacts from Project CCUP21-0004/Single Source

1 INTRODUCTION

SCS has been retained by Hahn and Hahn LLP (Client) for support services related to the review of site plans, a dispersion model, odor control plans and the potential impacts of odor emissions from proposed cannabis facility operations in El Dorado County. The project in question is CCUP21-0004/Single Source and the project located on the north side of D-Agostini Drive, approximately 1 mile west of the intersection with Aukum Road, in the Somerset area.

The state of understanding relative to the main cause of odor and, more specifically, the objectionable "Skunky" odor from cannabis emissions and the methods to mediate them from cannabis cultivation is rapidly evolving. Just a few years ago, it was a common perception that the main culprit relative to odors from cannabis operations were terpenes with Myrcene being the main identified culprit. We now know that although Terpenes are a part of the odor profile, they are not the cause of the unpleasant "Skunky" odor character that can be experienced downwind of cannabis operations.

In addition, there are considerable issues and complications that arise when attempting to describe or estimate a facilities potential odor impacts. These include several factors:

1) Cannabis, like most plants, has the potential to emit hundreds of different chemicals. Each at various rates, at widely divergent odor detection thresholds, and dependent on several external variables;
2) Emission rates are not constant throughout the cannabis plants life cycle or within the plant's daily cycle;
3) Emission rates can be influenced by temperature, exposure to light radiation, degree of agitation, plant stresses, among other external factors.
4) The ratios of compounds emitted by cannabis are not constant through the plant's life cycle and the times of highest emissions of certain compounds can be decoupled from other types of compounds.

Finally, there are various technologies that have been used and are being vetted for use in regards to odor mitigation from cannabis operations. From enclosed spaces, the technology of choice has been, and continues to be, scrubbing the effluent point through the use of tried and true carbon scrubbers. However, for vented greenhouses that take advantage of the local climate for temperature and humidity controls, the best technology for use in this space is still up for debate. Vapor Phase odor

neutralizers have been used with some success but this technology has limitations and is not looked at favorably by the general public. Standalone carbon scrubbing systems with various pretreatment options have also been shown to be capable of significantly reducing the potential for odor emissions from greenhouse spaces. Each of these technologies, when utilized in open air cultivation/harvesting operations are even less effective as contact with the odorous plume is required.

The following sections review the components of the "Updated Notice of Intent to Adopt A Mitigated Negative Declaration" (MND) in Regards to Potential Odor Impacts and specifically the project – specific Odor Analysis included as Appendix E. This Odor Analysis was the basis of the County's assessment that "No odor Mitigation is required" since the analysis showed impacts less than the County's limit of 7 D/T along project property lines.

2 APPENDIX E: ODOR REPORT REVIEW

Appendix E provides an initial Technical Memorandum (July 21st, 2021) as well as an updated Technical Memorandum dated August 11th, 2023. The first analysis resulted in odors at project property lines exceeding El Dorado County's 7 D/T limit. The project was then revised such that hoop houses would be utilized along with a smaller area of outdoor cultivation. Based on the revised project description, the analysis resulted in compliance with the County's 7 D/T limit.

The modelling study utilized an odor concentration of 20 D/T as the odor baseline. The Model was used to determine the attenuation of odors as they are dispersed from the project. This is not a terrible approach considering there are no published emission rates for cannabis odors and odors from cannabis cultivation are highly variable due to several factors. However, the model needs to account for all odor generating activities, be representative of all site operations, and estimate maximum odor conditions.

SCS has reviewed this analysis and have discovered several flaws that lead to severely under predicting odor impacts to the surrounding community. The following are some of the most critical issues:

1) The foundation of the model is the 20 D/T odor concentration baseline from which all concentrations are then calculated based upon a modelled dilution factor. This value was determined/estimated based upon less than 30 minutes of measurements at a different outdoor farm that is of smaller size than specified by this project.
    a. SCS has recorded D/T values at outdoor cannabis farms in excess of 250 D/T and routinely over 50 D/T.
    b. The 20 D/T baseline estimate was based upon a farm that was 2-weeks out from Harvest. Odor concentrations are likely to increase up to Harvest.
    c. The estimated 20 D/T was based on very limited measurements, conducted over a very short period of time, and there is no quality justification for using this value at this farm.
2) The model did not take into account harvesting and proposed processing activities including on-site drying operations.
    a. Harvesting operations are some of the most odor intensive activities that can be performed at a cannabis cultivation site. This was not taken into account.

   b. Processing activities such as drying, bucking, trimming are very odor intensive activities and are not taken into account in this analysis. It appears this operation is proposed to be performed in a tent within the cultivation area.
3) The analysis states that hoop houses will be installed within the current project and each hoop house would be equipped with a carbon filtration system that would reduce odor intensity below 7 D/T.
   a. It's unclear how the use hoop houses will reduce odor emissions as they are porous, unsealed, and have no control of the emission points.
   b. SCS does not see specifications in the odor analysis for carbon filtration. Various types of conditioning systems, fans, and filters are provided but no specifications for carbon filtration are included.

3 REVIEW OF SET BACK REQUIREMENTS

The following is on Page 22 of the MND.

"The El Dorado County Cannabis Ordinance, Section 130.41.200 contains a minimum setback of 800 ft from the property line of the site or public right-of-way for allowing cultivation and processing activities. The project components would not be setback by at least 800 ft from the western property line. However, the applicant is seeking a setback reduction waiver from the County"

The basis of this setback reduction waiver is the Odor Report discussed in Section 2. Since the Odor Report was based upon flawed assumptions, the request for this setback reduction waiver should be reviewed as there is a Residence 745 feet to the Southwest.

4 PROPOSED ODOR MITIGATION MEASURES

The MND includes standards for maximum allowable odors measured by the County at the property line. It also has provisions for mitigation measures to be installed should County measurements exceed the 7 D/T benchmarks. However, it is unclear how the proposed mitigation measures would actually reduce perceived odors in the surrounding communities. In addition, the schedule for installation of the measures is not provided. The following are some additional recommendations for this section:

1) Odor masking agents or solutions that include fragrance should not be used for odor control. SCS's experience is that community members would prefer cannabis odors to an unknown chemical agent that adds additional fragrance to the air.
2) Require the applicant to specify odor scrubbing/molecular filtration technology to be utilized for odor control in hoop houses along with specifications for odor control efficacy.
3) Schedule County compliance testing during Harvesting and processing activities.
4) Require third-party testing be performed with County oversight of methods to be employed and timing of tests to insure representativeness with worst case odor conditions.

Composite Outdoor Odor Data from Cannabis Cultivation Operations:

=Differential from background over 20 D/T

Date	Time Sampled	Location Description	D/T	Up/Down Differential	Site
9/12/2019	10:10	Upwind	11	0	1. Outdoor grow with hoop House covers.
9/12/2019	10:14	Within Hoop House 1	45	34	1. Outdoor grow with hoop House covers.
9/12/2019	10:20	Within Hoop House 2	298	287	1. Outdoor grow with hoop House covers.
9/12/2019	10:10	50 Feet From Edge of Grow	19	8	1. Outdoor grow with hoop House covers.
9/12/2019	10:14	51 Feet From Edge of Grow	11	0	1. Outdoor grow with hoop House covers.
9/12/2019	10:15	Property Line - 200 feet	21	10	1. Outdoor grow with hoop House covers.
9/12/2019	10:10	Property Line - 200 feet	21	10	1. Outdoor grow with hoop House covers.
9/12/2019	13:40	Upwind	11	0	1. Outdoor grow with hoop House covers.
9/12/2019	13:45	Within Hoop House 1	177	166	1. Outdoor grow with hoop House covers.
9/12/2019	13:49	Within Hoop House 2	149	138	1. Outdoor grow with hoop House covers.
9/12/2019	13:40	50 Feet From Edge of Grow	45	34	1. Outdoor grow with hoop House covers.
9/12/2019	13:43	51 Feet From Edge of Grow	38	27	1. Outdoor grow with hoop House covers.
9/12/2019	13:45	Property Line - 200 feet	35	24	1. Outdoor grow with hoop House covers.
9/12/2019	13:40	Property Line - 200 feet	25	14	1. Outdoor grow with hoop House covers.
9/30/2019	13:36	Center of Outdoor Grow	298	289	2. Outdoor Grow, no hoop houses
9/16/2020	7:16	Harvest Area	75	66	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	7:09	Upwind	9	0	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	7:30	Downwind -500 feet	17	8	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	7:07	Neighborhood	9	0	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	7:18	Neighborhood	8	-1	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	7:37	Neighborhood	10	1	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:12	Harvest Area	106	97	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:00	Upwind	9	0	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:07	Downwind -500 feet	16	7	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:23	Neighborhood	11	2	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:17	Neighborhood	9	0	3. Outdoor grow, no hoop houses, active harvest
9/16/2020	14:01	Neighborhood	12	3	3. Outdoor grow, no hoop houses, active harvest
6/24/2021	8:00	Upwind,Site Perimeter	9	0	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	7:37	On property, Near active Harvest	35	26	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:23	On property, Near active Harvest	21	12	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:13	On property, Near active Harvest	27	18	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:37	On property, downwind property line	163	154	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:48	On property, downwind property line	30	21	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:17	On property, downwind property line	8	-1	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:33	On property, downwind property line	16	7	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:49	Off property, Downwind	13	4	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	9:03	Off property, Downwind	9	0	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	10:49	Harvest Area	3213	3204	4. Outdoor grow, mix of open and hoop house, active harvest
6/24/2021	8:00	Regional Background Sample	8	0	4. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	9:15	Upwind -Spot 1	11	0	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	10:14	Upwind - spot 2	19	0	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	9:51	Downwind -Property fenceline	8	N/A	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	9:41	Downwind -Property fenceline	13	2	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	9:36	Downwind -Property fenceline	63	44	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	9:25	Downwind -Property fenceline	11	0	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	10:00	Downwind -Property fenceline	506	487	5. Outdoor grow, mix of open and hoop house, active harvest
10/11/2021	10:05	Downwind -Property fenceline	149	130	5. Outdoor grow, mix of open and hoop house, active harvest

PAUL W. SCHAFER, CIEC, VEE

Education

B.S. Chemical Engineering, University of California, Santa Barbara

Professional License/Certifications

- Certified Indoor Environmental Consultant (CIEC #1012011)
- Climate Action Reserve (CAR) Lead Verifier
- Certified U.S EPA Method 9 Visible Emissions Evaluator (VEE) (ID # 22868)
- OSHA HAZWOPER 40-hour Trained (OSHA 29 CFR 1910.120)

Professional Associations

- National Society of Professional Engineers
- Rocky Mountain Association of Environmental Professionals
- Air and Waste Management Association

Training Services/ Course Instruction Experience (Select)

- 2015 - Schafer, Paul W., et. al. "Air Monitoring Tips and Technologies, The Power of Defensible Data", SCS Engineers Client Presentation and Day Course.
- 2020-present: SCS internal training platform, Sustainable U Series, "Ambient Air, Stack Testing, and Odors" Course.
- 2022-2023: Asphalt Industry Class, "Perimeter Air Measurements", two separate in person classes.
- 2010-Present: National Ambient Air Monitoring Conference, Multiple Presentations on Air Monitoring Case Studies.
- 2009-Present: SCS Environmental Services College, Multiple presentations on Air Monitoring including Quality Assurance (QA) and Quality Control (QC) practices, emerging sensor technologies, and federal reference and equivalency method designations.
- 2021- SCS Landfill University, Day Course and presentations on "Odor Assessment Methodologies" including odor measurements, surrogate chemical sampling, odor panels, flux assessments and modelling.
- 2017: Odor Management Conference and Technology Showcase, Day Course and presentations on "Odor Assessments".

