

PLANNING & DEVELOPMENT APPEAL FORM

SITE ADDRESS: 4651 Santa Maria Mesa Road, Santa Maria, CA 93454 ASSESSOR PARCEL NUMBER: 129-040-010 Are there previous permits/applications? \(\text{Mno} \) \(\text{Uyes numbers:} \) \(\text{(include permit# & lot # if tract)} \) Is this appeal (potentially) related to cannabis activities? \(\text{Uno} \text{ Myes} \) Are there previous environmental (CEQA) documents? \(\text{Mno} \) \(\text{Uyes numbers:} \)
Appellant: Bien Nacido Vineyards, et al. Phone: (805) 969-5803 FAX: Mailing Address: 132 East Carillo Street, Santa Barbara, CA E-mail: mmiller@thornhillcompanies.co Street City State Zip 2. Owner:Phone:FAX:
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COUNTY USE ONLY

Case Number:	Companion Case Number: Submittal Date:				
Supervisorial District:	Receipt Number:				
Applicable Zoning Ordinance: Project Planner:	Accepted for Processing			===	
Project Planner:Zoning Designation:	Comp. Plan Designation	,	UNTY OF SAI CLERK (SOARD OF SU		A S
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COUNTY OF SANTA BARBARA APPEAL TO THE:

X BOARD OF SUPERVISORS
PLANNING COMMISSION:COUNTY MONTECITO
RE: Project Title Canna Rios LLC - Cannabis Cultivation Case No. 19LUP-00000-00116
Date of Action <u>5/5/2021</u>
I hereby appeal the X approval approval w/conditions denial of the:
Board of Architectural Review – Which Board?
Coastal Development Permit decision
Land Use Permit decision
X Planning Commission decision – Which Commission? County
Planning & Development Director decision
Zoning Administrator decision
Is the appellant the applicant or an aggrieved party?
Applicant
X Aggrieved party – if you are not the applicant, provide an explanation of how you are and "aggrieved party" as defined on page two of this appeal form:
See Attached.

Reason of grounds for the appeal – Write the reason for the appeal below or submit 8 copies of your appeal letter that addresses the appeal requirements listed on page two of this appeal form:

- A clear, complete and concise statement of the reasons why the decision or determination is inconsistent with the provisions and purposes of the County's Zoning Ordinances or other applicable law; and
- Grounds shall be specifically stated if it is claimed that there was error or abuse of discretion, or lack of a fair and impartial hearing, or that the decision is not supported by the evidence presented for consideration, or that there is significant new evidence relevant to the decision which could not have been presented at the time the decision was made.

	See Attached.
-	
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•	
Specif	ic conditions imposed which I wish to appeal are (if applicable):
a.	
b.	
C.	
A	

Please include any other information you feel is relevant to this application.

CERTIFICATION OF ACCURACY AND COMPLETENESS Signatures must be completed for each line. If one or more of the parties are the same, please re-sign the applicable line.

Applicant's signature authorizes County staff to enter the property described above for the purposes of inspection.

I hereby declare under penalty of perjury that the information contained in this application and all attached materials are correct, true and complete. I acknowledge and agree that the County of Santa Barbara is relying on the accuracy of this information and my representations in order to process this application and that any permits issued by the County may be rescinded if it is determined that the information and materials submitted are not true and correct. I further acknowledge that I may be liable for any costs associated with rescission of such permits.

Law Office of Courtney E. Taylor	5/14/2021
Print name and sign – Firm	Date
Law Office of Courtney E. Taylor	5/14/2021
Print name and sign – Preparer of this form	Date
Print name and sign – Applicant	Date
Law Office of Courtney E. Taylor	5/14/2021
Print name and sign – Agent	Date
Marshall Miller, Bien Nacido Vineyards Marshall T Willer	5/14/2021
Print name and sign – Landowner Aggrieved Party	Date

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VIA EMAIL & PERSONAL DELIVERY

May 14, 2021

Santa Barbara County Board of Supervisors 123 E. Anapamu Street Santa Barbara, California 93101

RE: Appeal of Planning Commission Approval
Canna Rios LLC - Outdoor Cannabis Cultivation (19LUP-00000-00116)

Chair Nelson and Honorable Supervisors:

This office represents the Miller Family, West Bay Company, LLC, RTV Winery, LLC, and Bien Nacido Vineyards, L.P. (collectively referred to as "Appellant"). Please accept this appeal of the Planning Commission's approval of 19LUP-00000-00116, a Land Use Permit for an outdoor cannabis cultivation operation located at 4651 Santa Maria Mesa Road in Santa Maria (APN 129-040-010) (the "Project"). Appellant owns and operates an approximately 3,200-acre ranch known as Bien Nacido Vineyards located on at 11 contiguous parcels at 3520 Rancho Tepusquet Road Santa Maria, CA 93455, directly west and downwind of the Project. Among other uses, there are 780 acres of vineyard onsite, 82 acres of avocado orchards, and a tasting room that will be completed and open for business this year.

Approval of the Land Use Permit for the Project, granted by the Planning and Development Department Director and upheld by the Planning Commission, is legally flawed and will have significant permanent effects on Appellant's business, its employees, the environment, and the long-term viability of both its vineyard operations and wine tasting room. As such, Appellant is an aggrieved party to this permit.

The Project proposed is for 46.73 acres of outdoor cannabis cultivation and 1.45 acres of cannabis nursery, or 48.18 acres of total "cultivation area". Of the operations, approximately 19 acres will be under hoop structures. The Project shares 3,000 feet of property line approximately 150 feet to the west of Appellant's vineyard, and is 750 feet from Appellant's wine tasting room. Appellant's avocado orchards are 3,800 feet to the north. The Project is also located near numerous sensitive receptors on Appellant's ranch which are downwind from the Project, including Appellant's ranch office, shop, five residences (some where children reside), and three wineries. Please see the enclosed map with an accurate depiction of the nearby sensitive receptors — Applicant fails to correctly identify each of them in the approved Project plans. See Exhibit 1.

Like other cannabis projects that have come before your Board on appeal, the Applicant has cultivated cannabis previously on this parcel. Hemp was also cultivated previously onsite. During the flowering and harvest periods for both products, Appellant and its employees experienced odor impacts from the cannabis cultivation on the Project site. These strong and offensive cannabis

Page 2

odors from this Project were experienced by Appellant and its employees for long-periods of time. At that time, however, Appellant was unaware that hemp was being cultivated onsite and believed the heavy sulfuric odors were emanating from Applicant's onsite wells and thus did not notify or complain about the odors to Applicant or the landowner. The Project is the only cannabis project in the vicinity of Appellant's ranch, so Appellant is confident the offensive and persistent malodors emanated from Applicant's property.

Applicant contends Appellant never complained about the malodors from the hemp cultivation onsite, and thus odor was never an issue. This is simply untrue. As stated above, malodors were experienced on Appellant's property throughout the growing and harvest season, and negatively impacted the quality of life of the onsite residents and impacts Appellant's business operations. Further, customers of Appellant's winegrapes remarked that the ranch and vineyard areas smelled strongly of cannabis. This is highly concerning to Appellant as it substantiates that odors from cannabis grown on Appellant's property will drift onto Appellant's property, and be detected by its customers, whose winegrape purchases Appellant relies on to operate their business.

Most importantly, Appellant's vineyard is highly regarded and produces premium winegrapes. The vineyard has been cited by Wine Enthusiast as one of the "Top Grand Cru Vineyards in California" and "Top Vineyards Behind the World's Most Famous Wines", by Wine & Spirits as of the "Top 25 Vineyards in the World", and by the Wall Street Journal as one of the "Top Five California Vineyards". Needless to say, Appellant's vineyard and the winegrapes it produces are among the top in the world and among those most recognized in Santa Barbara County. See recent acclaim for Appellant's vineyard at Exhibits 2 and 3.

Any impacts to this vineyard due to cannabis cultivation directly adjacent, whether from real impacts due to terpene taint or perceived impacts by its winegrape buyers, will materially impact the vineyard's reputation, Appellant's ability to sell winegrapes in the future, and the success of their tasting room. Appellant sells much of its winegrapes to over forty (40) different wineries, and a loss of its customer wineries due to odors or foreign terpenes from cannabis will result in economic impacts to Appellant's business, health effects to its onsite residents and farmworkers working on adjacent fields, and physical impacts to its property as cannabis terpenes are physically deposited on the skins of winegrapes. Further, Appellant's ability to exercise best management practices will be crippled by their proximity to Appellant's cannabis cultivation due to the physical migration of pesticides across property lines, which in turn threatens the viability of these operations. These are not the sort of "purely economic" impacts that the law and CEQA are unconcerned with.

1. The Project Is Inconsistent with the Comprehensive Plan and LUDC

a. Inconsistencies with the Agricultural Element

A project that conflicts with the applicable Comprehensive Plan must be denied. Friends of Lagoon Valley v. City of Vacaville (2007) 154 Cal.App.4th 807, 815. Additionally, projects that conflict with local policies or ordinances entail a potentially significant impact for which environmental review is required. CEQA Guidelines Appendix G, § IV (e); Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903 ("[I]f substantial evidence supports a fair argument that

the proposed project conflicts with policies [adopted for the purpose of avoiding or mitigating an environmental effect] this constitutes grounds for requiring an EIR."). Thus, any potential inconsistency with the Comprehensive Plan represents a potentially significant impact that must be evaluated as part of the instant Project. See *Pocket Protectors*, supra. Further, the County's CEQA Checklist only lists mitigation measures and has no policy consistency analysis.

The Project is inconsistent with the Agricultural Element of the County's Comprehensive Plan. The Agricultural Element provides as its first goal:

GOAL I. Santa Barbara County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara Country. Agriculture shall be encouraged. Where conditions allow, (taking into account environmental impacts) expansion and intensification shall be supported.

It further provides:

Policy I.E. The County shall recognize that the generation of noise, smoke, odor, and dust is a natural consequence of the normal agricultural practices provided that agriculturalists exercise reasonable measures to minimize such effects.

There is no evidence that the above goal and policy does not apply to the Project, or agricultural conflicts generally. There is substantial evidence that cannabis crops and legacy agricultural operations conflict, both with regard to farming operations, contamination of winegrapes with cannabis terpenes, and the impacts of odors on wine tasting rooms. Evidence of these impacts includes testimony of the Grower-Shipper Association of Santa Barbara-San Luis Obispo Counties, including a documented conflict that occurred between a cannabis cultivator and adjacent agricultural operation (one of the Grower Shipper Association members) regarding pesticide application (discussed further below). Other evidence includes letters from Santa Barbara County Agricultural Advisory Committee ("AAC", asking for delay in Board action pending ordinance revisions and if not, imposition of additional project conditions "to address predictable conflicts that have arisen in many situations in the County" on January 17, 2020), the Santa Barbara Vintners (asking for cannabis odors to be contained on the property on January 17, 2020), and the Santa Barbara County Farm Bureau (asking the County to require indoor cultivation with odor control only to prevent agricultural conflicts on May 29, 2020). See Exhibits 5 through 8.

Based on this evidence, the Project will conflict with Appellant's nearby legacy agricultural operations, including by precluding the operation of Appellant's onsite tasting room, which is a supportive agricultural use necessary to its agricultural operations. The effect of these conflicts will be to undermine the viability of these agricultural operations and the viability of the wine industry as a production industry in Santa Barbara County. The Project's impacts on adjacent agriculture clearly conflict with the primary goal of the County's Agricultural Element to ensure the viability of agriculture in the County, and thus the Board must deny the Project on these grounds alone. The Project's impacts on adjacent agriculture also clearly conflict with the primary goal of the County's Agricultural Element to ensure the viability of agriculture in the County and conflicts with *Policy I.E.* which requires agriculturalists like the Project operator to exercise reasonable measures to minimize the effects of, among other impacts, odors from its operations.