Professional Experience

Mr. Schafer is a Vice President and Project Director at SCS Engineers, and is SCS's National Expert for Ambient Air Monitoring Services and Odor Assessment Services. During his technical career at SCS which spans over 21 years, Mr. Schafer has assumed key roles on several nationally significant monitoring efforts. He has in-depth experience in interfacing with regulatory agencies regarding the performance of monitoring systems, source emission tests, and odor assessments. He has had direct working experience with the San Luis Obispo County APCD, San Joaquin Valley APCD, Imperial County APCD, South Coast AQMD, Santa Barbara APCD, San Diego County APCD, California Air Resources Board, EPA Region IX, and the General Services Administration regarding monitoring programs and air quality impact assessments.

Mr. Schafer offers decisive management skills, which contribute to the success of monitoring programs under his purview, including solid cost control and high-quality, defensible technical performance. He has developed close business relationships with manufacturers and vendors in the ambient air quality monitoring field. He managed/continues to manage the following projects:

California Air Resource Board/U.S. EPA - Ambient Monitoring Program for Cities along the California/Mexico Border. Program Manager for a 12 station monitoring network which measured urban baseline impacts for Tijuana and Mexicali, Baja California. Specific tasks include technician management, logistical planning, data review, equipment repairs, and QA/QC oversight. Each network supported criteria pollutant monitoring as well and particulates (PM_{10}), VOCs (TO-14) and air toxics (aldehydes, metals). Recently a new contract was awarded to SCs to install and operate $PM_{2.5}$ samplers and continuous instrumentation in Mexicali, Mexico. (1995-2008 and 2014-2018, 2020-Present)

California State Parks, Oceano Dunes SVRA. Project Manager for the installation, operation and maintenance of air quality and meteorological devices at Oceano Dunes State Vehicle Recreation Area (ODSVRA) in San Luis Obispo County, California. OD SVRA is subject to Rule 1001, *Coastal Dunes Dust Control Requirements* (*Dust Rule*) by the San Luis Obispo County (SLO) Air Pollution Control District (APCD). The *Dust Rule* requires OD SVRA to, among other things, implement dust reduction activities and assess the reduction in particulate matter (PM_{10}). The 2013-2015 phase of this project is a short-term effort to measure the effectiveness of specific dust control activities at reducing ambient particulate matter. A comprehensive Quality Assurance Project Plan was also developed as part of the project. (2014-present)

Los Angeles World Airports (LAWA) Source Apportionment Study. Mr. Schafer oversaw the design and installation of a multi-station network of ambient air monitors around Los Angeles International Airport. Installation included attainment of permits, procurement of samplers and monitoring hardware, site assessments, equipment integration, as well as calibration. Seasonal collection of multiple data parameters will be used in a source-apportionment modeling study. Paul was directly responsible for the installation and field calibration of all samplers and sensors. He also managed data logging and review of all field data. (2011-2012)

County Sanitation Districts of Los Angeles County. SCS Engineers established and operated a particulate and meteorological monitoring network at the Mesquite Regional Landfill in Imperial County. Paul Schafer authored an extensive monitoring protocol for the landfill, which was accepted by the Imperial County APCD without revision. The network consists of three medium-volume samplers for PM_{10} as well as one BAM-1020 unit for PM_{10}. These samplers have also been modified in order to accurately measure $PM_{2.5}$ according to EPA protocol and reference methods. The sampling program is supported by a PSD-quality meteorological monitoring station consisting of wind speed, wind direction, and temperature. (2006-2009)

San Joaquin Valley Air Pollution Control District. SCS has designed and installed a complete PSD quality air monitoring station for the SJVAPCD in Madera, CA. All aspects of the installation including design, construction management, permitting, procurement of equipment, and equipment installation and verification where managed by Paul Schafer. Since this original award, SCS has also been contracted to design, build and install air quality monitoring stations in Hanford, Manteca, and Fresno. (2009-2014)

Venoco, Inc. & Beacon West & Freeport McMoRan Oil and Gas Operation and maintenance of a PSD and odor monitoring network in support of permit conditions for an offshore and onshore oil and gas recovery program. Continuous air quality measurements include ozone, $NO/NO_2/NO_x$, THC, TRS, H_2S and SO_2. Meteorological monitoring is also included in the program. (2000-2022)

Publications and Presentations

Schafer, Paul W., et. al. "Quality Assurance Project Plan – Arroyo Grande Oil Field, H_2S and Meteorological Monitoring" SCS Engineers Report to San Luis Obispo County APCD, January, 2016.

Schafer, Paul W., et. al. "Air Monitoring Tips and Technologies, The Power of Defensible Data" SCS Engineers Client Presentation, June 2015.

Schafer, Paul W., et. al. "Quality Assurance Project Plan – Oceano Dunes SVRA" SCS Tracer Environmental Report to California State Parks and San Luis Obispo County APCD, June, 2014 and April, 2015.

Schafer, Paul W., et. al. "Air Monitoring Plan – Blanche Park" SCS Engineers Report to Miami-Dade County Dept. of Environmental Resources Management (DERM), April, 2014.

Schafer, Paul W., et. al. "PSD Monitoring Plan – West Campus" SCS Tracer Environmental Report to Santa Barbara County APCD, January, 2010.

Schafer, Paul W., et. al. "Quality Assurance/Quality Control Program Manual – West Campus/Ellwood Odor" SCS Tracer Environmental Report to Santa Barbara County APCD, February, 2010.

Schafer, Paul W., et. al. "Carpenteria Meteorological Monitoring Site - Quality Assurance/Quality Control Program Manual" SCS Tracer Environmental Report to Santa Barbara County APCD, January, 2009.

Schafer, Paul W., et. al. "Quality Assurance/Quality Control Program Manual – Carpenteria Monitoring Site" SCS Tracer Environmental Report to Santa Barbara County APCD, October, 2008.

Schafer, Paul W., et. al. "Meteorological Monitoring Plan – Carpenteria Gas Plant" SCS Tracer Environmental Report to Santa Barbara County APCD, October, 2008.

Schafer, Paul W., et. al. "PSD Monitoring Plan – Lompoc Oil and Gas Plant – HS&P Monitoring Plan" SCS Tracer Environmental Report to Santa Barbara County APCD, September, 2008.

Schafer, Paul W., et. al. "PSD Monitoring Plan – Lompoc Oil and Gas Plant – Paradise Road Monitoring Plan" SCS Tracer Environmental Report to Santa Barbara County APCD, September, 2008.

Schafer, Paul W., et. al. "PSD Monitoring Plan – Lompoc Oil and Gas Plant – Odor Monitoring Plan" SCS Tracer Environmental Report to Santa Barbara County APCD, September, 2008.

Schafer, Paul W., et. al. "PSD Monitoring Plan – Gaviota Oil Heating Facility – Carpenteria Monitoring Plan" SCS Tracer Environmental Report to Santa Barbara County APCD, September, 2008.

Schafer, Paul W., et. al. "PM-10 Monitoring Protocol for the Mesquite Regional Landfill" SCS Tracer Environmental Report to Imperial County APCD, September, 2007.

Paul W. Schafer, CIEC
Vice President, Project Director
SCS's National Expert for Odor Assessments and Ambient Air Monitoring Programs

Biography:

Mr. Paul Schafer is a Vice President and Project Director at SCS Engineers. He is also one of SCS's National Experts for conducting Odor Assessments and Ambient Air Monitoring Programs. He is considered an expert in conducting air quality assessments of specific air toxics, criteria pollutants, as well as odor and odoriferous compounds. Paul directly manages the operation of a laboratory quality olfactometer that meets ASTM and EN methods for odor assessments. In addition, he has developed state of the art measurement techniques for surrogate odor compounds specific to various odor sources. Paul has in-depth experience in interfacing with regulatory agencies regarding the performance of monitoring systems, air sampling networks, and continuous process monitors which are operated for our clientele. He has had direct working experience with several Air Pollution Control Districts, Air Quality Management Districts, the California Air Resources Board, and the EPA.

Paul has provided expert work services on several odor projects in litigation and has also provided expert testimony on one (1) case.

From: Sharen Robach <bsrobach@msn.com>
Sent: Friday, May 17, 2024 5:02 PM
To: BOS-Clerk of the Board
Subject: CCUP-A24-0002
Attachments: B. Robach's letter to EDC Board of Supervisors.doc

Categories: Blue category

Dear Honorable Clerk of the El Dorado County Board of Supervisors:

Attached please find my letter of concern regarding the above-referenced appeal to be heard by the Board on Tuesday, May 21, 2024.

Thank you.

Barry Robach
River Pines Estates
7052 Bertone Drive
Somerset, CA 95864

Attachment

May 17, 2024

Honorable Members of the El Dorado County Board of Supervisors:

Re: CCUP-A24-0002

CC&RS assigned to residential sub-divisions must be upheld. We realize the County does not enforce CC&Rs, but must notify the permit applicant if they appear to go against the applicant's use. The CC&Rs are presented to the County by the developer for a reason. You wouldn't even consider this use if it were Blackstone (EDH) or Greenstone (EDC).

Let the current ordinances run their course before you change them; you don't even know if they work yet.

Variances should be more difficult to obtain. The applicant can always make their grow site smaller to meet the requirements.

Thank you for your time.

/s/ Barry D. Robach

Barry D, Robach
River Pines Estates
County of El Dorado

From: Sharen Robach <bsrobach@msn.com>
Sent: Friday, May 17, 2024 5:08 PM
To: BOS-Clerk of the Board
Subject: CCUP-A24-0002
Attachments: S. Robach's letter to EDC Board of Supervisors.doc

Categories: Blue category

Dear Honorable Clerk of the El Dorado County Board of Supervisors:

Attached please find my letter of concern regarding the above-referenced application/appeal set to be heard by the Board of Supervisors on Tuesday, May 21, 2024.

Thank you.

Sharen D. Robach
River Pines Estates
7052 Bertone Drive
Somerset, CA 95684

May 17, 2024

Honorable Members of the El Dorado County Board of Supervisors:

Re: CCUP-A24-0002

My husband and I have lived in the residential community of River Pines Estates for over 25 years. During those years, we have participated in many community road work days cleaning out and refilling potholes in our roadways and various other maintenance projects. Unfortunately, our roads are not County maintained, therefore, the residents have to do the work ourselves. Our roads cannot take any more abuse from large trucks belonging to commercial suppliers. We love our neighborhood and have met many great neighbors who have worked tirelessly on their properties to make our community a great place to live.

I am sure you have heard many more negative reasons why this application/appeal should not be approved. I won't repeat those reasons in order to keep this short and to the point. In sum, I believe that a commercial pot dispensary growing approximately 87,000 square feet of plants does NOT belong in the middle of the residential community of River Pines Estates, period.

Thank you for your time.

/s/ Sharen D. Robach

Sharen D. Robach
River Pines Estates
County of El Dorado
State of California

From: Lee Tannenbaum <lee.tannenbaum@gmail.com>
Sent: Saturday, May 18, 2024 2:34 PM
To: BOS-Clerk of the Board; BOS-District I; BOS-District II; BOS-District III; Supervisor Parlin District; BOS-District V
Cc: Michael Pinette; David Harde; kevinwmccarty@pm.me; Ali Jones; rod@earthgroovy.com; Adolph Zierke; phil barrier; Tracy Doyle; Karen L. Garner; Christopher J. Perry; Robert J. Peters; Aaron D. Mount; David A Livingston; Jefferson B. Billingsley; Evan R. Mattes; Chris Cockrell; Lina Balciunas Cockrell; Jim Brunello
Subject: Agenda Item 24-0936, Tuesday May 21, 2024

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Blue category

Please add these comments to the record for public comment on the above agenda item.

Supervisors,

There has been a clear shift in the temperature around cannabis in EDC by staff, the Planning Commission and this board. It is disturbing that the will of this board, staff and the PC are not carrying out the will of the people (i.e. the vote). My previous comment is not just for cannabis, but relevant to this discussion.

The Pinette neighbors provided a competing odor opinion paper, which is not a competing study as required by CEQA. Legally, and according to CEQA, a competing study must be submitted. I have submitted previously (it's in the attachments from previous hearings), and for the record, a ruling by a judge in EDC, that the expectation is that CEQA experts will disagree and that there must be substantial differences in the studies to demand an EIR. This is not the case here. In fact, the study and the opinion papers are largely in agreement. They also both address a full greenhouse implementation to remove any odor. I'm hopeful you've read and compared them. The competing opinion piece also gives clear direction how to be in compliance to meet its criteria. Mr. Pinette is committed to do everything to meet these requirements now and has supporting documentation for you as I understand to be in compliance.

Today, you are here to discuss one item related to your decision. Does the revision to the project by moving to phase 2 immediately satisfy both experts? Nothing else noted on the staff recommendation, PC recommendation, or the neighbors may be considered by you. Heard, certainly, but legally not part of your decision making process. Other concerns, while understood, do not have supporting scientific documentation for dispute, so therefore may not be considered. They are immaterial without scientific support. As discussed at the Harde hearing, you are not here today to make policy decisions, you are here to decide on one single issue. Does phase 2 of the Pinette project satisfy the conditions of both the revised odor study and the opinion document submitted by the neighbors. The answer is undeniably, yes.

Mr. Pinette is committed to moving forward to phase 2 of his project now. This satisfies all conditions around odor by both experts. Our county ordinance supports this implementation as well and allow for a zero foot setback.

CEQA MND's may only be challenged by a competing scientific study. So therefore in your decision today, the only criteria for discussion is odor. The language of the PC and staff recommendation is vague at best, as this county does not rule on what neighbors think or say. In an email from Staff to the applicant, they literally asked if the neighbors had signed off on the proposed changes to phase 2. Neighbors do not make policy, nor do they decide project approvals or denials. Our ordinances clearly state what our guidelines are, as does CEQA.

Legally and according to the EDC ordinances and CEQA, you must approve Mr. Pinette's appeal today based on the above criteria and submitted changes to the project.

Sincerely,

Lee Tannenbaum
CEO Cybele Holdings, Inc.
President El Dorado County Growers Alliance
650.515.2484

From: Michael Pinette <michaelpca@gmail.com>
Sent: Sunday, May 19, 2024 1:38 PM
To: David A Livingston; BOS-Clerk of the Board; BOS-District I; BOS-District II; BOS-District III; BOS-District IV; BOS-District V
Cc: Lee Tannenbaum; KapahiR; tslmeds; Jay Windhill; Michael Pinette; Chris Stiles
Subject: Fwd: BoS Agenda Item 24-0936, Meeting scheduled May 21.2024 9 to 11am block
Attachments: DAgostini Memo Attachment.pdf; D_Adostino Cannabis Technical Memo 18 May_ 2024.pdf

Categories: Blue category

Dear Mr. Livingston and Supervisors,

Re: BoS Agenda Item 24-0936

I wish to submit this letter and two updated Odor Study documents and attachments from EPS (Ray Kapahi) into the public hearing documents for agenda item 24-0936. The Boad of Supervisors appeal is this Tuesday May 21 between 9 and 11am.

My name is Michael Pinette and I am the owner of 4941 D'Agostini Dr, Somerset, and co-owner of SSS Inc. This concerns CCUP21-0004 license.

Our neighbors provided a competing odor opinion paper, which is not a competing study as required by CEQA. This project had been fully approved by all staff and agencies until this odor opinion paper was submitted. A highly qualified professional did an odor analysis study which has been accepted and approved by all parties involved. This same professional is an approved vendor by the county, I do not believe the author of the opinion paper has this same qualification.

Regardless of what has transpired, our project has two approved phases. The second phase is a full deployment of greenhouses for the entire site, with charcoal filtration. This second phase, as the study and the opinion piece state, meets both experts conditions for approval as well as the DT threshold set by the county. As noted in our EDC ordinance, there can be a zero foot setback with this type of implementation.

Before Tuesdays meeting, we will submit a revised odor study using the competing odor opinion document and using this opinion's scientific baseline numbers to complete. By doing so, we comply 100% with the ordinance, both experts and meet all conditions for approval. SSS Inc will immediately implement Phase 2 of the project upon approval by your board.

From a CEQA perspective and legally according to our ordinances, the other concerns noted on the staff report recommendation and the PC recommendation are immaterial to this discussion. CEQA MND's may only be challenged by a competing scientific study. So therefore in your decision today, the only criteria for discussion is odor. The language of the PC recommendation is vague at best, as this county does not rule on what neighbors think or say. Our ordinances clearly state what our guidelines are, as does CEQA.

Legally and according to the EDC ordinances and CEQA, you must approve our project today based on the above criteria and changes to the project. See also updated Odor Study attachments. Results indicate DT measurements well below or at 7 DT, even without any mitigation. With mitigation either zero or below 2 DT.

With respect,

Michael S Pinette

CCUP21-0004 lead and SSS Inc co owner

El Dorado Growers Advocacy Alliance Board member and Treasurer

650-269-0063

ATTACHMENT

Figure 1

Location of Chico Greenhouses

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

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

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


0
20
30
40
50
60
70
80
90
100
10
20
30
40
50
60
70
90
100

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	[redacted]	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	[redacted]	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


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Report a map error


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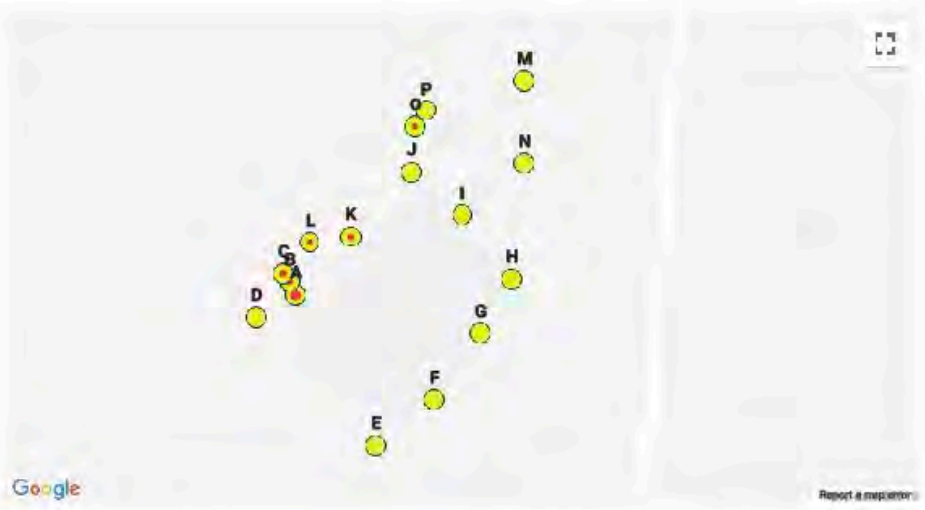
Google
Map data ©2019 Imagery ©2019 , Maxar Technologies, U.S. Report a map error

Odor DT Criteria (Eclipse Key)			
Avg. Log	Avg.	Eclipse Symbol	Description
0.000	= ND		Full Sun
0.001-0.301	< 2		1/4 Eclipse
0.301-0.845	>= 2		1/2 Eclipse
0.846-	>= 7		Full Eclipse

Date Range: 10/1/2019 thru 10/3/2019
Any Time of Day
Assessment Type: Inspection (DT)
Include Non-Detect



Odor DT Criteria (Eclipse Key)			
Avg. Log	Avg.	Eclipse Symbol	Description
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Date Range: 10/1/2019 thru 10/3/2019
Any Time of Day
Assessment Type: Inspection (DT)
Include Non-Detect

ENVIRONMENTAL PERMITTING SPECIALISTS
Air Quality • Permitting • OHSA • RMP/PSM

TECHNICAL MEMORANDUM

To: Michael Pinette
Single Source Solution, Inc.

Date: May 18, 2024

From: Ray Kapahi RK
Tel: 916-687-8352
E-Mail: ray.kapahi@gmail.com

Subject: Updated Analysis of Odor Impacts at the Proposed Cannabis Cultivation Located at 4941 D'Agostini Drive in Somerset (El Dorado County), California

INTRODUCTION AND SUMMARY

Environmental Permitting Specialists (EPS) has updated the analysis of odors at the proposed cannabis cultivation site located at 4941 D'Agostini Drive, Somerset. This update is based on the project employing hoop houses equipped with carbon filters. The updated site map showing the location of hoophouses is shown in Figure 1. There will be no outside grow on site. The greenhouses are labeled Phase 2 but will be moved to implementation immediately to satisfy odor mitigation issues.

It is my understanding that there would be an approximate total of 26 hoop houses on a 46.53 are site, lower vineyard. Each hoophouse would be 100 feet x 25 or 30 feet as shown in the attached site map. Each hoophouse would employ in-line carbon filters to control odors. The size of the carbon filters will be based on the interion volume of each hoophouse and the number of air changes per hour to ensure that odors will be effectively controlled. Information on the carbon filter is attached. By "controlled" we mean the intensity of odors will be reduced to below 7 dilution to threshold (DT).

The use of hoop houses equipped with activated carbon filters is one of the odor control options specified under the Eldorado County Ordinance 5110 (5)(D). Therefore, the use of hoop houses and carbon filters at this site will effectively control odors consistent with the requirements of

this Ordinance. This Memorandum provides an estimate of expected odor intensities at the property lines of the project site.

SCOPE AND METHODOLOGY OF ODOR ANALYSIS

To estimate the intensity of odors along the property lines, EPS relied on the odor modeling study previously detailed in the August 11, 2023 Memorandum and on odor intensity measurements conducted at greenhouses in Northern California. The combination of odor modeling and odor measurement allows us to estimate future maximum odor intensity along the property lines.

The odor dispersion modeling analysis at the site was described in the August 11, 2023 Memorandum. The results of analysis quantified the dilution of odors in the atmosphere versus distance from the odor source. The previous analysis employed an EPA and El Dorado County Air Quality Management District using procedure approved by the El Dorado County Air Pollution Control District. The results of that modeling study indicated that odor decline by 82% over a distance of 500 feet solely due to atmospheric dilution.

In addition to the dispersion modeling. EPS collaborated with Fulcrum Enterprises, LLC, NCM Odor Control, Inc., and Bosarge Environmental, LLC to conduct multi-day odor intensity measurements adjacent to greenhouses in Chico, California. Hoop houses used at this project are similar to greenhouses in that odors are confined to the interior of a structure where they can be controlled.

Melanie Bosarge conducted the odor measurements using a Nasal Ranger Field Olfactometer and the results are reported in terms of D/T (dilution to threshold) . She is a Certified Instructor and has extensive training and experience in the use of the Nasal Ranger. She also completed training at the Odor School at St. Croix Sensory, the manufacturer of Nasal Ranger.

The odor measurements were conducted October 1 to 3, 2019 at a Northern California location (10175 Alberton Ave, Chico) that has seven (7) greenhouses each measuring 200 feet x 42 feet. Each greenhouse had 3 rows of four hundred (400) plants totaling 1,200 plants. The greenhouses were equipped with an odor control misting system. Photographs of the misting system appear in the attached report. At the time odor measurements were taken, the cannabis plants were two weeks away from harvesting. See Figures 1 to 5 in the attached report.