There are no odor abatement requirements in the Project Conditions of Approval – the lack of such measures on its face is a failure to include "reasonable measures" to minimize odors.

b. Failure to Meet Odor Reduction Standards in Section 35.42. 075.D.1.0

Further, the Project fails to meet the requirements of LUDC Section 35.42.075.D.1.0 which requires that the drying, curing, and/or trimming of harvested cannabis shall either (1) be located within an enclosed structure which utilizes best available control technology, or (2) include techniques and/or equipment that shall achieve an equivalent or greater level of odor control as could be achieved using an enclosed structure which utilizes best available control technology. The Project's activities are neither contained within an enclosed structure, nor using equipment or technology that achieves an equivalent or greater level of odor control as could be achieved using an enclosed structure which utilizes best available control technology (or "BACT").

The original Project Description included "trimming" of cannabis onsite in the outdoor cannabis areas, presumably in the 113,705 sq ft "Packing and Shipping Area". The Staff Report at the Planning Commission hearing on May 5, 2021, however, removed this reference but did not indicate or list the removal of trimming onsite as a modification made by Applicant prior to the hearing. Other changes to the Project were specifically identified, but this was not.

The Project site plans state there will be "No drying, trimming, or finish packaging onsite (with 1/3 frozen onsite and shipped, and 2/3 boxed onsite and shipped)" with other references to post-harvest activities which state that harvested cannabis will be "hauled offsite" or "flash fr[ozen] for distribution". These statements are incorrect, as Applicant intends to engage in processing by harvesting and trimming cannabis in the field, flash freezing cannabis onsite, and packing cannabis onsite. The LUDC specifically defines "Processing" for cannabis as "All activities associated with drying, curing, trimming, storing, packaging, and labeling of nonmanufactured cannabis products." The activities proposed by Applicant fall within the County's own definition of "processing" and the attendant odor control methods in LUDC Section 35.42.075.D.1.0 are required upon commencement of any Project activities.

BACT for enclosed cannabis structures has been demonstrated by other cannabis growers in the County, most recently the Planning Commission deemed the "platinum standard" to be the odor control system proposed by CVW Organic Farms. That project includes both carbon filtration systems (i.e. carbon or molecular filters or scrubbers) which are currently viewed as the best control technology for reducing VOC emissions from cannabis cultivation facilities, and vapor phase systems (which are reported to reduce odors by 98.7% to 100%, see CVW Organic Farms odor plans available here: https://cosantabarbara.app.box.com/s/q97rv82305oyfnbdjhcyxrr dhu3dgkqy/file/754011897897, from Criterion Environmental Inc. and Byers Scientific respectively). The LUDC clearly requires Applicant to reduce odors from the Project to the equivalent of at least 98.7%, and to implement odor technology that achieves an equivalent or greater level of odor control as could be achieved using an enclosed structure which utilizes best available control technology. Applicant fails to demonstrate that it has met the requirements of LUDC Section 35.42.075.D.1.o.

2. Scope of Board Discretion and Applicability of CEQA

Land Use Permits can be either "discretionary" or "ministerial" permits. Whether a permit is "discretionary" or "ministerial" has bearing on the Board's authority and discretion to review and condition a project prior to approval or deny a project. The Land Use Permit required for this Project is a discretionary permit which, in this case, gives the Board broad authority and discretion to review and condition the Project, or deny the Project.

CEQA does not define "discretionary" or "ministerial" permits. The Guidelines, however, define the terms "discretionary project" and "ministerial."

"Discretionary project" means a project that "requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations." Thus, "where a governmental agency can use its judgment in deciding whether and how to carry out or approve a project," the project is discretionary.

"Ministerial" project means a project that requires "little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out."

The Guidelines' statement of the principles for determining whether a particular agency action is discretionary or ministerial are supplemented by case law. The often-cited Friends of Westwood, Inc. v. City of Los Angeles (1987) 191 Cal.App.3d 259, 235 Cal. Rptr. 788 (Westwood) discussed the discretionary-ministerial distinction in detail. (Id. at pp. 264-273.) In Westwood, the appellate court concluded that the permit approval process for the 26-floor office tower was discretionary and reversed the trial court. The court determined city employees set, or had the opportunity to set, standards and conditions for various aspects of the proposed building.

In contrast, a permit is ministerial if "[t]he fixed approval standards delineate objective criteria or measures which merely require the agency official to apply the local law ... to the facts as presented in a given ... application. The approval process is one of determining conformity with applicable ordinances and regulations, and the official has no ability to exercise discretion to mitigate environmental impacts."

Here, this Project, like all cannabis projects, requires the exercise of judgment and some level of deliberation among County staff and the Planning Director when the Department decides to approve, disapprove, or require modifications to a particular cannabis project. In adopting the Cannabis Ordinance, the Board declared its purpose was to establish the "minimum land use requirements" for cannabis cultivation, codifying the County's discretion to impose additional requirements needed "to protect public health, safety, and welfare, enact strong and effective

regulatory and enforcement controls, . . . and minimize adverse impacts on people, communities and the environment". § 35.42.075.A.1. With the Project specifically, the County exercised its discretion to modify the Project prior to approval, although these modifications remain insufficient to mitigate impacts as required by CEQA and protect public health, safety and welfare and the environment.

It is well established that CEQA applies to "discretionary projects". With this in mind, the Board must review this Project as a discretionary permit subject to CEQA regulations and requirements.

a. CEQA Requires Project-Specific Environmental Review

Prior to approval of this Project, the County must comply with the California Environmental Quality Act ("CEQA"). The Program EIR for the County's Cannabis Ordinance ("PEIR") was prepared in 2017 and certified February 6, 2018, when the legal cannabis industry was in its infancy, and the range and severity of environmental impacts resulting from commercial cannabis activities was not well understood. Since then, County residents and businesses have experienced first-hand just how impactful these operations are, and have testified at numerous public hearings identifying specific and substantial evidence documenting new information of new and substantially more severe impacts than disclosed and analyzed in the PEIR. These assertions have been validated and confirmed by the Grand Jury Report.

In order to approve the Project as being within the scope of the project covered by the PEIR, the County is required to find that pursuant to CEQA Section 15162, no new effects from this Project could occur and no new mitigation measures would be required. Conversely, if the Project would have effects that were not examined in the PEIR, a new Initial Study would need to be prepared specifically for this Project, leading to either an EIR or a Negative Declaration.

As will be discussed, the Project will have significant direct impacts to agricultural resources and land use compatibility that were not adequately reviewed in the Santa Barbara County's Programmatic Environmental Impact Report for the Cannabis Land Use Ordinance and Licensing Program ("PEIR") or by staff prior to approval of the Project. Thus, additional CEQA review of this Project is clearly required. The Board is barred by law from approving this Project until such CEQA review has been completed if there is substantial evidence supporting a fair argument that either of the following are true:

Substantial changes have occurred which result in new significant environmental effects of a substantial increase in the severity of previously identified significant effects.¹

New information, which was not known and could not have been known at the time the PEIR was certified as complete, is available, shows significant effects that were not examined by the PEIR, or the effects examined in the PEIR will be substantially more severe, or mitigation measures previously found not to be feasible would now be feasible.²

¹ Cal. Pub. Resources Code at § 21166(b); CEQA Guidelines § 15162(a) (1-2).

² Id. at § 21166(c); CEQA Guidelines § 15162(a) (3)

Substantial evidence may take many forms for the purposes of determining whether there is a fair argument that either the foregoing are true with regard to a project. The following constitute substantial evidence:

Expert opinion if supported by facts, even if not based on specific observations as to the site under review.³ Where such expert opinions clash, the County should require preparation of a tiered EIR.⁴

Relevant personal observations of area residents on nontechnical subjects.⁵

When there is doubt or uncertainty as to whether there is *substantial evidence* supporting a *fair argument*, all doubts must be resolved in favor of environmental review and the agency must prepare a new tiered EIR, **notwithstanding the existence of contrary evidence**. CEQA provides that the Board merely need enough relevant information and reasonable inferences that a *fair argument* can be made to support a conclusion, even though other conclusions might also be reached.⁶ Specifically, as explained in more detail below, the Project presents three impacts that require substantive and meaningful review and mitigation:

changed circumstances with respect to the County's Uniform Rules for Agricultural Preserves leading to new and substantially more severe impacts to agriculture;

changes to the County's Right to Farm Act which now make <u>odor mitigation</u> on AG-II zones and this Project feasible; and

extent and severity of the <u>land use incompatibility</u> with adjacent agriculture, including critical, supportive uses such as tasting rooms.

By law, the Board must seek review and resolution of these issues through use of the CEQA review process *prior to* approval of the Project. It cannot proceed with Project approval in any form without this information in hand to make reasoned and informed decisions, supported by fact and law.

b. Amendments to the Uniform Rules Eliminated APAC Compatibility Review

According to the Santa Barbara County's Environmental Thresholds and Guidance Manual, and the PEIR, a project may have significant land use and planning impacts if it is incompatible with a surrounding neighborhood. Discussed above, the Project is incompatible with surrounding

³ The Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 928, citing Friends of the Old Trees v. Department of Forestry & Fire Protection (1997) 52 Cal.App.4th 1383, 1398–1399 & fn. 10).

⁴ Sierra Club v. County of Sonoma, 6 Cal.App.4th at 1322; see also Pocket Protectors, 124 Cal.App.4th at 928, citing Guidelines, § 15064 (g).

⁵ Pocket Protectors, 124 Cal.App.4th at 928, citing Ocean View Estates Homeowners Ass'n Inc. v. Montecito Water District (2004) 116 Cal.App.4th 396, 402.

⁶ CEQA Guidelines, § 15384 (a).

⁷ Santa Barbara County's Environmental Thresholds and Guidance Manual, p. 118; PEIR, p. 3.9-32.

agriculture due to issues with migration and pesticide contamination of cannabis crops, as well as cannabis terpene contamination of wine grapes. Explained above, new information revealed these potentially significant impacts after the PEIR was certified.

On March 20, 2018, the County Board of Supervisors amended the County's Uniform Rules to allow cannabis activities on Williamson Act contracted lands and define cannabis cultivation as commercial production of an agricultural commodity on lands subject to Agricultural Preserve contracts.

The Board's decision to amend the Uniform Rules to define cannabis cultivation as commercial production of an agricultural commodity on lands subject to Agricultural Preserve contracts was at odds with the recommendation of its own Agriculture Advisory Committee ("APAC"), defied the recommendation of County staff that cannabis be considered a "compatible" use, conflicted with the Board Letter and then-proposed draft Uniform Rules amendments presented in the February 6, 2018 hearing during which the PEIR was certified, and was not analyzed in the PEIR, as expressly stated by County staff at the March 20, 2018 hearing.

Staff's Board Letter at page 6 specifically states in the "Environmental Review" section that the option ultimately adopted by the Board was not adequately covered by the PEIR:8

Both options [APAC and County staff recommendations to classify cannabis cultivation as a compatible use] described in this Board Letter and shown in the attached Uniform Rules amendments (Attachments 2 and 3) are adequately covered by the Program EIR.

County staff cautioned against the Board's definition, stating:

<u>Cannabis</u> is <u>Defined</u> as <u>Agriculture</u> and <u>Allowed</u> as a <u>Principal Use</u> — Under this scenario, cannabis cultivation would be defined as an agricultural use and its production would be used to meet the eligibility requirements for a Williamson Act contract. Such an approach would likely raise concerns regarding "Right to Farm" protections that may affect the County's ability to mitigate impacts from cannabis (e.g., odor abatement measures). General public concerns have also been raised regarding the potential government subsidy of cannabis activities that would occur under this option.

When the PEIR was certified on February 6, 2018 the County Uniform Rules did not allow cannabis activities. (PEIR p. 3.9-30.) While the PEIR assumed that the Uniform Rules would be amended to allow cannabis activities in some form, the options being considered at the time all assumed that cannabis would be considered a "compatible" use. (See PEIR p. 2-1 and "Alternative 2" p. 4-34). At the time the PEIR was certified, APAC's recommendation was to classify cannabis as a "compatible use" and allow cannabis cultivation within or outside the designated development envelope of a premises, but the land dedicated to cannabis cultivation outside of the development envelope could not exceed 5% of the premises or 5 acres, whichever is less.