Odor intensity was measured at the greenhouse exhaust vents, at the property lines and at nearby off-site locations. A total of 17 on-site readings were taken. The results of the on-site testing were as follows:

Number of Readings	Measured DT	Mitigation Scenario
4	0 (non-detect)	With Mitigation
10	Between 2 and less than 2	With Mitigation
2	4	No Mitigation

1	7	No Mitigation

These results show an average odor intensity of 2.06 D/T and a maximum of 7 D/T. A copy of the odor monitoring report is attached. We expect the use of carbon filters will control odors to the same or higher level than the use of misting systems.

On the basis of odor measurements and odor modeling studies, EPS calculated the maximum intensity of odors at the nearest property lines. The results are summarized below.

To determine if the proposed project will comply with El Dorado County's 7 dilution to threshold (DT) odor standard [Ordinance 5110 (5) D)], EPS relied on odor intensity measurements at other greenhouses in Northern California and on numerous odor modeling studies. The odor modeling studies quantify the dilution of odors with distance from the greenhouses.

Specifically, EPS conducted an odor dispersion modeling study in Somerset in 2021 to determine the dilution of odors versus distances from greenhouses. This study employed an EPA and El Dorado County Air Quality Management District using procedure approved by the District. The results of the modeling study indicated that odor decline by 70% over a distance of 300 feet solely due to atmospheric dilution. Figures 2 and 3 show the spatial variation of relative odor intensity from for a 75' x 75' area.

In addition to the dispersion modeling. EPS collaborated with Fulcrum Enterprises, LLC, NCM Odor Control, Inc., and Bosarge Environmental, LLC to conduct multi-day odor intensity measurements adjacent to greenhouses in Chico, California.

Melanie Bosarge conducted the odor measurements using a Nasal Ranger Field Olfactometer and the results are reported in terms of D/T (dilution to threshold) . She is a Certified Instructor and has extensive training and experience in the use of the Nasal Ranger. She also completed training at the Odor School at St. Croix Sensory, the manufacturer of Nasal Ranger.

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1	7	No Mitigation

These results show an average odor intensity of 2.06 D/T and a maximum of 7 D/T. A copy of the odor monitoring report is attached.

On the basis of odor measurements and odor modeling studies, EPS calculated the maximum intensity of odors at the nearest property lines. The results are summarized below.

Location	Minimum Distance to Property Line		Maximum Conc.	Conc. At Property Line	Lowest Dilution Ratio	Fenceline DT
	(ft)	(m)				
North	< 1000	< 300	58,407	> 9738.9	< 6.00	< 3.33
Eastern Property Line	500	152.4	56,441	7,939	7.11	0.98
SW Property Line	190	57.9	64,944	20,043	3.24	2.16
Western Property Line	310	94.5	32,391	10,037	3.23	2.17
Baseline DT	7					

These results indicate that even without mitigation, the odor intensity at the nearest property lines would remain well below 7 D/T.

To ensure on-going compliance with the County's 7 D/T odor standard along the property lines, EPS staff will be available to measure odor intensity after the greenhouses are in operation.

From: Mike Gorvad <mikegorvad@gmail.com>
Sent: Sunday, May 19, 2024 9:45 PM
To: BOS-Clerk of the Board
Subject: CCUP21-004/Single Source
Attachments: Assessment of Odor Report_CEQA MND_032524_Draft.pdf; earthgroovy.pdf

Categories: Blue category

Michael Gorvad

6804 Flat Creek Drive

Somerset, CA 95684

May 19, 2024

Via Email

El Dorado County Board of Supervisors

Clerk of the Board

330 Fair Lane, Building A

Placerville, CA 95667

edc.cob@edcgov.us

Re: CCUP21-004/Single Source (the “Project”)

Honorable Members of the Board of Supervisors:

I live in River Pines Estates at 6804 Flat Creek Drive, Somerset, CA 95684. My property lies within 1000 feet of the proposed project. On April 25, 2024, the El Dorado County Planning Commission denied a motion to approve this project and approved a motion to take the matter off the Planning Commission agenda to either allow time for preparation of an Environmental Impact Report (EIR) or to allow the Applicant to change their project to address concerns raised at that meeting and at a previous Planning Commission meeting on March 27, 2024. The Applicant has chosen to appeal the April 25, 2024 Planning Commission decision.

There is substantial evidence to support a fair argument that the published plans and documentation for the Project do not adequately cover the environmental impacts of the Project and therefore the Project should be required to submit an Environmental Impact Review (EIR). I respectfully request that the Board of Supervisors deny the Applicant's appeal.

There are at least four areas in which the published plans and documentation for the Project are lacking: 1) Water Usage; 2) Odor Control; 3) Biological Resources; 4) Acoustic and Air Quality Studies. Discussion of these areas of concern follow. Additional details to support the discussion may be given in presentations today and in emails to the Planning Commission or Board of Supervisors by other members of the Committee To Protect River Pines Estates.

Two additional points I wish to present to the Board of Supervisors are 5) Character of the River Pines Estates Community and 6) Safety Issues Associated With The Project.

1) <u>Water Usage</u>

The Applicant claims the well to be used for the Project produces 35 gallons per minute (gpm) and that this will not impact the wells on other properties near the Project. The Applicant's plans do not take into account the amount of water used for the remaining 8 acre vineyard on the Applicant's parcel, nor does it include the water used for the Applicant's residence and

landscaping. Water usage for growing cannabis has been studied by various sources and is estimated to be 9583 gallons per acre per day. Estimated water usage for residential use and landscaping for the parcel in question is 1,594 gallons per day. Estimates for wine grapes are 3944 gallons per acre per day. When all these factors are taken into account, the daily draw on this well far exceeds its capacity. Table 1 below summarizes this information and shows that the proposed well will not produce enough water to meet the needs of the cannabis farm and the rest of the site parcel. The Project must address this shortcoming.

Table 1: Project and Site Parcel Water Usage

	Daily Usage	Reference
Existing 8 Acre Vineyard	36,000-40,000 gallons [3,500-4,000 gal./day/day]	Reference 1
Outdoor Cannabis Cultivation (2 acres)	19,166 gallons [9,583 gal./acre/day]	Reference 2
Single Family Home w/ landscaping	1,594 gallons	Reference 3
Total	56,760-60,760 gallons/day	
Well Production	50,400 gal./day	
Deficit	-6,760 to -10,760 gal./day	

Note that Table 1 does not include water that may be used for the misters that are proposed as part of the Project's odor mitigation measures.

2) Odor Control

The review by Paul Schafer of SCS Engineers (Reference 4) shows the odor sources given by the Applicant are not accurate and underestimate the amount of odor-causing elements that the Project will produce. The Project Odor Study is based on flawed measurements and flawed assumptions and does not take into account odors produced by the on-site processing and drying operations. In addition, the SCS report indicates mitigation measures proposed by the Project will not be effective in controlling the noxious odors that will affect neighbors. Part of the mitigation measures proposed by the Project include the use of chemicals sprayed into the air via misters to mask the cannabis odors. The Applicant's plans do not specify the masking chemical(s) to be used, so the effect of the chemical(s) on people and the environment is unknown. The masking chemical(s) need(s) to be specified and the effect on people and the environment detailed. The

proposed odor mitigation measures neglect to take into account shifts in wind direction. They also neglect to account for noise from the fans as well as runoff from the misters.

3) Biological Resources

The Initial Study supporting the Applicant's Draft MND was performed during December when many plants are dormant and many animals and birds are not present. This time of the year is clearly not representative of the wildlife, including birds, that frequent the woods near the grow site at various times of the year.

4) Acoustic and Air Quality Studies

The Acoustic and Air Quality Studies used to support the Applicant's Draft MND were performed by Earth Groovy Products. Based on California Secretary of State Records (Reference 5), Rod Miller is a principal of the company. Mr. Miller is also one of the Applicants of the Project. This is clearly a conflict of interest and an independent company or consultant should conduct theses analyses.

5) Character of the River Pines Estates Community

River Pines Estates (RPE) was established as a residential community. It consists mainly of single family residences, some with small private vineyards. It was never intended to have commercial activities such as the Proposed Project. The Project is completely out of character with the RPE community.

6) Safety Issues Associated With The Project

The Project will potentially be an attractive nuisance at the least, and more probably, a criminal magnet. If the project is so innocuous, why does it require security lights, fences, cameras, and sensors? It also potentially puts an additional burden on the sheriff's department.

A common (spurious) argument for legalizing cannabis growing and legalizing cannabis farming has been that such activities will be “safer”. I list below five references (Reference 6 – Reference 10) of articles easily found on the internet that contradict this argument. They all reference strong arm robberies at legal cannabis farms. This list is not exhaustive. Please do not subject the RPE Community to similar criminal activities.

Respectfully,

/s/ Michael R. Gorvad

Michael R. Gorvad

References

Reference 1 Zheng Z, Fiddes K, Yang L. A narrative review of environmental impacts of cannabis cultivation, J Cannabis Res. 2021; 3:35;

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8349047/

Reference 2 Wilson H, Bodwitch H, Carah J. First known survey of cannabis production practices in California. California Agricul. 2019;73(3):119–27.

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0120016

Reference 3 EID estimates homes in the County use .56 acre feet per year, or 1,594 gallons per day, on average, Mountain Democrat

https://www.mtdemocrat.com/news/eid-reviews-consumption/article_f9e6dd8c-16a1-5bc4-bd02-2186c30d8840.html

Reference 4 Odor Study; Paul Schafer of SCS Engineers & Environmental Consultants

Attached File: Assessment of Odor Report_CEQA MND_032524_Draft.pdf

Reference 5 California Secretary of State Statement of Information Earth Groovy Products, LLC

Attached File: earthgroovy.pdf

Reference 6 Armed Robbery at Miranda Cannabis Farm
https://humboldtgov.org/civicalerts.aspx?AID=5253

July 25, 2023

Reference 7 OVER 700 POUNDS OF CANNABIS STOLEN FROM LEGAL FARM

https://kymkemp.com/2022/02/05/over-700-pounds-of-cannabis-stole-from-legal-farm-near-hayfork-by-trusted-workedr/

Saturday, 5 February 2022

Reference 8 Four arrested after burglary on legal California pot grow farm

https://original.newsbreak.com/@golden-gate-media-1351221/3216712566028-four-arrested-after-burglary-on-legal-california-pot-grow-farm-one-suspect-climbed-tree-to-hide

2023-11-03

Reference 9 ARMED ROBBERY WITH SHOTS FIRED AT PERMITTED CANNABIS FARM

https://kymkemp.com/2019/10/10/armed-robbery-with-shots-fired-at-permitted-cannabis-farm-this-morning/

10 October, 2019

Reference 10 One Shot at Cannabis Farm Robbery
https://www.northcoastjournal.com/NewsBlog/archives/2019/10/07/one-shot-at-cannabis-farm-robbery

Oct 7, 2019

From: Kathleen Gorvad <kathleen_go@hotmail.com>
Sent: Monday, May 20, 2024 12:17 AM
To: BOS-Clerk of the Board
Subject: CCUP21-004/Single Source (the "Project")

Categories: Blue category

Kathleen Gorvad
6804 Flat Creek Drive
Somerset, CA 95684

19th May 2024

Via Email

El Dorado County Board of Supervisors
Clerk of the Board
330 Fair Lane, Building A
Placerville, CA 95667

edc.cob@edcgov.us

Re: CCUP21-004/Single Source (the "Project")

Honorable Members of the Board of Supervisors:

My comments refer to the El Dorado County Board of Supervisors Governance Handbook which, in part, states "Our mission is to enhance the well-being of all residents".