⁸ See 3/20/18 Board Letter, attached hereto as Exhibit 3.

The PEIR's analysis of the Cannabis Ordinance impacts on Williamson Act contracted land also assumed that cannabis cultivation would not be subject to acreage limitations, provided that the property owner complies with the minimum cultivation of non-cannabis crops and/or grazing requirements of the Uniform Rules. The only alternative analysis in the PEIR is "Alternative 2 – Preclusion of Cannabis Activities from Williamson Act Land Alternative", which (like APAC's recommendation and the PEIR's project analysis) also analyzed a scenario where cannabis is classified as a "compatible use", but the canopy is limited to one outdoor cannabis cultivation license of 22,000 square feet from the California Department of Food & Agriculture. Both the PEIR's Proposed Project Description and Alternative 2 assumed cannabis would be treated as a "compatible use" by the Uniform Rules.

To address potential adverse effects of incompatibility between cannabis and adjacent agricultural crops, the PEIR relied on APAC review under the Uniform Rules to ensure compatibility with agricultural uses, and to ensure that "cannabis activities would not conflict with properties that are subject to Williamson Act contract." Specifically, the PEIR's analysis of Impact AG-1 provides:

The APAC evaluates the compatibility of uses on an Agricultural Preserve on a case-by-case basis, and the uses are subject to development standards and requirements in County zoning ordinances. . . . Additionally, land use compatibility with adjacent agricultural crops would be ensured by APAC review which ensures compatibility with agricultural uses, and cannabis activities would not conflict with properties that are subject to Williamson Act contracts. For instance, due to extensive testing requirements for cannabis products, it is a benefit for cannabis cultivators to be located further away from agricultural operations which utilize potentially hazardous pesticides, such as grape and strawberry harvesters.

(PEIR p. 3.2-20.) This provision for APAC compatibility review is the only means identified in the PEIR that purports address conflicts between neighboring agricultural operations including the effects of odors on agricultural uses, such as tasting rooms.

Subsequent revisions to the Uniform Rules after PEIR certification classified cannabis cultivation as commercial production of an agricultural commodity, eliminating the compatibility review relied on in the PEIR to protect neighboring agricultural operations and to mitigate significant impacts to agriculture resulting from conflicts with existing zoning for agricultural use (including impacts to tasting rooms as a winery's direct sale of its farm products), Agricultural Preserve contracts pursuant to the Williamson Act, or the conversion of farmland to non-agricultural use. Now that it is no longer occurring by virtue of the Uniform Rules change, there is no support whatsoever for the claim that the PEIR analyzed the Cannabis Ordinance's potential to introduce incompatible agricultural uses, and further environmental review is plainly required. APAC did not review the Project for compatibility with adjacent agriculture, including issues concerning odor impacts to supportive agricultural retail sales uses like tasting rooms.

The provision for APAC compatibility review is the only means identified in the PEIR that purports to address conflicts between neighboring agricultural operations, including the effects of odors in wine tasting rooms. The PEIR did not anticipate, and thus evaluate in its principal analysis

or Alternative 2, the impacts if cannabis would be defined as commercial production of an agricultural commodity and thus included in the minimum production requirements in the Uniform Rules for commercial production of "agricultural commodities." The PEIR could not and did not analyze the impacts of this new classification either to existing agriculture generally or to Williamson Act contracted lands specifically. Lastly, the PEIR could not and did not analyze the effect of the changed definition on the County's ability to mitigate the impacts of individual cannabis cultivation projects. In short, the Uniform Rules revisions eliminated a critical procedural and substantive element of ensuring compatibility between cannabis cultivation projects and adjacent conventional agricultural uses, rendering that portion of the PEIR and Alternative 2 moot, and thus unavailable to serve as permit-level environmental review for this issue.

The Board's March 2018 decision to define cannabis as commercial production of an agricultural commodity on Williamson Act contracted lands conflicted with and eviscerated the PEIR's reliance on APAC review to ensure cannabis' compatibility with non-cannabis agricultural uses on the parcel, and eliminated the process of APAC review that was relied on in the PEIR to separately ensure that cannabis activities would not conflict with other adjacent and nearby properties and farming operations subject to Williamson Act contracts.

There are at least two practical consequences of the Board's decision that affect cannabis projects proposed on contracted land that were not considered in the PEIR. First, because cannabis is treated as agricultural production, APAC does not review applications for cannabis cultivation to assess whether they are compatible with agriculture occurring on other contracted lands as expressly assumed and relied on in the PEIR's environmental analysis. Second, the minimum production requirements in the Uniform Rules for agricultural production uses can require that an applicant to grow *more* cannabis than they otherwise want to in order to stay in compliance with their Williamson Act contract. Given the Board's subsequent adoption of an acreage limit on cannabis countywide, the requirement to increase grow sizes on Williamson Act contracted lands will likely result in a concentration of larger grows in a smaller area for the first generation of permittees and a less equitable and distributed pattern of cultivation. These represent a substantial change in circumstances with potentially significant impacts.

The Uniform Rules amendment defining cannabis cultivation as an allowed, qualifying agricultural use exempt from any odor control and without limitations on the size of grows per parcel undermines the PEIR's adequacy and triggers CEQA's subsequent environmental review requirements.

CEQA Guidelines § 15162 require an assessment of whether there are changed circumstances necessitating supplemental environmental review before approving a later project. When an agency has prepared an EIR for a project, it must prepare a subsequent, independent project EIR for later projects in three circumstances.⁹ First, where "[s]ubstantial changes are proposed in the project which will require major revisions of the environmental impact report." Second, where "[s]ubstantial changes occur with respect to the circumstances under which the project is being

⁹ Sierra Club v. County of Sonoma (1992) 6 Cal. App. 4th 1307, 1317.

¹⁰ Cal. Pub. Resources Code, § 21166(a).

Page 11

undertaken which will require major revisions in the environmental impact report." And third, when "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available." The PEIR was certified on February 6, 2018. Since the adoption of the PEIR, substantial changes have occurred with respect to the circumstances under which the County's Cannabis Ordinance operates with respect to Agricultural Preserve contracts and new information relevant to the County's Cannabis Ordinance and compatibility of projects processed under such ordinance has become available. Under these circumstances, the County must prepare a stand-alone Project EIR for this Project.

Evidence of new and substantially increased impacts to agriculture resulting from the post-PEIR certification Uniform Rules amendment has been presented to County decisionmakers. This substantial evidence includes testimony of the Grower-Shipper Association of Santa Barbara-San Luis Obispo Counties regarding conflicts with neighboring agricultural properties under Agricultural Preserve, including a documented conflict that occurred between a cannabis cultivator and adjacent agricultural operation (one of the Grower Shipper Association members) regarding pesticide application (see Exhibits 5 through 8, and discussion below).

c. New Information Regarding the Severity of Agricultural Compatibility

i. New Information Regarding Severity of Odor Impacts

The PEIR also did not address the negative impacts odors have on both tourism and tasting room visits and sales on agriculturally zoned parcels, or how cannabis odors would negatively impact tourism and sales to generated at local wine tasting rooms and the long-term impacts this would have on agricultural viability in the region. Notably, the Grand Jury Report found:

For vineyard and winery owners in the Santa Rita Hills AVA, the area between Buellton and Lompoc, the issues of odor and terpenes, an aromatic hydrocarbon obtained from plant oils, are severe. Vintners have been growing in the Santa Rita Hills since 1971 and the area finally became recognized as a coveted AVA in 2001. There are now 2,700 planted acres by 59 total wineries.

...Flavors inherent in wine, much like food, rely heavily on sense of smell to produce a favorable experience while consuming. When other strong odors are introduced, it obviously changes the perception of the taster.

...Winery and vineyard operators have spent millions of dollars developing and building their operations and brands. The proposed introduction of over 625 acres of open-air cannabis grows, with the ever-present north and west winds averaging between 9.1 to 10.5 MPH daily, <u>makes it virtually impossible for these two types of operations to co-exist, weighing heavily against the viability of the wine industry</u>. The heavy skunky odor, of even just a few cannabis plants, can elicit a strong response from people nearby. Olfactory molecules do not stop at the property

¹¹ Id. at § 21166(b).

¹² Id. at § 21166(c).

line. Several hundred acres of cannabis will be devastating to the region's wine reputation, tourism, and sales.

Id. at pp. 12.

Tasting rooms are supportive agricultural uses, and account for a significant percentage of the total wines sales for wineries in Santa Barbara County. In 2013, the total consumer direct sales for wineries in Santa Barbara County are estimated to total \$136M, which is more than 34% of the value of wines produced in the County. In other words, Santa Barbara's wineries depend on consumer direct sales for more than one third of their revenue. Uniquely to Santa Barbara County, direct sales from tasting rooms are significantly higher than that in similar regions. Further, it is well recognized that the wine tasting room is "the engine that drives the wine club and is the main recruiting place for wine club members. The tasting room establishes the culture of the winery and tells the story of the wine. Without the tasting room and the wine's story, the wine sold from a wine club would be just another wine competing with all of the other low-cost retailers." ¹⁴ According to a study conducted for Napa County in August 2019, "odor impacts from nearby commercial cannabis operations could detract from both outdoor and indoor tasting areas at adjacent wineries." ¹⁵

The product of wine grapes, wine, is primarily valued on its organoleptic qualities (smell and taste), and where it is grown. A consumer's ability to taste, appreciate, and chose to purchase Santa Barbara County wines is highly contingent on a positive tasting room experience, which is conditioned up a consumer's ability to smell and taste the wines. According to a study conducted for Napa County in August 2019, "odor impacts from nearby commercial cannabis operations could detract from both outdoor and indoor tasting areas at adjacent wineries." Odor from cannabis grows will significantly impact the customer's ability to appreciate the principal value of wine grape's product: its aroma. This simple fact has been the underlying policy rationale for the current prohibition on cannabis cultivation in Napa County.

Outdoor cultivation generates odors while plants are in their flowering phase, increasing in intensity to the point of harvest. These sites are generally undertaking multiple harvests annually using short-cycle varieties and methods and pose conflicts with surrounding agriculture and with downwind residences and communities, including tasting rooms. The PEIR asserted that odor impacts would be mitigated by Odor Abatement Plans (MM AQ-5) that are supposed to "ensure that odors are ... generally confined within the cannabis activity site property." [PEIR 3.3-24] The PEIR relied on a flawed assumption that imposing odor controls on AG-II cannabis cultivation operations would conflict with agricultural policies allowing choice of crops. Changes

¹³ See "The Economic Impact of Santa Barbara's County's Wine and Grapes, 2013", available at: https://sbcountywines.com/wp-content/uploads/2018/11/sb impact final december 15.pdf.

¹⁴ See Direct to Consumer Sales in Small Wineries: A Case Study of Tasting Room and Wine Club Sales, available at: http://academyofwinebusiness.com/wp-content/uploads/2010/04/Direct-to-consumer-sales-in-samll-wineries paper.pdf.

¹⁵ See "Elections Code Section 9111 Report Regarding the Napa County Cannabis Regulation Initiative", available at: https://www.winebusiness.com/content/file/9111 Report 082019.pdf.

¹⁶ See "Elections Code Section 9111 Report Regarding the Napa County Cannabis Regulation Initiative", available at: https://www.winebusiness.com/content/file/9111 Report 082019.pdf.

Page 13

and clarification in law establish this justification was incorrect, and that Odor Abatement Plans can and should be required in AG-II areas.

If odor impacts deter consumers from visiting Appellant's tasting room, Appellant's direct sales will suffer. This is particularly problematic during COVID-19 shutdowns, when wineries must operate their tasting rooms outdoors, and rely even more on direct sales to consumers to sustain their business. This economic impact will jeopardize Appellant's ability to sustain its farming operations and grape sales, impacting the long-term agricultural viability of its vineyard and tasting room, and of the wine industry in Santa Barbara County generally. This is a CEQA impact—without the ability to direct market and sell wines to consumers, Appellant's revenues will be materially impacted and the viability of its wine tasting business model is threatened. This change in circumstance alone merits project-specific environmental review under CEQA.

ii. New Information Regarding Terpene Taint

In addition to the above, new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the PEIR was certified, has become available showing that the Project will have substantially increased impacts to agriculture from terpene taint. Terpene taint results when concentrated airborne terpenes released by cannabis plants in low wind conditions and during inversions (that are common in the Project vicinity) are transported to and absorbed by nearby grapes on the vine. This taint is conveyed to wine produced from these grapes, creating imperfections and different flavors in wines that are meticulously produced to present the subtle terroir of the soils and land where the grapes are raised.

The threat of taint impugns the reputation of wines, wineries, and entire appellations, including the Appellant's famous vineyard, where delicate and refined flavor profiles are adversely affected by even subtle changes in flavor. If Appellant's vineyard is impacted by terpene taint, the grapes sourced from its vineyard could be labeled as inferior within the premium wine market due to terpene taint, ultimately impacting Appellant's own wines and grape sales to other wineries.

Accolades for both Appellant's vineyard and wines that are produced from the vineyard promote the Santa Barbara County wine industry to the world, and the secondary economic inputs that come from the media attention and acclaim is substantial. Terpene taint threatens to undermine or eliminate significant portions of the local economy that are founded on the success of the wine industry in Santa Barbara County, which is bolstered and given a national spotlight through media coverage of Appellant's vineyard. This economic impact has potentially significant impacts on the local wine industry and supportive hospitality industries, from the abandonment and conversion of idled lands, loss of agricultural services and infrastructure making agriculture more expensive, difficult, and unprofitable, ultimately causing significant losses of open and productive agricultural lands.

The potential for cannabis terpenes to impact wine grapes was not an identifiable issue at the time the PEIR was certified. This newly discovered issue was not examined in the PEIR. Discussed below, under these circumstances there is sufficient substantial evidence to support a fair argument

Page 14

that the Project may result in taint to wine grapes grown nearby and by extension, impugn the quality and marketability of Santa Barbara County wines.

The Staff Report claims the PEIR analyzed VOCs and terpenes, and these were considered as part of the air quality impacts (Staff Report, p. 13.) An evaluation of the PEIR reveals that the issue of terpene taint on wine was not even so much as mentioned, let alone "examined" either in the air quality context or elsewhere in the document. (CEQA Guidelines § 15168 (c)(3) ("if the Project would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.")) The PEIR's discussion of agricultural impacts including incompatibility of agricultural uses (see Impact AG-1, PEIR pp. 3.2-19 -3.2-21) is silent on this issue. Similarly, the PEIR's discussion of cannabis VOCs and terpenes (see PEIR Vol. II (Response to Comments), p. 8-8) is silent on potential impacts to the quality of Santa Barbara County wines and the wine industry. Only recently have researchers documented evidence of terpene taint.

Significant new information regarding the potential impact of cannabis terpenes on wine grapes has become available. At the time the PEIR was certified, the only publication regarding the issue of terpene tainting wine grapes was a HighTimes article describing statements made by the Lodi Chamber of Commerce CEO at the prior week's meeting of the San Joaquin Board of Supervisors that "[if t]he odor travels, it could permeate grape skins and render the wine deficient, causing it to lose value," as "next-level nonsense". However, in 2019 Food and Wine magazine reported that an Oregon vineyard has been allowed to move forward with a lawsuit against a nearby marijuana business, claiming their operation caused at least one customer to fear their grapes would have unwanted notes of cannabis. Instead of "smoke taint," call it "smoking taint." Since then, there has been considerable development of this issue including with respect to the science behind how cannabis terpenes may impact wine grapes.

Experts including Dr. Anita Oberholster of the Department of Viticulture and Enology at UC Davis, Dr. William Vizuete of Pacific Environmental Analytics, LLC, and others have testified and presented evidence to the County regarding terpene taint. See Exhibits 9 to 11. Of note, Dr. Oberholster states that existing research regarding the impacts of 1,8-cineole and a-pinene (both terpenes) to winegrapes allowed her to analogize and draw conclusions regarding the potential impacts of cannabis terpenes on winegrapes. Her conclusion is that winegrapes can absorb cannabis terpenes in the atmosphere and, depending on the concentration and frequency of exposure, can potentially pose a threat to the grape and wine industry. A test conducted by Tyler Thomas, the President of Star Lane & Dierberg Vineyards, LLC, a member of the County's Agricultural Advisory Committee, and a member of the Board of Santa Barbara Vintner's Association confirms the presence of foreign terpenes in winegrapes grown near an outdoor cannabis farm; the same foreign terpenes were not present in the control group winegrapes not grown near a cannabis farm. See Exhibit 11.

Dr. Vizuete evaluated emission rates of cannabis monoterpenes including 1,8-cineole, betamyrcene, alpha-terpinene, and terpinolene from an outdoor cultivation site, and establishes that the

¹⁷ https://hightimes.com/news/california-businessman-believes-the-smell-of-marijuana-hurts-wine-grapes/

¹⁸ https://www.foodandwine.com/wine/wine-grapes-marijuana-odor-lawsuit-oregon

Page 15

cannabis monoterpenes can migrate to and be absorbed in nearby grapes. ¹⁹ Dr. Vizuete's further conclusions regarding the time required for four cannabis terpenes to reach set thresholds in winegrapes are concerning in that he concluded the terpene beta-myrcene, one of the most common terpenes found in cannabis, would only take 75 days to reach 381 ppb in winegrapes. It is generally recognized that terpenes at levels as low at 50 ppb can alter characteristics of wines – that could mean that cannabis terpenes can meet a threshold of 50 ppb in approximately 10 days. Further, Dr. Vizuete's research referenced in the Staff Report (p. 13) identified thresholds for cannabis terpenes detectable in wines in ppm, well below the generally accepted thresholds at the ppb levels. These fundamental flaws were outlined by Tyler Thomas, the President of Star Lane & Dierberg Vineyards, LLC, a member of the County's Agricultural Advisory Committee, and a member of the Board of Santa Barbara Vintner's Association. See Exhibit 12. Mr. Thomas has Master of Science degrees and has published three peer-reviewed papers related to plant biology.

While research necessary to thoroughly understand this impact is presently underway, there is substantial evidence in the record that wine quality can be affected by exposure to airborne terpenes from cannabis cultivation, including the fact-based expert opinion of Dr. Oberholster and peer reviewed scientific studies and testing results in Santa Barbara County, each of which establish that terpene migration from cannabis is occurring and that terpenes can cause wine taint. This substantial evidence supports a fair argument that the Project may result in terpene taint to nearby wine grapes, leading to a significant incompatibility between these two land uses. Evidence of this impact is far from speculation, and is being taken seriously by the Agricultural Commissioner, who is currently investigating funding sources for, and researchers who are qualified to conduct, a study to further address wine grape absorption and taint from cannabis terpenes. Additionally, the public has submitted chemical testing results as evidence of terpene taint of wine from cannabis terpene migration at a comparable vineyard in Santa Barbara County. These expert and industry opinions constitute substantial evidence supporting a fair argument of a potentially significant impact that necessitates project-specific environmental review.

iii. New Information Regarding the Severity of Crop Conflicts

The PEIR also failed to consider the significant conflicts inherent in farming vineyards and orchards near cannabis. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the PEIR was certified, has become available showing that the Project will have substantially increased impacts to adjacent agriculture as a consequence of pesticide migration. Specifically, the occurrence of migration of pesticide waft that can occur after lawful applications of pesticides, in conjunction with the prohibition on pesticides or insecticides in cannabis, including most commonly used organically-certified pesticides, will likely result in the conversion of farmland to non-agricultural uses when conventional agriculture becomes impossible or uneconomical.²⁰ In addition, because the PEIR does not examine or analyze this impact, it also fails to provide mitigation for the likely

¹⁹ Dr. Vizuete's report on the proposed Hacienda project makes a number of assumptions that render it's claimed conclusions both highly unreliable and inapplicable to the instant project. Dr. Vizuete conflated the concentrations of one terpene observed in grapes grown downwind of a cannabis grow with a threshold of significance, and further assumed planting density of 2,000 plants per acre, whereas the Busy Bee project reports plant density of 10,000 to 12,000 plants per acre.

²⁰ See PEIR, pp. 3.2-19-3.2-23.

Page 16

loss of agricultural land.21 This fact has been recognized by the County, including its Agricultural Commissioner's office. The Agricultural Commissioner's office convened a working group to review and analyze this exact issue and which was unable to develop a solution.²²

After the PEIR's certification, substantial evidence has come forward showing that commercial, third-party pesticide applicators (used for decades and necessary for much of the County's economically productive avocado, grape, and citrus production) have refused to apply materials to either conventional or organic avocado and citrus crops due to incompatibility with nearby cannabis cultivation operations. Thresholds for cannabis are as little as one microgram per gram, or 0.1 part per million. Other farmers in Santa Barbara County, in at least two instances, have lost crops after switching to other less effective pest management products to reduce potential liability from the legal application of pesticides after threats of legal action by cannabis operators.

As discussed above, the County has received clear testimony of the now-known severity of this impact. See Exhibits 5 through 8. This is clear evidence that conventional farms like Appellant's, when located nearby proposed cannabis cultivation sites, are unable to produce economically viable crops due to cannabis cultivators' threats, which has chilled pest control applicators from providing pest control services to sites near cannabis cultivations. The Project will cause these farms including Appellant's and it neighbors to cease production and potentially go out of business, creating blight and facilitating the collapse of the wine industry and food production in the vicinity of the Project and elsewhere in Santa Barbara County, with secondary impacts to hospitality facilities in wine country and Appellant's tasting room.

The Staff Report attempts to rebut this claim on several fronts. First, it asserts pesticide drift is not allowed under pesticide use regulations. (Staff Report pp. 12-13.) However, the seminal case on the issue of pesticide drift, Jacobs Farm/Del Cabo, Inc. v. Western Farm Service, Inc.23 clearly establishes that not all drift is illegal, including volatilization and air dispersal, but all drift gives affected parties tort claims that are not barred by pesticide statutes. The facts of Jacobs are directly analogous to the cannabis cultivation context. In Jacobs, the defendant sprayed pesticides which volatilized and moved in the fog to plaintiff neighbor's organic herb crops of rosemary, dill, and cilantro which, like cannabis, have a zero-tolerance threshold established by the Environmental Protection Agency (EPA). The agricultural commissioner found the defendant had applied pesticides in accordance with law. The defendant then voluntarily switched materials (and used a drift retardant) and told their herb-growing neighbor each time they sprayed; however, materials still drifted and agricultural commissioner again found no violations. Plaintiff sued defendant, alleging that pesticides defendant applied to fields near plaintiff's farm migrated to plaintiff's land, contaminated plaintiff's herb crop, and rendered the crop unmarketable. Plaintiff ultimately won on theories of negligence, trespass, and nuisance. As part of a preliminary injunction, defendant agreed not to apply the subject pesticides on two fields closest to plaintiff's fields, leaving a 1.5mile buffer zone surrounding plaintiff's crop.

²¹ *Id.* at pp. 3.2-24-25.