I ask you to keep this simple obligation in mind as you decide if a pot farm in the middle of River Pines Estates is appropriate; something that will "enhance the well-being" of the residents living there. This area was developed as a rural/residential community. That atmosphere has been maintained over the years and we would like to keep it that way.

Making exceptions favoring something that would negatively* impact any community in El Dorado County is contrary to what you have committed to uphold in your own Mission Statement.

Thank you for considering my remarks.

*I'm sure you have read the ample and detailed documentation of the concerns submitted by others who are opposed to this project, so I will not elaborate any further here.

/s/ Kathleen Gorvad

Kathleen Gorvad

From: Cammy &/or Michael Morreale <mcmorreale@sbcglobal.net>
Sent: Monday, May 20, 2024 7:15 AM
To: BOS-Clerk of the Board
Cc: BOS-District II; BOS-District III; BOS-District IV; BOS-District V; BOS-District I; Andy Nevis
Subject: Re: CCUP-A24-0002 - BOS Appeal from Mike Pinette/Single Source Commercial Cannabis Permit (Hearing 5/21/24)
Attachments: Attachment for BOS Appeal on 5-21-24 from Cammy Morreale - Single Source Public Review Letter.pdf; Attachment for BOS Appeal on 5-21-24 from Paul Schafer SCS Odor Expert.pdf; Attachment for BOS Appeal Hearing on 5-21-24 from Dave Sederquist Engineering Geologist Hydrogeologist (Youngdahl) - Email 3-1-24.docx; Attachment for BOS Appeal Hearing on 5-21-24 from Rick Blodgett Laboratory Director Water Environmental Testing - Email 3-25-24.docx; Attachment for BOS Appeal on 5-21-24 from Ground Water in Fractured Hard Rock - California Department of Water Resources.pdf

Categories: Blue category

Dear Clerk of the Board:

Please upload the attached documents representing my Public Review Response for the Appeal Hearing on Tuesday, May 21, 2024. Please be sure to forward this documentation to all Board of Supervisors and anyone else you deem appropriate.

Thank you for your assistance,

Cammy Morreale
818-681-8552

Cammy Morreale
6625 Perry Creek Road
Somerset, CA 95684
mcmorreale@sbcglobal.net

March 26, 2024

VIA E-MAIL
El Dorado County Planning Commission
% Evan Mattes, Senior Planner
2850 Fairlane Court
Placerville, CA 95667
planning@edcgov.us

RE: CCUP21-0004/Single Source – 4941 D'Agostini Drive

Dear Planning Commissioners:

I am a resident near Mr. Mike Pinette's proposed cannabis project and urge you to make the following decisions in the hearing on March 28, 2024:

- **Reject** the Mitigated Negative Declaration "MND" and Initial Study as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

- **Reject** the Mitigation Monitoring and Reporting Plan "MMRP" as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

- **Deny** the Commercial Cannabis Use Permit as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

I offer you five (5) Expert Opinions representing there is "Substantial Evidence" for the "Fair Argument Standard" supporting our demand that the Project prepare an EIR. An EIR is required when there is substantial evidence of Significant Environmental Impact.

#1 - Water Quality – in the following Email from the subject matter expert Rick Blodgett ("Water Environmental Testing Laboratory" in Shingle Springs), Rick recommends a baseline Title 22 and Monitoring Wells to be used for continuous water quality

inspections/oversight/tracking. Additionally, Rick Blodgett is a PhD in Public Health Epidemiology with 40 years experience in Chemical and Microbiology.

From: *Rick Blodgett <wet.laboratory@gmail.com>*
To: *mcmorreale@sbcglobal.net <mcmorreale@sbcglobal.net>*
Sent: *Monday, March 25, 2024 at 01:29:49 PM PDT*
Subject: *Inquiry for Water Quality Teasting*

Cammy Morreale

March 25, 2024

Dear Ms. Morreale,

Thank you for your inquiry on what water quality parameters to test for in private wells that are adjacent to commercial farming facilities. In determining whether fertilizers, pesticides, herbicides, or industrial solvents may leach into the watershed or a well aquifer, it is suggested that a baseline Title 22 be conducted on the well in question to determine water quality constituents before the farming practices have begun.

Good farming and environmental monitoring practices also suggest that monitoring wells be used at the perimeter of the farming property to test for possible contaminant intrusion, If there are streams or waterways that may be impacted by the agricultural practices, then an NPDES permit may be required by regulatory agencies. I would suggest viewing the environmental impact report (EIR) from the farming facility to determine the pesticide/herbicide application permit. Presently in El Dorado County, the synthetic organic compounds (SOC) required to test are:

- *Alachlor (EPA 525.2)*
- *Atrazine (EPA 525.2)*
- *Simazine (EPA 525.2)*
- *Lindane (EPA 508)*
- *Toxaphene (EPA 508)*
- *Carbofuran (EPA 531.1)*
- *2,4-D (EPA 515.1)*
- *Diquat (EPA 549.2)*
- *Endothall (EPA 548.1)*
- *Glyphosate (EPA 547)*

Additional tests required by the county for small water systems are volatile organic compounds (VOC), radiological (Gross alpha), natural uranium, and radium 226 & 228.
Title 22 will be more comprehensive, but this list is the minimum requirements for a water quality package in this county.

If you have further questions please feel free to call me at 530 677-5776.

Richard R. Blodgett, Ph.D.
Laboratory Director
Water Environmental Testing Laboratory
(530) 677-5776

#2 - Water Supply and Quality – in the following email from subject matter expert Dave Sederquist (Senior Engineering Geologis/Hydrogeologis with Youngdahl Consulting Group), Dave recommends monitoring wells to ensure water supply and water quality do not negatively impact neighboring wells.

From: *Dave Sederquist <dcs@youngdahl.net>*
To: *mcmorreale <mcmorreale@sbcglobal.net>*
Sent: *Friday, March 1, 2024 at 09:45:54 AM PST*
Subject: *RE: Commercial Cannabis Project at 6540 Perry Creek Road Somerset (David Harde, Owner)*

Cammy, the best way to answer your question is that it is not unreasonable to be concerned about a neighboring project adversely impacting groundwater resources. Often a project will go through review and the impacts estimated. Mitigation measures might be required; often as a mitigated negative declaration. In El Dorado County, when developing a subdivision project relying on wells, there is a requirement that adequate groundwater resources be shown to be present. Where certain projects have a potential to impact groundwater quality, monitoring wells might be required.

Without knowing details, this about as specific as I can get. I hope this helps.

David C. Sederquist, C.E.G., C.HG.
Senior Engineering Geologist/Hydrogeologist
YOUNGDAHL CONSULTING GROUP, INC.
1234 Glenhaven Ct, El Dorado Hills, CA 95762
Office: (916) 933.0633 Fax: (916) 933.6482

#3 – Water Table – more evidence and mitigation is needed to ensure neighboring wells do not run dry and/or get contaminated from herbicides, pesticides and fertilizers used for cannabis projects. I encourage you to read the attached study from the California Department of Water Resources called "Ground Water in Fractured Hard Rock". A quote in this study states: "Also, keep in mind that a neighboring well can interfere with your well. How much water passes through fractured rock varies greatly depending on connections between fractures. As a result, interference between neighboring wells is difficult or impossible to predict in advance. The best insurance against such problems is large lot sizes. Wells on lots as large as nine acres have gone dry." In addition per David Sederquist (Geologist/Hydrogeologist with Youngdahl

Consulting Group), "Where certain projects have a potential to impact groundwater quality, monitoring wells might be required."

#4 - Odor Mitigation "Fans" – in the 3/5/2024 Board of Supervisor "BOS" meeting for File #24-0275 the CCUP-A24-0001 David Harde Permit Appeal, Lori Parlin (Board of Supervisor District 4) attested to the fact that "FANS" do not work in El Dorado County and Evan Mattes attested to the fact that there is NO evidence that "FANS" will work. This is additional "Substantial Evidence" for the "Fair Argument Standard" supporting our demand that the Single Source Project prepare an EIR. This is required when there is substantial evidence of Significant Environmental Impact.

Please review the video recording for File #24-0275 in the BOS 3/5/2024 hearing starting at time counter 5:46:58 to evidence Lori Parlin's professional opinion regarding the failure of FANS in El Dorado County.

#5 – Odor Study – in Paul Schafer ("SCS Engineers & Environmental Consultants", a National Expert on Odor Management) Odor Report, he states the Project's Odor study is flawed and does not actually reflect the conditions present at the proposed grow site therefore the project's study severely underestimates the potential odor. The original study by the Project states that the odor at the western property line will exceed the allowable threshold. The study also does not address the odors that will be emitted during the processing and drying of the cannabis crop, which are said to be the most pungent. (See analysis of odor study by Paul Schafer of SCS Engineers and Environmental Consultants, submitted by counsel to the Committee to Protect River Pines Estates)

RECAP:
These five (5) Fact Based/Expert Opinions support the "Fair Argument Standard" and Substantial Evidence that there will be Significant Environmental Impact.

TAKE APPROPRIATE ACTION ON MARCH 28, 2024 BY DOING THE FOLLOWING:

- **Reject** the Mitigated Negative Declaration "MND" and Initial Study as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

- **Reject** the Mitigation Monitoring and Reporting Plan "MMRP" as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

- **Deny** the Commercial Cannabis Use Permit as there are flaws and gaps in the evidence and there is "Substantial Evidence & Fair Argument" there will be significant environmental impact. In this situation, the **"Fair Argument Standard" requires there must be an Environmental Impact Report "EIR".**

Thank you for your consideration!

Sincerely,

Cammy Morreale

Cammy Morreale

Resources attached and/or links provided:

Water Supply –
Email From: Rick Blodgett <wet.laboratory@gmail.com>
Sent: Monday, March 25, 2024 at 01:29:49 PM PDT
Subject: Inquiry for Water Quality Teasting

Water Supply & Quality -
Email From: Dave Sederquist <dcs@youngdahl.net>
Sent: Friday, March 1, 2024 at 09:45:54 AM PST
Subject: RE: Commercial Cannabis Project at 6540 Perry Creek Road Somerset (David Harde, Owner)

Water Supply & Quality -
Ground Water in Fractured Hard Rock: https:water_fact_1__2011.pdf (ca.gov)

Odor Fans:
El Dorado County Board of Supervisor's Hearing Video recording for File #24-0275 in the BOS hearing from 3/5/2024 meeting starting at time counter 5:46:58
https://eldorado.granicus.com/player/clip/2024?view_id=2&redirect=true

Odor:
Paul Schafer ("SCS Engineers & Environmental Consultants", a National Expert on Odor Management) Odor Report

March 25th, 2024
File No. 24224153.00

MEMORANDUM

TO: Mr. Todd R. Moore, Hahn & Hahn LLP

FROM: Paul Schafer, Vice President, SCS Engineers

SUBJECT: Review of "Updated Notice of Intent to Adopt A Mitigated Negative Declaration" in Regards to Potential Odor Impacts from Project CCUP21-0004/Single Source

1 INTRODUCTION

SCS has been retained by Hahn and Hahn LLP (Client) for support services related to the review of site plans, a dispersion model, odor control plans and the potential impacts of odor emissions from proposed cannabis facility operations in El Dorado County. The project in question is CCUP21-0004/Single Source and the project located on the north side of D-Agostini Drive, approximately 1 mile west of the intersection with Aukum Road, in the Somerset area.

The state of understanding relative to the main cause of odor and, more specifically, the objectionable "Skunky" odor from cannabis emissions and the methods to mediate them from cannabis cultivation is rapidly evolving. Just a few years ago, it was a common perception that the main culprit relative to odors from cannabis operations were terpenes with Myrcene being the main identified culprit. We now know that although Terpenes are a part of the odor profile, they are not the cause of the unpleasant "Skunky" odor character that can be experienced downwind of cannabis operations.