²² See reference to this working group on page 36 of Staff Report from October 2, 2019 Planning Commission

²³ Jacobs Farm/Del Cabo, Inc. v. Western Farm Service, Inc. (2010) 190 Cal.App.4th 1502

Page 17

The *Jacobs* case made clear that pesticides lifted from target crops and moved with fog are not necessarily the result of illegal pesticide applications. A 2001 study by Texas A&M University researchers shows that pesticides can volatilize into the gaseous state and be transported over long distances fairly rapidly through wind and rain.²⁴ A U.S. Geological Survey report reached similar conclusions, finding, "After they are applied, many pesticides volatilize into the lower atmosphere, a process that can continue for days, weeks, or months after the application, depending on the compound. In addition, pesticides can become airborne attached to wind-blown dust."²⁵

Second, the Staff Report claims that the "use of pesticides and insecticides by non-cannabis cultivation and the accompanying regulatory framework was the same at the time the PEIR was prepared and certified ...[and] is not new information that triggers environmental review." (Staff Report, p. 12.) At the time the PEIR was prepared and certified, the extent of the potential conflict was not known. This conflict arose when local pesticide applicators were threatened by cannabis growers, and based on those threats of monetary damages, refused to apply the pest control materials to agricultural operations located near cannabis grows. The PEIR's agricultural impact analysis barely touches on the issue, stating merely "due to extensive testing requirements for cannabis products, it is a benefit for cannabis cultivators to be located further away from agricultural operations which utilize potentially hazardous pesticides, such as grape and strawberry harvesters." (PEIR p. 3.2-20.) Rather, it is recent reports and publications that have identified this as a significant issue. For example, an article published in Environmental Health Perspectives in April 2019 entitled, "Into the Weeds: Regulating Pesticides in Cannabis" revealed:

Outdoor cannabis crops can become contaminated with pesticides that the growers never actually applied—sometimes at levels high enough to trigger a failed test. Chen of Sonoma Lab Works says that such cross-contamination is not just a theoretical scenario; he's seen it happen to his own customers in California. "Several streams of unintentional contamination that are common to farmers are overspray from neighboring acres due to factors such as wind or recycled water," he says. "When working with such small concentrations, there are dozens of avenues of contamination."

The Staff Report asserts that environmental analysis of potential pesticide drift from neighboring agricultural operations is not required (Staff Report, p. 12.) However, under CEQA, a potentially significant impact to the environment occurs where a project may "convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use," "conflict with existing zoning for agricultural use," or "involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in the conversion of farmland to

²⁴ Wade, T., et al. 2001. Atmospheric Deposition of PAH, PCB and Organochlorine Pesticides to Corpus Christi Bay. Texas A&M Geochemical and Environmental

Research Group. Presented at the National Atmospheric Deposition Program Committee Meeting.

²⁵ USGS Releases Study on Toxic Rainfall in San Joaquin Valley. https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=169.html

²⁶ Environmental Health Perspectives is a monthly journal of environmental health research and news published with support from the National Institute of Environmental Health Sciences, one of the 27 institutes and centers of the National Institutes of Health (NIH).

Page 18

non-agricultural use."²⁷ Here, substantial evidence supports a fair argument that the occurrence of drift that is lawful under the pesticide regulations, in conjunction with the prohibition on pesticides or insecticides in cannabis, including most commonly used organically-certified pesticides, will likely result in the conversion of farmland to non-agricultural uses when conventional agriculture becomes impossible or uneconomical. Legacy farmers cannot even use most certified organic pest control agents near cannabis, as these are prohibited in the cannabis product. Paradoxically, these lands rendered unsuitable for agricultural use due to cannabis will also be unsuited for residential uses due to cannabis' proximity as well.

d. Amendments to the Right to Farm Laws Make Odor Mitigation Feasible

Amendments to the Right to Farm Act after PEIR certification have made odor mitigation on AG-II zoned parcels now feasible — mitigation would greatly reduce the odor impacts to supportive agricultural uses, like Appellant's tasting room. The PEIR's discussion of any potential impact of odors from cannabis on AG-II lands reasons that "Agricultural operations are not typically monitored for their odors and are generally protected from odor related and other complaints under the County's Right to Farm Ordinance" and accordingly that any odor abatement mitigation should not apply in the AG-II areas such as this Project site. See the PEIR pp. 8-9.

Since the PEIR's certification, circumstances have changed with respect to the status of cannabis under the County's Right to Farm Act that render odor abatement mitigation feasible. Specifically, on May 8, 2018, the County Board of Supervisors approved the amendment to the Right to Farm Act to exclude cannabis from its protections. The County's new position that the Right to Farm Act does not protect AG-II cannabis cultivation from County odor regulations constitutes new information that a mitigation measure previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of this Project (and the Project proponents have declined to adopt the mitigation measure). Accordingly, additional environmental review is required pursuant to CEQA Guidelines § 15162 (a)(3)(c) on this issue alone.

e. New Information and Site-Specific Air Quality Impacts Require CEQA Review and Violate State and Federal Laws

According to the Grand Jury Report, on Friday, April 26, 2019, the Air Pollution Control District ("APCD") issued online an APCD Advisory ("Advisory") titled *Air Quality and Cannabis Operations*. In the Advisory, the APCD advised that with outdoor cannabis cultivation should have a reasonable buffer between the grow site and any residential, commercial, or public access point. The APCD went on to state it:

"strongly encourage[es] large buffer zones (e.g., 1 mile) to allow for maximum odor dispersion, as well as other odor abatement strategies, to avoid nuisance odors"

As the behest of the Planning Department, the revised Advisory recommends a buffer without reference to a specified distance. Appellant believes APCD should be afforded deference, and their initial recommendation should be given significant weight by the Board. The Board should support

²⁷ CEOA Guidelines, Appendix G, § II.

Page 19

a Project condition of a 1-mile buffer from adjacent uses, such as residences and tasting rooms, and "other odor abatement strategies" such as a Project condition that no odor be detected offsite.

Id. pp. 18-19.

As explained by Professor Holden and a number of other scientific analyses, the emissions generated by the Project will have a significant impact on human health and safety, which will particularly harm sensitive receptors in residential areas.

Indeed, one of the stated Project Objectives in the PEIR is to:

"Limit potential for adverse impacts on children and sensitive populations by ensuring compatibility of commercial cannabis activities with surrounding existing land uses, including residential neighborhoods, agricultural operations, youth facilities, recreational amenities, and educational institutions."

Id., Project Objectives, § 2.3.2.

The PEIR acknowledges that tourists visit Santa Barbara County for purposes of "tourism, wine-tasting, beach going, bicycling, hiking, equestrian, cultural events, and other recreational activities." The PEIR, however, fails to analyze project incompatibility with surrounding agriculture and uses, including areas used by tourists (like tasting rooms) that are considered a "sensitive group" in the PEIR.²⁸ It also fails to fully assess odor impacts in neighborhoods.²⁹ As the Project individually and cumulatively will arguably have a significant impact on land use compatibility, the County must examine, and, if necessary, mitigate these impacts.

Appendix G of the CEQA Guidelines provides that a project may have significant air quality impacts if it "creates objectionable odors effecting a substantial number of people." Likewise, Santa Barbara County's Environmental Thresholds and Guidance Manual provides that a project "creates odor... impacting a significant number of people" may have significant air quality impacts.³⁰ The PEIR did not examine whether the Project, specifically, would create odors, the intensity of such odors, nor how many people would be impacted by odors emanating from the Project site.³¹ Nor did the PEIR adequately assess whether odor mitigation measures proposed by the PEIR are actually effective in reducing environmental impacts specific to this Project. Though the PEIR itself recognized that odor impacts vary widely depending on the location and siting of a cannabis project, the County failed to analyze specific odor impacts for the Project.³² As discussed supra, the Project will result in the release of significant odors particularly during an inversion and is located near numerous residential areas and tasting rooms, which will have an impact on a significant number of people. As such, the County is required, pursuant to CEQA, to develop a tiered EIR for this Project to analyze and, if necessary, mitigate such impacts.

²⁸ See PEIR, pp. 3.9-47 - 3.9-48.

²⁹ See discussion, *supra*, in the Air Quality section.

³⁰ Santa Barbara County's Environmental Thresholds and Guidance Manual, p. 23.

³¹ See generally PEIR, pp. 3.3-22-23.

³² PEIR, p. 3.3-8 ("the predictability and degree to which cannabis odors can travel is highly variable and depending on climatic and topographic conditions near a cannabis site").

The PEIR also did not identify residential areas and neighborhoods as sensitive receptors and thus did not examine the impact of air pollution from cannabis operations on residents and business that serve the public near the Project site, specifically the business and residences on Appellant's properties. The PEIR references visitors to "outdoor facilities" as sensitive "users" but does not assess impacts to such users in the PEIR. The Project is just 150 feet from Appellant's downwind neighboring row crops and vineyards. As explained below, the emissions generated by the Project will have a significant impact on human health and safety, which will particularly harm sensitive receptors in residential areas.

The PEIR defines sensitive receptors for air pollution impacts as follows:

1.3.2.2 Sensitive Receptors

Individuals with pre-existing health problems, those who are close to the emissions source, or those who are exposed to air pollutants for long periods of time are considered more sensitive to air pollutants than others. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential land uses are considered sensitive to poor air quality because people in residential areas are often at home for extended periods and are therefore subject to extended exposure to the type of air quality present at the residence. Recreational land uses offer individuals a location to exercise and are therefore considered moderately sensitive to air pollution. Vigorous exercise places a high demand on the human respiratory function and poor air quality could add potentially detrimental stresses to the respiratory function.

Santa Barbara County Cannabis PEIR, § 3.3.2.2 Sensitive Receptors (emphasis added).

Indeed, one of the stated Project Objectives in the PEIR is to:

"Limit potential for adverse impacts on children and sensitive populations by ensuring compatibility of commercial cannabis activities with surrounding existing land uses, including residential neighborhoods, agricultural operations, youth facilities, recreational amenities, and educational institutions."

Id., Project Objectives, § 2.3.2.

Santa Barbara County's CEQA air quality thresholds identify "sensitive receptors" as including children, elderly or acutely ill." CEQA Thresholds Chapter 5, § B. Courts have found similar definitions. In *Downtown Fresno Coal. V. City of Fresno* (2016) 2016 Cal. App. Unpub. LEXIS 5212, the Fifth Appellate District reviewed a Negative Declaration that assessed the impacts of air pollutants, including odor, on sensitive receptors as follows:

"Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. A sensitive receptor is considered to be a location where a sensitive individual could remain for 24 hours, such as residences,

Page 21

hospitals, or convalescent facilities. . . . [W]hen assessing the impact of pollutants with [one]-hour and [eight]-hour standards (such as carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

Downtown Fresno, Slip. Op. at 39.

In *Downtown Fresno*, the court specifically noted the Negative Declaration's treatment of odors on sensitive receptors as follows:

"Odors
$$[\P] \dots [\P]$$

"Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. . . . $[\P]$. . . $[\P]$

Id., at p. 46-47.

See also Citizens for Responsible Equitable Environmental Development v. City of Chula Vista (2011) 197 Cal.App.4th 327, 332 (""Sensitive receptors" include children.")

The Board should direct the preparation of a robust and complete air quality impact analysis assessing the likely location of sensitive receptors, including residences and locations where youthful, elderly and persons with compromised respiratory capacity are located and evaluate the Project's potentially significant impacts upon them.

Secondary toxins from cannabis terpene reactions in the atmosphere pose potential human health risks

Cannabis plants contain approximately 500 unique chemical components and particulate matter³³. Of these, some are biogenic volatile oil compounds (BVOCs) known as terpenes. Like many VOCs, many terpenes are typically not stable chemicals, and upon release to the environment, depending on the conditions, experience complex atmospheric chemical reactions at differing rates. Many of the secondary compounds that form when terpene reacts with ozone in the atmosphere or otherwise degrades have significant irritating and, in some cases, toxic properties. This is another area where the risk can be identified but not quantified without additional analysis, as would be addressed in an EIR.

Plants have evolved terpene compounds such as limonene, linalool, and pinene as protection, largely as a chemical defense against insects. However, it is often not the terpene itself that is toxic to the insect; rather, it is the metabolic oxidation of the terpene inside the body of the insect that chemically changes it into a toxic pesticide (Scalerandi, et. al, 2018). Similar effects are seen in the human environment, where these new compounds created by terpene oxidation are noted to be more irritating than the original terpene (Pommer, 2003).