In addition, there are considerable issues and complications that arise when attempting to describe or estimate a facilities potential odor impacts. These include several factors:

1) Cannabis, like most plants, has the potential to emit hundreds of different chemicals. Each at various rates, at widely divergent odor detection thresholds, and dependent on several external variables;
2) Emission rates are not constant throughout the cannabis plants life cycle or within the plant's daily cycle;
3) Emission rates can be influenced by temperature, exposure to light radiation, degree of agitation, plant stresses, among other external factors.
4) The ratios of compounds emitted by cannabis are not constant through the plant's life cycle and the times of highest emissions of certain compounds can be decoupled from other types of compounds.

Finally, there are various technologies that have been used and are being vetted for use in regards to odor mitigation from cannabis operations. From enclosed spaces, the technology of choice has been, and continues to be, scrubbing the effluent point through the use of tried and true carbon scrubbers. However, for vented greenhouses that take advantage of the local climate for temperature and humidity controls, the best technology for use in this space is still up for debate. Vapor Phase odor

neutralizers have been used with some success but this technology has limitations and is not looked at favorably by the general public. Standalone carbon scrubbing systems with various pretreatment options have also been shown to be capable of significantly reducing the potential for odor emissions from greenhouse spaces. Each of these technologies, when utilized in open air cultivation/harvesting operations are even less effective as contact with the odorous plume is required.

The following sections review the components of the "Updated Notice of Intent to Adopt A Mitigated Negative Declaration" (MND) in Regards to Potential Odor Impacts and specifically the project – specific Odor Analysis included as Appendix E. This Odor Analysis was the basis of the County's assessment that "No odor Mitigation is required" since the analysis showed impacts less than the County's limit of 7 D/T along project property lines.

2 APPENDIX E: ODOR REPORT REVIEW

Appendix E provides an initial Technical Memorandum (July 21st, 2021) as well as an updated Technical Memorandum dated August 11th, 2023. The first analysis resulted in odors at project property lines exceeding El Dorado County's 7 D/T limit. The project was then revised such that hoop houses would be utilized along with a smaller area of outdoor cultivation. Based on the revised project description, the analysis resulted in compliance with the County's 7 D/T limit.

The modelling study utilized an odor concentration of 20 D/T as the odor baseline. The Model was used to determine the attenuation of odors as they are dispersed from the project. This is not a terrible approach considering there are no published emission rates for cannabis odors and odors from cannabis cultivation are highly variable due to several factors. However, the model needs to account for all odor generating activities, be representative of all site operations, and estimate maximum odor conditions.

SCS has reviewed this analysis and have discovered several flaws that lead to severely under predicting odor impacts to the surrounding community. The following are some of the most critical issues:

1) The foundation of the model is the 20 D/T odor concentration baseline from which all concentrations are then calculated based upon a modelled dilution factor. This value was determined/estimated based upon less than 30 minutes of measurements at a different outdoor farm that is of smaller size than specified by this project.
    a. SCS has recorded D/T values at outdoor cannabis farms in excess of 250 D/T and routinely over 50 D/T.
    b. The 20 D/T baseline estimate was based upon a farm that was 2-weeks out from Harvest. Odor concentrations are likely to increase up to Harvest.
    c. The estimated 20 D/T was based on very limited measurements, conducted over a very short period of time, and there is no quality justification for using this value at this farm.
2) The model did not take into account harvesting and proposed processing activities including on-site drying operations.
    a. Harvesting operations are some of the most odor intensive activities that can be performed at a cannabis cultivation site. This was not taken into account.

   b. Processing activities such as drying, bucking, trimming are very odor intensive activities and are not taken into account in this analysis. It appears this operation is proposed to be performed in a tent within the cultivation area.
3) The analysis states that hoop houses will be installed within the current project and each hoop house would be equipped with a carbon filtration system that would reduce odor intensity below 7 D/T.
   a. It's unclear how the use hoop houses will reduce odor emissions as they are porous, unsealed, and have no control of the emission points.
   b. SCS does not see specifications in the odor analysis for carbon filtration. Various types of conditioning systems, fans, and filters are provided but no specifications for carbon filtration are included.

3 REVIEW OF SET BACK REQUIREMENTS

The following is on Page 22 of the MND.

"The El Dorado County Cannabis Ordinance, Section 130.41.200 contains a minimum setback of 800 ft from the property line of the site or public right-of-way for allowing cultivation and processing activities. The project components would not be setback by at least 800 ft from the western property line. However, the applicant is seeking a setback reduction waiver from the County"

The basis of this setback reduction waiver is the Odor Report discussed in Section 2. Since the Odor Report was based upon flawed assumptions, the request for this setback reduction waiver should be reviewed as there is a Residence 745 feet to the Southwest.

4 PROPOSED ODOR MITIGATION MEASURES

The MND includes standards for maximum allowable odors measured by the County at the property line. It also has provisions for mitigation measures to be installed should County measurements exceed the 7 D/T benchmarks. However, it is unclear how the proposed mitigation measures would actually reduce perceived odors in the surrounding communities. In addition, the schedule for installation of the measures is not provided. The following are some additional recommendations for this section:

1) Odor masking agents or solutions that include fragrance should not be used for odor control. SCS's experience is that community members would prefer cannabis odors to an unknown chemical agent that adds additional fragrance to the air.
2) Require the applicant to specify odor scrubbing/molecular filtration technology to be utilized for odor control in hoop houses along with specifications for odor control efficacy.
3) Schedule County compliance testing during Harvesting and processing activities.
4) Require third-party testing be performed with County oversight of methods to be employed and timing of tests to insure representativeness with worst case odor conditions.

From: Dave Sederquist <dcs@youngdahl.net>
To: mcmorreale <mcmorreale@sbcglobal.net>
Sent: Friday, March 1, 2024 at 09:45:54 AM PST
Subject: RE: Commercial Cannabis Project at 6540 Perry Creek Road Somerset (David Harde, Owner)

Cammy, the best way to answer your question is that it is not unreasonable to be concerned about a neighboring project adversely impacting groundwater resources. Often a project will go through review and the impacts estimated. Mitigation measures might be required; often as a mitigated negative declaration. In El Dorado County, when developing a subdivision project relying on wells, there is a requirement that adequate groundwater resources be shown to be present. Where certain projects have a potential to impact groundwater quality, monitoring wells might be required.

Without knowing details, this about as specific as I can get. I hope this helps.

David C. Sederquist, C.E.G., C.HG.

Senior Engineering Geologist/Hydrogeologist

YOUNGDAHL CONSULTING GROUP, INC.

1234 Glenhaven Ct, El Dorado Hills, CA 95762

Office: (916) 933.0633 Fax: (916) 933.6482

From: Rick Blodgett <wet.laboratory@gmail.com>
To: mcmorreale@sbcglobal.net <mcmorreale@sbcglobal.net>
Sent: Monday, March 25, 2024 at 01:29:49 PM PDT
Subject: Inquiry for Water Quality Teasting

Cammy Morreale

March 25, 2024

Dear Ms. Morreale,

Thank you for your inquiry on what water quality parameters to test for in private wells that are adjacent to commercial farming facilities. In determining whether fertilizers, pesticides, herbicides, or industrial solvents may leach into the watershed or a well aquifer, it is suggested that a baseline Title 22 be conducted on the well in question to determine water quality constituents before the farming practices have begun.

Good farming and environmental monitoring practices also suggest that monitoring wells be used at the perimeter of the farming property to test for possible contaminant intrusion, If there are streams or waterways that may be impacted by the agricultural practices, then an NPDES permit may be required by regulatory agencies. I would suggest viewing the environmental impact report (EIR) from the farming facility to determine the pesticide/herbicide application permit. Presently in El Dorado County, the synthetic organic compounds (SOC) required to test are:

- Alachlor (EPA 525.2)
- Atrazine (EPA 525.2)
- Simazine (EPA 525.2)
- Lindane (EPA 508)
- Toxaphene (EPA 508)
- Carbofuran (EPA 531.1)
- 2,4-D (EPA 515.1)
- Diquat (EPA 549.2)
- Endothall (EPA 548.1)
- Glyphosate (EPA 547)

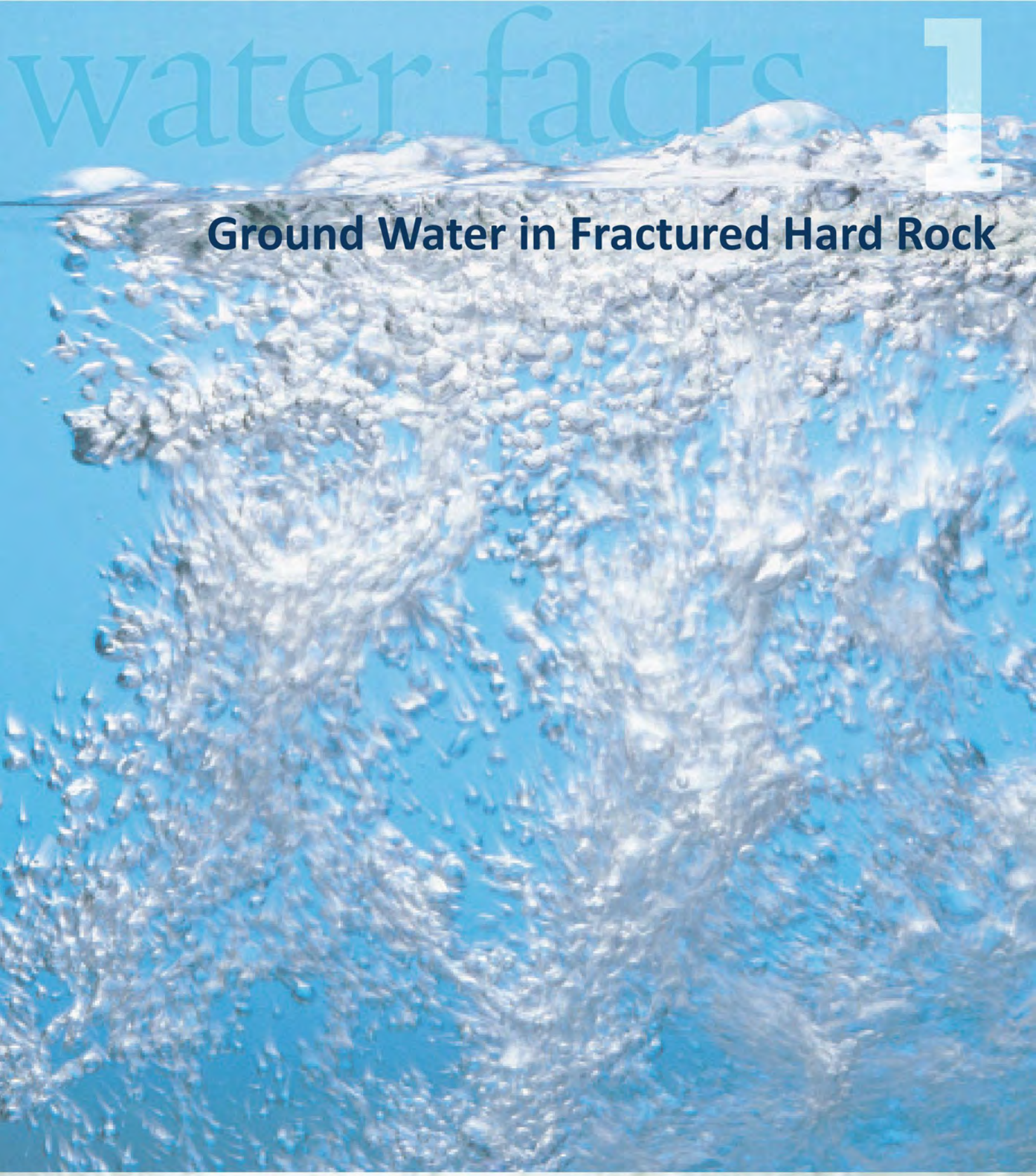
Additional tests required by the county for small water systems are volatile organic compounds (VOC), radiological (Gross alpha), natural uranium, and radium 226 & 228.
Title 22 will be more comprehensive, but this list is the minimum requirements for a water quality package in this county.

If you have further questions please feel free to call me at 530 677-5776.

--
Richard R. Blodgett, Ph.D.
Laboratory Director
Water Environmental Testing Laboratory
(530) 677-5776

water facts 1

Ground Water in Fractured Hard Rock



water.ca.gov/publications

California Department of Water Resources
Attn: Publications Office
P.O. Box 942836
Sacramento, CA 94236-0001
(916) 653-1097
imr-publications@water.ca.gov

Free
01/11

In mountainous areas of California, groundwater can be found in the cracks or fractures of hard rocks, such as granite, greenstone, and basalt

The water does not actually penetrate the rocks, because there is no pore space between the grains of the rock. However, some of these rocks have fractures in them. These fractures store water and yield small amounts of water to wells that intersect the fractures.

Some sedimentary rocks, like sandstone, are hard but can still absorb some water into their pores. These rocks may also have fractures that contain water.

About 60 percent of California is composed of hard rocks. However, only a small quantity of groundwater is stored in the fractures of these rocks.

The majority of groundwater is stored in what the average person would call "dirt" or "soil," more accurately described as alluvium (loose gravel, sand, and silt) which has pore spaces between the grains.

Where are the hard rocks?

In general, all mountain and hilly areas of California are composed primarily of hard rocks.

- The Coast Ranges, The Sierra Nevada, and large areas of coastal southern California and southern desert regions consist of granitic and metamorphic, volcanic, and hard sedimentary rocks.
- The northeastern part of California is composed mainly of volcanic rocks.

A thin layer of sediments, soil, or weathered rock covers some of these hard rock formations.

How do rocks become fractured?

Like most fractures, rock fractures are caused by stress. Rocks may fold, faults may move, and rocks may expand when overlying material is removed by erosion and the now-bare rocks are exposed to the weather. Volcanic rocks may also fracture while cooling and contracting. Ice, plant roots, or water flow can enlarge these fractures.

What do the fractures look like?

Fractures may be large or small and may run up and down or sideways. They may be a few millimeters to hundreds of meters long, and range in width from less than a millimeter to several centimeters, but usually occur in a regular pattern.

In carbonate rocks (limestone and dolomite) the fractures may be enlarged into caverns when the rock is dissolved by water.

You'll find most fractures in the upper few hundred feet of rock. This is because the weight of the rock on top inhibits the development of deep fractures. In addition, the deeper you go, the smaller the width of these fractures.

The beautifully sculpted rocks that form Yosemite Valley are the result of glaciation and the removal of rock material along these intersecting fracture surfaces.

How does water get to the rock fracture?

Water that falls on land may run off on the surface in creeks and rivers, or it may infiltrate into the rock materials on the ground. The infiltration of water recharges groundwater

supplies in sandy, loose material and in fractured hard rock.

It is important to note that water occurring in rock fractures have less protection from contamination, compared to alluvial aquifers where the soil acts as a filter treatment.

Why are fractures important for groundwater?

For the most part, fractures are the only way groundwater can be stored in hard rocks. In addition to relatively small amounts of storage, the fractures (particularly intersecting networks of fractures) are the primary conduit for groundwater flow to wells.

Variables that affect water volume:

- size and location of the fractures
- interconnection of the fractures
- amount of material clogging the fractures

Water can also be stored in lava tubes in volcanic rock and in solution openings in carbonate rocks (limestone and dolomite).

How much water is stored in hard rock?

The total volume of water stored in fractured hard rocks near the surface is estimated to be less than 2 percent of the rock volume. This percentage decreases with depth as fractures become narrower and farther apart.

The amount of water in the rocks surrounding a hard rock well is small. Groundwater levels and the well's yield can decline dramatically during the summers of dry years.

In areas where alluvium overlying the hard rock is saturated with water, the alluvium provides additional water storage for nearby wells in the hard rock. The volume of water stored in many alluvial soils can amount to 10-25 percent of the volume of the alluvium. This situation most often occurs in valleys or meadows.

How much water will my well yield?

Half of all hard rock wells yield 10 gallons per minute or less, which is only enough for individual domestic supplies. When conditions are good, wells drilled in fractured rock may yield several hundred gallons per minute when pumped.

Good conditions:

- large amounts of fractures
- good interconnection between fractures
- wide, large, clean fractures
- a source of recharge
- a large quantity of water in storage
- proper installation of the well, including removal of granular debris that may clog the fractures

Some wells may be dry if the above conditions are not met.

How do I know I have a high-yielding well?

You don't. While exploration of the well site may help, you will still face some trial and error that you seldom face when drilling in an alluvial aquifer.

Wells that are close together in alluvial aquifers will probably have similar yields. However, hard rock wells may not have similar yields. You have to be able to drill to a very specific point in a major fracture zone that has a lot of water in it. The water must also be continuously recharged. If these conditions aren't met, then you can easily have a dry hole that is drilled right next to a producing well.

Also, keep in mind that a neighboring well can interfere with your well. How much water passes through fractured rock varies greatly depending on connections between fractures. As a result, interference between neighboring wells is difficult or impossible to predict in advance. The best insurance against such problems is large lot sizes. Wells on lots as large as nine acres have gone dry.

Recent advances such as fracture pattern analysis, borehole imaging, and fracture-flow models will help.

How do I get started?

You need a real expert for well drilling, and even that does not assure that you will hit water, but the odds will be more favorable. If you know a geologist, talk with him or her. Consult a professional well-drilling firm with a California C-57 contractor's license. And remember, once you have your well drilled, pump tests of new wells are necessary to verify the existence of a suitable and sustained water supply. The firm that drilled your well can perform these tests.

For a single family residence, 24 hours of pumping and recovery of the water level to within two feet, or 5% of the static level, depending on the amount of drawdown during pumping, may be adequate. Longer tests are necessary for community supply or industrial wells. Consult with your County well permitting agency for specific water well testing requirements for any type of well.

Where can I get more information?

www.water.ca.gov/groundwater

Integrated Regional Water Management
901 P Street
Sacramento, CA 95814-3515

Northern Region
2440 Main Street
Red Bluff, CA 96080-2398
(530) 529-7300

North Central Region
3500 Industrial Blvd.
West Sacramento, CA 95691
(916) 376-9600

South Central Region
3374 E Shields Avenue
Fresno, CA 93726-6913
(559) 230-3354

Southern Region
770 Fairmont Avenue, Suite 102
Glendale, CA 91203-1035
(818) 543-4600

References

California Department of Water Resources. *California's Groundwater.* Bulletin 118-2003. 2003.

California Department of Water Resources. 1990. *Mountain Counties Water Management Studies, Amador County.*

California Department of Water Resources.. 1983. *Status of Sierra Foothills Water Management Studies.*

California Department of Water Resources. 1974. *Water Quality Investigation of Western Nevada County.*

Heath, Ralph C. 1983. *Basic Groundwater Hydrology.* U.S Geological Survey Water Supply Paper 2220.

Page, R.W.; Anttila, P.W.; Johnson, K.L.; and Pierce, M.J. 1984. *Groundwater Conditions and Well Yields in Fractured Rocks, Southwestern Nevada County, California.* U.S.Geological Survey Water Resources Investigation 83-4262.

State of California
The Resources Agency
Departtment of Water Resources

From: Michael Pinette <michaelpca@gmail.com>
Sent: Monday, May 20, 2024 8:59 AM
To: BOS-Clerk of the Board
Subject: Re: BoS Agenda Item 24-0936, Meeting scheduled May 21.2024 9 to 11am block

Thank you for your assistance.

On Mon, May 20, 2024 at 8:31 AM BOS-Clerk of the Board <edc.cob@edcgov.us> wrote:

> Appropriate public comment will be attached to the item and forwarded to the Board of Supervisors.
>
> Thank you,
>
> El Dorado County Clerk of the Board of Supervisors
>
> 330 Fairlane Building A
>
> Placerville, CA 95667
>
> 530.621.5390
>
> **From:** Michael Pinette <michaelpca@gmail.com>
> **Sent:** Sunday, May 19, 2024 1:38 PM
> **To:** David A Livingston <david.livingston@edcgov.us>; BOS-Clerk of the Board <edc.cob@edcgov.us>; BOS-District I <bosone@edcgov.us>; BOS-District II <bostwo@edcgov.us>; BOS-District III <bosthree@edcgov.us>; BOS-District IV <bosfour@edcgov.us>; BOS-District V <bosfive@edcgov.us>
> **Cc:** Lee Tannenbaum <lee.tannenbaum@gmail.com>; KapahiR <ray.kapahi@gmail.com>; tslmeds <tslmeds@gmail.com>; Jay Windhill <jaywind855@gmail.com>; Michael Pinette <michaelpca@gmail.com>; Chris Stiles <CStiles@rmmenvirolaw.com>
> **Subject:** Fwd: BoS Agenda Item 24-0936, Meeting scheduled May 21.2024 9 to 11am block

Dear Mr. Livingston and Supervisors,

Re: BoS Agenda Item 24-0936

I wish to submit this letter and two updated Odor Study documents and attachments from EPS (Ray Kapahi) into the public hearing documents for agenda item 24-0936. The Boad of Supervisors appeal is this Tuesday May 21 between 9 and 11am.

My name is Michael Pinette and I am the owner of 4941 D'Agostini Dr, Somerset, and co-owner of SSS Inc. This concerns CCUP21-0004 license.

Our neighbors provided a competing odor opinion paper, which is not a competing study as required by CEQA. This project had been fully approved by all staff and agencies until this odor opinion paper was submitted. A highly qualified professional did an odor analysis study which has been accepted and approved by all parties involved. This same professional is an approved vendor by the county, I do not believe the author of the opinion paper has this same qualification.

Regardless of what has transpired, our project has two approved phases. The second phase is a full deployment of greenhouses for the entire site, with charcoal filtration. This second phase, as the study and the opinion piece state, meets both experts conditions for approval as well as the DT threshold set by the county. As noted in our EDC ordinance, there can be a zero foot setback with this type of implementation.

Before Tuesdays meeting, we will submit a revised odor study using the competing odor opinion document and using this opinion's scientific baseline numbers to complete. By doing so, we comply 100% with the ordinance, both experts and meet all conditions for approval. SSS Inc will immediately implement Phase 2 of the project upon approval by your board.

From a CEQA perspective and legally according to our ordinances, the other concerns noted on the staff report recommendation and the PC recommendation are immaterial to this discussion. CEQA MND's may only be challenged by a competing scientific study. So therefore in your decision today, the only criteria for discussion is odor. The language of the PC recommendation is vague at best, as this county does not rule on what neighbors think or say. Our ordinances clearly state what our guidelines are, as does CEQA.

Legally and according to the EDC ordinances and CEQA, you must approve our project today based on the above criteria and changes to the project. See also updated Odor Study attachments. Results indicate DT measurements well below or at 7 DT, even without any mitigation. With mitigation either zero or below 2 DT.