³³ See Dominant volatile organic compounds (VOCs) measured at four Cannabis growing facilities: Pilot study results. Vera Samburova, Mark McDaniel, Dave Campbell, Michael Wolf, William R. Stockwell & Andrey Khlystov. Pages 1267-1276 | Received 23 Apr 2019, Accepted 01 Aug 2019, Published online: 09 Sep 2019.

Page 22

Furthermore, the action of each terpene can be synergistically enhanced by the presence of additional terpenes or particulate matter, increasing, and enhancing toxicity of the combination above the effect of one terpene alone (Scalerandi, et. al, 2018). This synergistic action of terpenes would certainly explain why plants such as cannabis have evolved such complex and diverse 'chemical cocktails' rather than rely on single chemical compounds. The VOCs from cannabis cultivation for the Project, when combined with the permitted emissions sources down or upwind could be a detriment to human health and adjacent sensitive receptors. Specifically, there is a concrete and asphalt recycling facility, and an aggregate facility – both near the Project site – and the Blochman School is directly downwind of these uses. Breathing of fine particulate matter (particularly inhalable PM10 and PM2.5) can lead to a wide variety of cardiovascular and respiratory health effects. Further, the County is designated as nonattainment for the State PM10 standard.³⁴

Some of the most common terpenes present in cannabis are linalool, a- and b-pinene, terpinolene, d-limonene, myrcene (Mediavilla et al, 1997). Several of these compounds carry double-carbon bonds, noted to be especially susceptible to oxidation (Pommer, 2007). When oxidation occurs, these terpenes can produce a host of secondary chemicals harmful to human and environmental health, as noted in the table below:

Terpene	Secondary Toxin	Action	
Linalool	Hydroperoxide a-, b- unsaturated aldehyde	Sensitizer; contact allergens	Skold M et al. 2004 Api, et al, 2015
A-pinene	Pinonaldehyde Acetone Formaldehyde Formic Acid Hydroxyl radical Ozone	Atmospheric pollutants Major irritants Toxic substance	Atkinson and Arey,2003 Orlando et al, 2000
B-Pinene	Acetone Formaldehyde Formic acid	Atmospheric pollutants Toxic substance Major irritants	Orlando et al, 2000

³⁴ The federal Clean Air Act Amendments of 1970 (P.L. 91-604, Sec. 109) classifies areas that are considered to have air quality worse than the National Ambient Air Quality Standards (as defined therein) as "non-attainment areas." Nonattainment areas must have and implement a plan to meet the standard, or risk losing some forms of federal financial assistance. Currently, Santa Barbara County is in nonattainment for certain pollutants.

See Table ES-1 of the PEIR which states in part: Impact AQ-3. Emissions from operations of cannabis activities could potentially violate an air quality standard or substantially contribute to an air quality violation, and result in a cumulatively considerable net increase of a criteria pollutant for which the County is in nonattainment.

Page 23

Terpene	Secondary Toxin	Action		
Terpinolene	Aldehydic acid Acetone Formaldehyde	Atmospheric pollutants Major irritants Toxic substance	Ma and Marston, 2009 Orlando et al, 2000	
d-Limonene	Acetone (R)-(-)-carvone Cis/trans isomers of (+)-limonene oxide	Atmospheric pollutant OSHA-listed hazardous material/solvent Potent allergen sensitizers	Karlberg, et al 1992 Reissell, et al, 1999	
Myrcene	Acetone Formaldehyde Formic acid	Atmospheric pollutants Toxic substance Major irritants	Orlando et al, 2000	

35

³⁵ Api, A.M., D. Belsito, S. Bhatia, M. Bruze, P. Calow, M.L. Dagli, W. Dekant, A.D. Fryer, L. Kromidas, S. La Cava, J.F. Lalko, A. Lapczynski, D.C. Liebler, Y. Miyachi, V.T. Politano, G. Ritacco, D. Salvito, J. Shen, T.W. Schultz, I.G. Sipes, B. Wall, D.K. Wilcox, 2015. <u>RIFM fragrance ingredient safety assessment, Linalool</u>, CAS registry number 78-70-6 http://dx.doi.org/10.1016/j.fct.2015.01.005

Atkinson R, Arey J. Gas-phase tropospheric chemistry of biogenic volatile organic compounds: A review. Atmos Environ. 2003; 37:197-219. http://dx.doi.org/10.1016/ S1352-2310(03)00391-1

European Collaborative Action, 2007. <u>Urban air, indoor environment and human exposure.</u> Report No. 26: Impact of Ozone-initiated Terpene Chemistry on Indoor Air Quality and Human Health. 2007.

Karlberg AT, Magnusson K, Nilsson U., 1992. <u>Air oxidation of d-limonene (the citrus solvent) creates potent allergens.</u> Contact Dermatitis. 1992 May;26(5):332-40.

Ma, Yan, and Marston, George, 2009. Formation of organic acids from the gas-phase ozonolysis of terpinolene. Physical Chemistry Chemical Physics, Issue 21.

Mediavilla, Vito and Simon Steinemann 1997. <u>Essential oil of Cannabis sativa L. strains.</u> Journal of the International Hemp Association 4(2): 80 - 82.

Orlando, John J., Noziere, Barbara, Tyndall, Geoffrey S., Orzechowska, Grażyna E., Paulson, Suzanne E., and Rudich, Yinon, 2000. Product studies of the OH- and ozone-initiated oxidation of some monoterpenes. Journal of Geophysical Research, VOI 105, No. D9, Pages 11,561 - 11,572.

Pathak RK, Salo K, Emanuelsson EU, et al. Influence of ozone and radical chemistry on limonene organic aerosol production and thermal characteristics. Environ Sci Technol. 2012;46:11660-69.

Pommer, Linda, 2003. Oxidation of terpenes in indoor environments.

A study of influencing factors Doctoral dissertation, Environmental Chemistry Department of Chemistry Umeå, Sweden ISBN 91-7305-313-9

Page 24

Some terpenes, when exposed to air, react chemically to generate ozone (Samburova, et al, 2019). Other terpenes present in cannabis react specifically with ozone to create these secondary toxins (European Collaborative Action, 2007; Pathak and Salo 2013; Pommer, 2003). In effect, an airborne mass of terpenes emitted from a large-scale cannabis grow and/or their processing facilities can become chemical feedback loops for the production of ozone and these secondary toxins. Since some of these secondary compounds are recognized as toxins, including formaldehyde and acrolein.

The County must "reasonable effort to substantively connect a project's air quality impacts to likely health consequences" (Sierra Club v. County of Fresno (2018) 6 Cal. 5th 502, 510 (citations omitted). Specifically, as the extent and nature of terpene emissions associated with large cannabis cultivation and processing operations become known, the health impacts of exposure of sensitive individuals to terpene successor chemicals must be analyzed in an environmental review document.

The Board should direct the preparation of a robust and complete air quality impact analysis assessing the likely location of sensitive receptors, including tasting rooms and evaluate the Project's potentially significant impacts upon them.

3. Project Approval Does Not Comply with the Williamson Act

The California Land Conservation Act of 1965, also known as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

The Department of Conservation assists all levels of government and landowners in the interpretation of the Williamson Act related government code. The Department also researches,

Reissell, Anni, Harry, Cheryl, Aschmann, Sara M., Atkinson, Roger, Arey, Janet, 1999. Formation of acetone from the OH radical- and O3-initiated reactions of a series of monoterpenes. Journal of Geophysical Research, Papers on Atmospheric Chemistry. Volume104, IssueD11 Pages 13869-13879. https://doi.org/10.1029/1999JD900198

Samburova, Vera, Mark McDaniel, Dave Campbell, Michael Wolf, William R. Stockwell & Andrey Khlystov (2019) <u>Dominant volatile organic compounds (VOCs) measured at four Cannabis growing facilities: Pilot study results,</u> Journal of the Air & Waste Management Association, 69:11, 1267-1276, DOI: 10.1080/10962247.2019.1654038

Scalerandi, Esteban, Guillermo A. Flores, Marcela Palacio, Maria Teresa Defagó, María Cecilia Carpinella, Graciela Valladares, Alberto Bertoni and Sara María Palacios, 2018. <u>Understanding Synergistic Toxicity of Terpenes as Insecticides: Contribution of Metabolic Detoxification in Musca domestica.</u> Front. Plant Sci., 30 October 2018 https://doi.org/10.3389/fpls.2018.01579

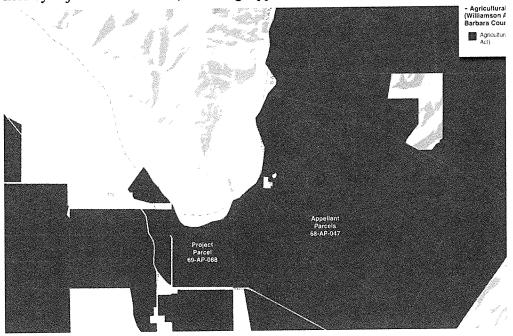
Skold M et al., 2004. <u>Contact Allergens Formed on Air Exposure of Linalool. Identification and Quantification of Primary and Secondary Oxidation Products and the Effect on Skin Sensitization.</u> Chem Res Toxicol 17 (12): 1697-705 (2004)

publishes, and disseminates information regarding the policies, purposes, procedures, and administration of the Williamson Act according to government code. Participating counties and cities are required to establish their own rules and regulations regarding implementation of the Williamson Act within their jurisdiction. These rules include, inter alia, which uses are deemed agricultural production versus those that are deemed secondary uses.

Santa Barbara County implemented an Agricultural Preserve Program to support the long-term conservation of agricultural and open space lands. The program enrolls land in Agricultural Preserve contracts whereby the land is restricted to agricultural, open space, or recreational uses in exchange for reduced property tax assessments. The Santa Barbara County Uniform Rules for Agricultural Preserves and Farmland Security Zones (referred to as "Uniform Rules") are the set of rules the County uses to implement the Agricultural Preserve program. The Uniform Rules define eligibility requirements and qualifying uses that each participating landowner must follow in order to receive a reduced property tax assessment under the Williamson Act.

The County's Agricultural Preserve Advisory Committee ("APAC") is responsible for administering the County's Agricultural Preserve Program and the Uniform Rules. Its duties include reviewing applications and making recommendations for creating agricultural preserves, entering new contracts, making revisions to existing preserves or contracts, termination of contracts and disestablishing preserves. In conjunction with these duties, the APAC is responsible for monitoring and enforcement of the Agricultural Preserve Program, including by conducting the foregoing compatibility review for proposed projects where the proposed use is deemed "compatible" under the Uniform Rules.

To address potential adverse effects of incompatibility between cannabis and adjacent agricultural crops, the PEIR relied on Santa Barbara County Agricultural Preserve Advisory Committee (APAC) review under the Uniform Rules to ensure compatibility with agricultural uses and to ensure that "cannabis activities would not conflict with properties that are subject to Williamson Act contract." Contrary to the fundamental assumption of the PEIR, the Project's proposed cannabis cultivation was not reviewed by APAC for compatibility with the Agricultural Preserve contracts held by adjacent landowners, including Appellant.



Page 26

See below above – parcels under Agricultural Preserves contracts are in indicated in purple and available here: https://sbcblueprint.databasin.org/maps/new/#datasets=293bb2006edc4c8986d6b 564d4502527.

If the County has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by substantial evidence. The County lacks the power to approve uses on Williamson Act contracted lands that are inconsistent with the principles of compatibility. *County of Colusa v. California Wildlife Conservation Bd.* (2006) 145 Cal.App.4th 637, 654; *Cleveland National Forest Foundation*, 37 Cal.App.5th at 1043.

The Board's 2018 decision to classify cannabis cultivation as an agricultural commodity for the County's Agricultural Preserve Program does not mean the County may forgo considering the consistency of cultivated cannabis with the principles of compatibility. The County is not the agency charged with interpreting the Williamson Act and cannot make determinations which do not promote the Williamson Act policies, including compatibility review.

The Uniform Rules compatibility principles include, among other findings, the APAC make the following determination regarding the Project:

Use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

(Uniform Rules p. 25, § 2-2.1.)

APAC's review of the Project lacked any analysis or finding concerning whether the Project's cultivation is compatible with surrounding agriculture including Appellant's vineyards and tasting room, which it is not. The absence of APAC's analysis prevents a conclusion whether the Project's cannabis cultivation could be found compatible with surrounding agricultural uses on other nearby and adjacent Williamson Act contracted lands. There is substantial evidence as discussed previously.

4. The Project Expanded Beyond its Legal Nonconforming Status

In addition to conformity with the Comprehensive Plan, the Board must make the following finding, or the appeal must be upheld, and the Project denied:

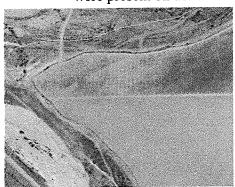
The subject property is in compliance with all laws, regulations, and rules pertaining to uses, subdivisions, setbacks and any other applicable provisions of this Development Code, and any applicable zoning violation enforcement fees and processing fees have been paid.

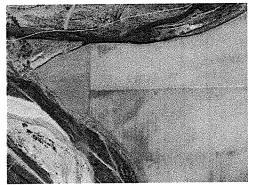
Applicant has exceeded its legal nonconforming status and the Project site is not in compliance with all laws, regulations, and rules pertaining to uses. Thus, this finding cannot be made.

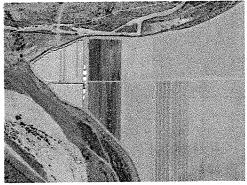
Page 27

Based on aerial map photographs and CalCannabis licensing records, Applicant began cultivating cannabis on the Project site in 2018, well after January 19, 2016. Cannabis expansions conducted before permits are issued, including issuance of a business license, are defined as a public nuisance by Article X. ("Any act or practice contrary to the provisions of this article shall be and the same is hereby declared unlawful and a public nuisance." Art. X, § 35-1004.A.1.) As such, Applicant's expansion constituted a public nuisance *per se* that cannot be corrected after the fact, and any further cannabis cultivation beyond the narrow scope of actual uses present on or before January 19, 2016 is not allowable until the Project receives full County and State approvals and survives any legal challenge. Further, the passage of Proposition 64 does not allow cultivation of cannabis to proceed unless and until authorized by local government authorities, which has not occurred until the Applicant receives both their land use entitlements and business license.

Applicant claims legal nonconforming status for this parcel pursuant to an affidavit executed by Brandon Gesicki of Salinas on December 21, 2017. See Exhibit 12. The operative date under Art. X of the Santa Barbara County Code to claim legal nonconforming status for a cannabis site is the existence and scope of cannabis activity on January 19, 2016. Based on Google Earth and Zoom Earth (NASA) photos over this time period, the site did not have medical cannabis being cultivated as of January 19, 2016 (first photo). However, by February 2018 (second photo), the cannabis site area had been cleared and by August 2018 (third photo), hoop structures and outdoor cannabis were present on the site.







Despite the lack of cannabis cultivation on the site before January 19, 2016, the County condoned the issuance of cannabis cultivation licenses by providing local authorization to the California Department of Food and Agriculture ("CDFA"), which issues the State cultivation permits once authorization is received from the local county.

California legal precedent has long held that "[i]ntensification or expansion of the existing nonconforming use, or moving the operation to another location on the property is not permitted, and "[t]he burden of proof is on the party asserting a right to a nonconforming use to establish the lawful and continuing existence of the use at the time of the enactment of the ordinance." The veracity of the affidavit submitted by Mr. Gesicki and the scope of the claimed legal nonconforming use was not, and still has not been investigated. Based on photographs obtained by Appellant, it appears Applicant's current cultivation significantly exceeds the scope of any possible claim to legal nonconforming use.

4. Applicant Has Unlawfully Modified the Cuyama River

Appellant or a previous owner of the parcel where the Project is located has diverted the Cuyama River to reshape the watercourse in order to allow for a low river-crossing to an adjacent parcel to the north. The unnatural flow of the watercourse due to manmade interventions has caused potential risk to the integrity of Applicant's legally permitted water crossing just northeast of the diverted areas and increased the flood risk on Applicant's parcel, including damage to Appellant's vineyards. Specifically, the Cuyama River was diverted on the Project parcel and requires a Streambed Alteration Agreement in accordance with the F&G Code § 1602. The Department of Fish & Wildlife's authorization letter does not address the diversion specifically, and instead states the Project will not harm fish or wildlife. The diversion has also created an obstruction of the navigable capacity of the Cuyama River and is illegal absent authorization by the U.S. Army Corps of Engineers pursuant to 33 U.S.C. § 403 (Rivers and Harbors Act). There is no evidence that this diversion and subsequent obstruction has been authorized.

In connection with approval of the Project, the County and Applicant must demonstrate the Project is in compliance with all laws, including the State Water Resource Control Board's (SWRCB) Cannabis Policy, California Department of Fish & Wildlife requirements, and California Department of Food & Agriculture requirements. As stated above, there remain issues as to whether the Applicant has complied with all such laws.

Lastly, the SWRCB Cannabis Policy prohibits trespass (Cannabis Policy § 1.18). Trespass of terpenes and other particulates from the Project onto neighboring property in inevitable in violation of SWRCB Cannabis Policies. Applicant must provide sufficient evidence demonstrating compliance with these laws and requirements, particularly concerning the diversion of the Cuyama River.

5. Applicant's Water Source is Shared with Appellant

Appellant's water source is subject to a well-sharing agreement with Appellant. This agreement requires certain coordination and cooperation of the parties with respect to their water usage, and ratable allocation of the water among the parties. To Appellant's knowledge, Applicant (through its landlord) has not obtained Appellant's consent or approval for use of the shared water for the cultivation of cannabis or other related operations at the Project site. Further, the well that is the subject of the parties' agreement is not supplying sufficient water to meet the parties' respective needs. Once cannabis is planted onsite, the increased water use will further deprive Appellant of its share of the water.

The public water system required for this Project must be required prior to Applicant commencing its operations onsite. Appellant disputes that a one-year delay as outlined in the approved Project permit is merited here. Further, for the required public water system, Appellant is unclear whether Applicant intends to use the well subject to the well-sharing agreement, or another well onsite.

Summary and Conclusion

After investing millions in its vineyard and tasting room, Appellant faces what could be (and is perceived by many to be) a threat to their existence due to the extent and severity of the land use incompatibility of cannabis with adjacent agriculture, including odor impacts to supportive uses such as tasting rooms. The extent of the impacts were not considered in the PEIR or by the Board in adopting the Cannabis Ordinance, and due to these impacts, the Project runs contrary to the policies in the County's Comprehensive Plan.

If cannabis nuisance odors deter consumer direct sales in Appellant's tasting room or grape sales to winery buyers, Appellant will see material economic impacts to their business – with reduced tasting room visits, reduced direct sales, reduced wine club memberships, and reduced aggregate sales. This would clearly result in the potential loss of revenues jeopardizing the ability to sustain ongoing farming and winery operations, and the viability of its business would decline leading to its collapse. At scale, the blight from abandoned and idle farms (even just Appellant's large ranch) would lead to physical impacts on the environment. These are CEQA impacts – without the ability to directly market and sell wines to consumers, revenues will be materially impacted and the viability of the wine industry, including grape growing, is at risk.

Further, changed circumstances with respect to the County's Right to Farm Act now make odor mitigation even more critical (because APAC is no longer reviewing projects for compatibility, including with tasting rooms as onsite agricultural processing) and odor requirements are feasible. Further, Applicant's proposed methods for reducing odors are inadequate and fail to meet the requirements of the LUDC.

As discussed, the PEIR assumed that all cannabis projects would undergo a compatibility review process whereby APAC would assess each project's compatibility with adjacent agricultural operations, including tasting rooms as supportive agricultural uses. This was without regard to whether parcels are within the Williamson Act. Thus, the impacts to legacy agriculture, including the issues identified in this letter, are completely ignored during the County's permitting process. These represent a substantial change in circumstances with potentially significant, irreparable, and longstanding negative impacts to discrete areas of the County. The County must ensure compatibility review as relied on by the PEIR occurs in some form.

The Grand Jury Report affirms these issues. Each of the above qualifies as a legitimate CEQA issue standing alone and provides a basis for the Board's denial of the project on CEQA grounds. When combined, there are numerous grounds for denial of the Project.

As is presented above and in additional materials that will be submitted to the Board, this Project may not be approved as proposed. Approval of this Project would violate CEQA, is inconsistent with Comprehensive Plan policies, and would represent an abdication of the County's responsibility to protect the public health, safety, and welfare. Accordingly, Appellant urges the Board to uphold the appeal and deny the Project.

Page 30

Exhibit 13:

Respectfully submitted,

LAW OFFICE OF COURTNEY E. TAYLOR, APC

Courtney E. Taylor Attorney for Appellant

Cc: John H. Haan, Jr., Rogers, Sheffield & Campbell, LLP

Exhibits

Vicinity Map Exhibit 1: 10 Vineyards Behind the World's Most Famous Wines, Wine Enthusiast Exhibit 2: (Published on January 25, 2021) Walking The Rows: Bien Nacido Vineyard In California's Santa Maria Valley Exhibit 3: AVA, Forbes (Published on January 29, 2021) Board Letter, Uniform Rules, March 20, 2018 Exhibit 4: Grower Shipper Association Letter, January 16, 2020 Exhibit 5: Agricultural Advisory Committee Letter, January 17, 2020 Exhibit 6: Santa Barbara Vintners Letter, January 17, 2020 Exhibit 7: Santa Barbara County Farm Bureau Letter, May 29, 2020 Exhibit 8: Dr. Anita Oberholster, March 3, 2020 Exhibit 9: Estimated emissions, concentrations, and deposition of monoterpenes from an Exhibit 10: outdoor Cannabis farm, Final Report, December 6, 2019 Terpene Analysis on Grapevine Tissue, August 7, 2019 Exhibit 11: Tyler Thomas Letter, March 13, 2020 Exhibit 12: Affidavit of Brandon Gesicki

Exhibit 1

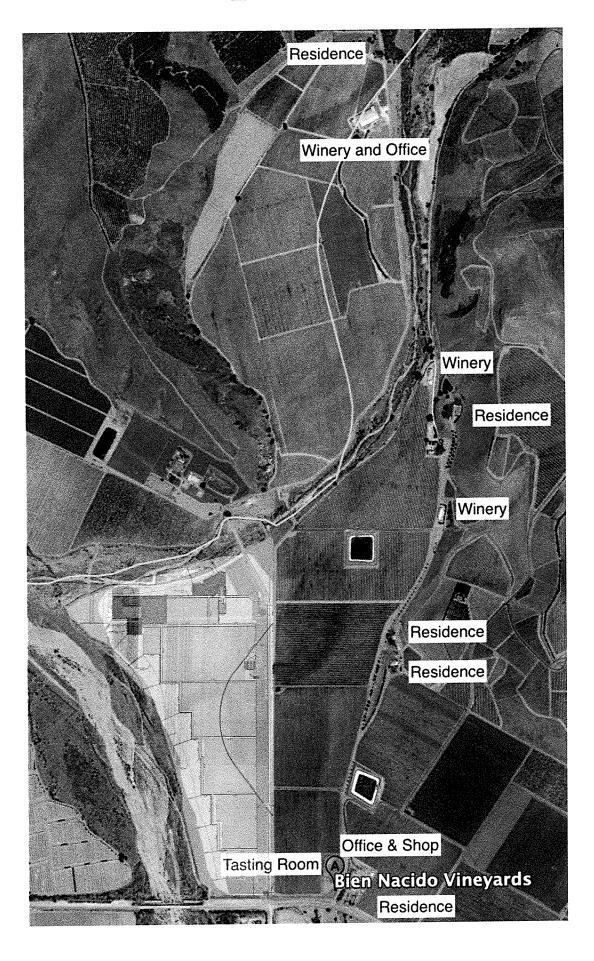
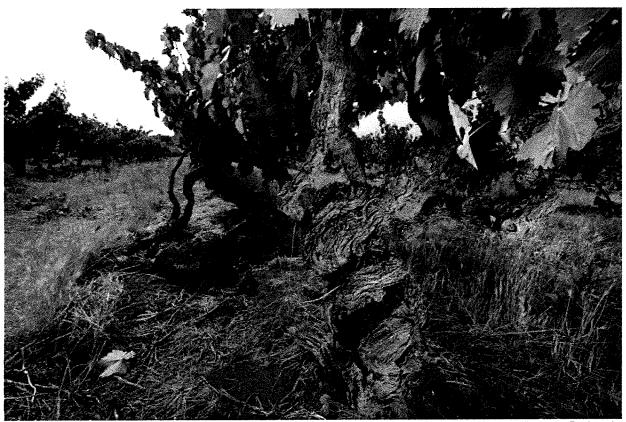


Exhibit 2

10 Vineyards Behind the World's Most Famous Wines

BY J'NAI GAITHER



Hewitson Old Garden vineyard / Photo courtesy Dragan Radocaj

It is often said that great wine begins in the vineyard, and with many of the world's most storied wines, that is unequivocally true. Yes, viticulture can be confounding, but it's the all-important factor that truly makes great wine. The soils upon which these vines grow matter, as do their <u>elevations</u>, orientation to the sun and various microclimates.