With respect,

Michael S Pinette

CCUP21-0004 lead and SSS Inc co owner

El Dorado Growers Advocacy Alliance Board member and Treasurer

650-269-0063

From: Michael Morreale <mmorreale522@gmail.com>
Sent: Monday, May 20, 2024 10:07 AM
To: BOS-Clerk of the Board
Subject: Re: CCUP-A24-0002 - BOS Appeal from Mike Pinette/Single Source Commercial Cannabis Permit (Hearing 5/21/24)
Attachments: BOS CC letter may20 24 - Michael.docx

Dear Clerk of the Board,

Please distribute the attached letter to all the B O S .

thank you,

Michael

Michael Morreale
mmorreale522@gmail.com
(818) 645-5550 cell

May 20, 2024

My name is Michael Morreale and I live in a neighborhood which would be impacted by a Commercial Cannabis growth project. I am opposed.

I urge the planning commission to DENY this Commercial Cannabis use permit based on the facts presented to you today concerning odor, water, environment and setbacks.

Further, I urge you to reject the Mitigated Negative declaration because of the overwhelming conflict of information and lack substantive proof that the mitigation factors will work. A case has been made that this project REQUIRES a full E I R.

Here are the facts:
1. You have been presented with evidence and testimony from a qualified expert that odor will be an issue and that the proposed odor mitigation will NOT work. It might even add to the problem in terms of odor, noise and air pollution. There is NO evidence NONE that can prove it has worked or will work at this time.

2. There is evidence and testimony that the proposed site well and neighboring wells have been negatively affected by the vineyard sharing that well. This will be exacerbated by a high water demand crop like cannabis. This is supported by two experts one a certified hydrologist and the other a geological engineer. I do not believe there are any 'water experts' on the board although you may have significant experience.... that said I have personally on three separate occasions had the opportunity to discuss this with Jim Hammonds whose family has been operating a well and well maintenance company for over 50 years in this area.

Both Mr. Hardee and Mr. Pinette have asked for his advice. When I told him about the proposed amount of water estimated on their applications , he replied " yes, that volume of draw would most definitely have a negative effect on the surrounding wells.

3. Setbacks are in place for ALL the parties involved. To waive them requires that the reduced setback have "substantially the same impact" as the original setback. In terms of a visual, security fences and lights, sound, the fans and increased traffic / equipment and odor... this will be a huge difference.

Based on these facts and the testimony you have been provided detailing factual evidence from recognized experts, I urge you to follow those guidelines contained within the statutes concerning commercial cannabis growth and DENY this appeal.

Sincerely,

Michael J. Morreale
Somerset, CA

From: Chris Stiles <CStiles@rmmenvirolaw.com>
Sent: Monday, May 20, 2024 2:59 PM
To: BOS-Clerk of the Board; BOS-District I; BOS-District II; BOS-District III; BOS-District IV; BOS-District V
Cc: 'Michael Pinette'
Subject: Letter re: Agenda Item 24-0936
Attachments: Letter to El Dorado County BOS re. Agenda Item 24-0936 (00701811xB0A85).pdf

Dear Clerk and Board of Supervisors:

Please see the attached correspondence regarding Agenda Item 24-0936 for the May 21 Board of Supervisors Meeting.

Thanks,

Chris

Christopher L. Stiles
Attorney

RMM
REMY | MOOSE | MANLEY LLP
555 Capitol Mall, Suite 800 | Sacramento, CA 95814
P (916) 443-2745 x 212 | F (916) 443-9017
cstiles@rmmenvirolaw.com | www.rmmenvirolaw.com

RMM

REMY | MOOSE | MANLEY LLP

Christopher L. Stiles
cstiles@rmmenvirolaw.com

May 20, 2024

Via Electronic Mail

Board of Supervisors
El Dorado County
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Re: Agenda Item 24-0936 – Appeal of Continuation Off Calendar of Commercial Cannabis Use Permit CCUP21-0004

Dear Board of Supervisors:

My firm, Remy Moose Manley LLP, represents Single Source Solutions Inc (SSS Inc.), the applicant for Commercial Cannabis Use Permit CCUP21-0004. As you know, SSS Inc. and County staff spent significant time and resources reviewing and analyzing the proposed project pursuant to the California Environmental Quality Act (Pub Resources Code, § 21000 et seq.) (CEQA). Despite all of this effort and despite the fact that the Mitigated Negative Declaration (MND) prepared for the project is amply supported, the planning commission, in a split 3-2 vote, decided to table the project and require that SSS Inc. prepare an Environmental Impact Report (EIR) based on opposition from a single neighbor. According to the "Appeal Memo," the planning commission directed SSS Inc. to "either prepare an EIR or revise their project to address public concerns and testimony." The Appeal Memo cites two bases for requiring an EIR: (1) "conflicting expert opinion" over whether the project may have a significant odor impact, and (2) "layperson testimony" raising "concerns over water usage and impacts to ground water, with evidence demonstrating that wells in the area had gone dry." Both of these bases are groundless. As explained below, there is no substantial evidence supporting a fair argument that the project may result in a significant environmental impact, and therefore, there is no basis to require an EIR. Please also note that SSS Inc. has provided additional information to the Board, including revisions to the project, to address the concerns raised by commenters, which provides an independent basis to grant SSS Inc.'s appeal.

1. **CEQA Requirements**

Pursuant to CEQA, an agency can require an EIR only when there is substantial evidence supporting a fair argument that a project may have a significant effect on the environment. (Pub. Resources Code, § 21080, subd. (d); CEQA Guidelines, § 15064, subd. (f).) When "there is no substantial evidence in light of the whole record before the public agency that the project, as revised [with mitigation measures], may have a significant effect on the environment then a mitigated negative declaration *shall* be prepared. (Pub. Resources Code, § 21080, subd. (c); CEQA Guidelines, § 15064, subd. (f)(2), italics added.) Although the "fair argument" standard is a relatively low bar, CEQA and the courts are clear that agencies cannot require an EIR based on *any* argument or *any* evidence of significant impacts; instead, there must be a *fair* argument and the argument must be supported by *substantial evidence* in the agency's record. (Pub. Resources Code, § 21080; CEQA Guidelines, § 15064.) The standard for the agency "is not whether any argument can be made that a project might have a significant environmental impact, but rather whether such an argument can *fairly* be made." (*Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1003.) CEQA specifies that argument, speculation, unsubstantiated opinion or narrative, and evidence that is clearly inaccurate or erroneous is *not* substantial evidence. (Pub. Resources Code, § 21080, subd. (e)(2).) Moreover, "the existence of public controversy over the environmental effects of a project shall not require preparation of an environmental impact report if there is no substantial evidence in light of the whole record before the lead agency that the project may have a significant effect on the environment." (Pub. Resources Code, § 21082.2, subd. (b).) Finally, contrary to the Appeal Memo, SSS Inc.'s and the County's analysis is not irrelevant when presented with conflicting opinions; "contrary evidence is considered in assessing the weight of the evidence supporting the asserted environmental impact." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 617, citing *Lucas Valley Homeowners Assn. v. County of Marin* (1991) 233 Cal.App.3d 130, 142.)

2. **There is no substantial evidence supporting a fair argument that the project may result in a significant odor impact.**

The Appeal Memo cites a document prepared by Paul Schafer of SCS Engineers & Environmental Consultants (Schafer Memo) as evidence that the project may have a significant odor impact. The Appeal Memo states that "Paul Schafer (outside expert) disagreed with the baseline and conclusions of the project odor study prepared by Ray Kapahi of Environmental Permitting Specialists (EPS Study), who completed the study for the applicant," and that an EIR is required because there is a disagreement between two experts. Not so. Even if the Schafer Memo can be characterized as a critique of the EPS Study, there is still no evidence, much less

substantial evidence, in the Schafer Memo or anywhere in the record that the project may have a significant odor impact.

First, it is important to note that the threshold of significance is whether the project would "result in other emissions (such as those leading to odors) adversely affecting *a substantial number of people*?" (CEQA Guidelines, Appendix G, Section III, italics added.) The mere possibility of adverse impacts "on a few people, as opposed to the environment in general," is insufficient to require the preparation of an EIR under CEQA. (*Protect Niles v. City of Fremont* (2018) 25 Cal.App.5th 1129, 1139, quoting *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 929; *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 902.) Even assuming for sake of argument that odors did reach the property line, there is no evidence that the odors would adversely affect a substantial number of people.

In any event, there is no substantial evidence that the project may result in any odor impacts. At best, the Schafer Memo critiques the approach and modeling in the EPS Study and argues that more analysis and studies should be performed. That is not evidence of an environmental impact. As the court observed in *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 625, "we are aware of no authority supporting objectors' unstated premise that an initial study is inadequate unless it amounts to a full-blown EIR based on expert studies of all potential environmental impacts. If this were true, the Legislature would not have provided in CEQA for negative declarations." Moreover, here, there are expert studies supporting the determination that no significant impacts will occur, and despite assertions in the Schafer Memo that the analysis was flawed based primarily on observations from other projects in other places, there is no evidence *this* project will have significant odor impacts. Indeed, in response to the Schafer Memo, SSS Inc. contracted odor experts to redo the analysis to address the Schafer Memo's critique and recommendations, including utilizing a different baseline. The result is even more evidence that the project will not result in significant odor impacts, and no evidence to the contrary.

The critique in the Schafer Memo also reflects inaccurate assumptions about the project. For example, the memo attempts to cast doubt on the fact that hoop houses will reduce odor emissions by stating they are "porous, unsealed, and have no control of the emission points." In fact, the hoop houses that will be used for the project are non-porous and are proven effective at reducing odors. And, again, there is no evidence to the contrary.

The Schafer Memo also questioned the mitigation measures that are included in the project to reduce odor impacts. But merely questioning mitigation measures is not substantial

evidence of an environmental impact. Moreover, the additional analysis provided by SSS Inc. provides even more evidence that the mitigation measures will be effective and there is no evidence that they will not be effective.

3. **There is no substantial evidence supporting a fair argument that the project may result in a significant water supply or groundwater impact.**

As the other grounds for requiring an EIR, the Appeal Memo states that "public testimony brought forward concerns over water usage and impacts to ground water, with evidence demonstrating that wells in the area had gone dry. This layperson testimony should be further addressed and analyzed." This is also insufficient to require an EIR.

First, while there are circumstances where layperson testimony on a non-technical subject may qualify as substantial evidence for a fair argument, impacts to groundwater and wells are highly technical and layperson testimony cannot undermine the analysis and evidence supporting the determination there will be no significant impacts. "Unsubstantiated fears and desires of project opponents do not constitute substantial evidence." (*Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 902.) "[I]n the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the consequences of a project do not constitute substantial evidence." (*Ibid.*)

Second, there is no substantial evidence that this project may have significant impacts to groundwater or wells. The threshold of significance for groundwater in the MND for the project is whether the project would "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)?"[1] The project does not require *any* additional water supply than what is already being used at the property. The project will convert an existing two-acre vineyard into two acres of cannabis cultivation and will use the well water that is currently used for the vineyard, which is adequate to serve the project. Put differently, there will be no change over existing baseline conditions (which is the basis for determining whether a physical change in the environment constitutes as significant impact). The fact that, according to the single project opponent, other wells have "gone dry" (which, according to the County's record, means

[1] This is more conservative that the threshold of significance recommended in the CEQA Guidelines: Whether the project would "substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?" (CEQA Guidelines, Appendix G, Section X.)

only that they had to be replaced with new wells on the property), does not mean this project will cause or result in groundwater depletion. Again, "dire predictions by nonexperts regarding the consequences of a project do not constitute substantial evidence." (*Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 902.)

4. <u>Conclusion</u>

For the foregoing reasons, we urge the Board to grant the appeal and not require an EIR.

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Very truly yours,

Christopher L. Stiles

cc: Michael Pinette - michaelpca@gmail.com