Get to know some of these special vineyards below.

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Getty

Romanée-Conti

Burgundy lays claim to a large number of the world's most storied vineyards. Many of these inimitable sites, also known as *climats*, are UNESCO World Heritage sites. Perhaps the most iconic site is Romanée-Conti, of Domaine de la Romanée-Conti (DRC) fame.

This vineyard is a monopole, which means it's a vineyard or appellation owned and controlled by one winery. Its cemetery-like cross stands sentry at the mouth of the vineyard, lending an almost solemn reverence to match its near-mythical status.

Romanée-Conti is also a clos, or walled vineyard. This particular clos only produces around 450 cases of wine per year from a parcel that measures just under five acres. In 2018, a bottle of 1945 DRC sold for \$558,000 at a Sotheby's auction. Other notable older vintages include the 1966 and 1978.

The vineyard was planted in the 13th century by monks of the Saint--Vivant abbey. The wines are renowned for their <u>ageability</u> because the grapes are grown on vines that are at least 50 years old, grown in chalky, limestone soils.

Notable Producer (if the opportunity ever presents itself): <u>Domaine de la Romanée-Conti</u>

Montrachet

/

Another revered climat, or vineyard, in Burgundy is Montrachet, located in the Côte de Beaune, the southern part of the esteemed Côte d'Or. Centered around the town of the same name, the Côte de Beaune is not strictly a white wine region, but the whites are for what the region is known.

Montrachet is a grand cru vineyard thought to be the greatest place in the world for Chardonnay production. It's situated between the famed towns of Puligny and Chassagne. The vineyard lies midslope and faces southeast, which protects against the strong, westerly winds.

Well-draining, calcium-rich soils allow the grapes to stay hydrated, and to thrive.

Like Romanée-Conti, it also covers a small growing area—only 20 acres, or eight hectares—to produce the longest-lived and most expensive white wines in the world. Montrachet is not a monopole, so there are a few owners who make wine from the site.

Notable Producers: Domaine de la Romanée-Conti, <u>Bouchard Père et Fils, Domaine Leflaive, Joseph Drouhin, Louis Latour</u>

Clos Saint-Jacques

There's one premier cru vineyard in Burgundy that inspires awe in the way that many grand crus do, and that is Gevrey-Chambertin's Clos Saint-Jacques.

Why is Clos Saint-Jacques rated as a premier cru vineyard only? It's believed that during the establishment of Burgundy's classification system, some owners refused to pay the higher fee associated with the higher tier of classification. Of course, everything always comes down to money.

In Clos Saint-Jacques, five owner-producers are allowed to use the vineyard name on the bottle: Louis Jadot, perhaps the most affordable of the five producers; Domaine Armand Rousseau; Domaine Sylvie Esmonin; Domaine Fourrier and Domaine Bruno Clair.

Armand Rousseau has the largest holdings at a little over five acres. Its wines are said to be the plushest of the bunch, but all are held in high esteem.

Notable Producers: <u>Domaine Bruno Clair</u>, Domaine Sylvie Esmonin, Domaine Fourrier, <u>Louis Jadot</u>, <u>Domaine Armand Rousseau</u>



Photo courtesy www.mkb.photo

Clos des Goisses

The name says it all. While clos means walled vineyard, *goisses* is French for "very steep vineyard," and this roughly 13.5-acre plot on the north end of the Marne River in Champagne ascends from 30° to 45°. Such a slope requires manual farming (standard in Champagne) or, somewhat anachronistically, horses and plows.

Planted to both Chardonnay and Pinot Noir, this premier cru vineyard has grown wine grapes since the 16th century and is currently the warmest site in Champagne. Its southfacing orientation and surrounding wall creates a warmer microclimate than the rest of Champagne. This ensures that the grapes ripen, and its special chalk soil acts as a heat conductor.

Notable Producer: Philipponnat

Coulée au Serrant

Planted in the 12th century by Cistercian monks, Coulée au Serrant has been continually harvested each year. As of 2020, the vineyard has seen 890 consecutive vintages.

<u>Coulée</u> is a monopole and appellation in the Savennières district of the Loire Valley, owned by Nicolas Joly. The vineyard's 17-plus acres are planted to one of the flagship grapes of the Loire, Chenin Blanc. The south-southeast vineyard is farmed according to

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biodynamic principles and has vines that average from 35 to 40 years old. They sit on schist, quartz and flint soils, which provide distinctive minerality.

Notable Producer: Domaine Nicolas Joly

Cannubi

"It was like touching the stars with my hands," says Luciano Sandrone, a Piedmont producer, about Italy's most famous cru.

Says Michele Chiarlo, another Barolo producer: "When I was able to buy [acreage in <u>Cannubi</u>] it was a joy, almost like touching heaven with my fingertips."

Grapes have been grown in Cannubi since before Barolo was a designation. Owned by 19 producers, its 37 acres have been at the center of contentious property disputes and naming rights over the years, and one time the issue made its way to Italy's Supreme Court.

It is such a revered name that neighboring vineyards like Cannubi San Lorenzo and Cannubi Muscatel sought to use the "Cannubi" name as a demonstration of their wine's quality. In 2013, courts decided that the neighboring vineyards *could* use the name to promote their proximity to the world-famous site.

Notable Producers: Brezza, Damilano, Michele Chiarlo, Sandrone, Paolo Scavino

To Kalon Vineyard

In Greek, To Kalon means "the beautiful," and standing at the overlook from Robert Mondavi Winery, it's easy to understand why. The 1,000-acre parcel in Napa Valley's Oakville appellation sees acres of vines butted up against a blue, cloudless sky and the lush, green Mayacamas mountains.

To Kalon is also home to the small yet mighty parcel named I-Block, lauded for having North America's oldest Sauvignon Blanc vines, now 75 years old. Their thick, gnarled trunks are untrellised and require no irrigation, concentrating their already bright fruit flavor.

If America had grand cru vineyards, To Kalon would certainly be at the top of the list. As Napa Valley is known for Bordeaux grape varieties like Cabernet Sauvignon, however, it's more fitting to say that To Kalon is a kind of "first growth" vineyard.

And because To Kalon was part of the partnership between Robert Mondavi and Baron Philippe de Rothschild of Bordeaux first growth <u>Château Mouton Rothschild</u>, the analogy is even more apt.

Like Cannubi, its enviable location and soil diversity has made To Kalon a target, of sorts, with some of the best and most expensive wineries in the Valley vying to produce a To Kalon-labeled wine. The vineyard is currently divided among a few conglomerates. Robert Mondavi-Constellation owns the largest holdings at nearly 450 acres, while grower Andy Beckstoffer has 90 acres and Opus One has 100 acres. The rest are owned by a handful of smaller growers.

Notable Producers: Robert Mondavi, Opus One, Realm Cellars

Shea Vineyard

Because of Burgundy's storied pedigree, Pinot Noir is almost as noble as grapes come. And Pinot Noir in the States is gaining a foothold. Even Burgundian denizens praise Oregon's Willamette Valley for its great terroir for Pinot production.

The region's Mecca is often considered to be Shea Vineyard, a 290-acre property in Yamhill County renowned for its sedimentary sandstone soil. Shea dedicates 149 acres to Pinot Noir and six acres to Chardonnay.

Proprietor Dick Shea supplies grand cru-quality grapes to some of the most vaunted and well-known Oregon and California wineries.

Notable Producers: Bergström, Ken Wright Cellars, Shea Wine Cellars, Winderlea



SANTA MARIA VALLEY, SANTA BARBARA COUNTY, CA – 2009: The Bien Nacido Vineyard is seen in this 2009 Santa Maria Valley, Santa Barbara County, California, late afternoon landscape photo. (Photo by

Bien Nacido Vineyard

Located on California's Central Coast, Bien Nacido dates to 1837. However, it didn't arrive on many wine lovers' maps until the Millers, a fifth-generation family of California farmers, purchased it in 1969.

Their dream was to shepherd a vineyard that rivaled those of the great estates of Europe. Many people believe that dream has been realized.

Bien Nacido lies in the Santa Maria Valley of Santa Barbara County. It's one of the coolest growing sites in the state due to the ocean influence and transverse (east-west orientation) Santa Ynez mountain range. The vineyard is planted to 900 acres of vines and supplies grapes to many high-end wineries in California.

Notable Producers: Au Bon Climat, Bien Nacido Estate, Qupé, Twomey, Migration



Photo courtesy Dragan Radocaj

Old Garden Vineyard (Barossa Valley)

Contrary to what one might believe, the world's oldest-producing vines are not in Europe, but Australia. Planted in 1853, the Old Garden vineyard is now owned by Dean Hewitson, winemaker and proprietor of Hewitson winery in South Australia.

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Old Garden has the great honor of never having been affected by phylloxera, the vine root louse that wreaked havoc on many of the world's vineyards in the 1800s. It is home to the world's oldest, perpetually-producing Mourvèdre vines in the world. They are currently 168 years old and produce a rich, deeply complex wine.

Notable Producer: <u>Hewitson</u>



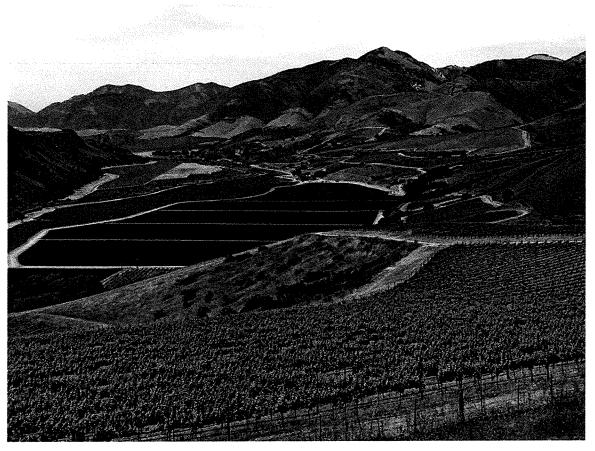
Exhibit 3

Jan 29, 2021, 05:07pm EST | 1,144 views

Walking The Rows: Bien Nacido Vineyard In California's Santa Maria Valley AVA



Jill Barth Contributor ① ①
Food & Drink
I cover wine at work, with attention to makers and growers.



Bien Nacido Vineyards BIEN NACIDO ESTATES

There is one vineyard that stands out—way out—when it comes to single vineyard designated wines: Bien Nacido.

A Single Vineyard Superstar

This spot is the source for 15,000 single vineyard designated wine releases over the course of its 43 year history. This includes estate wines made the proprietor, the Miller family, as well as those produced by partners who have bought fruit for their own bottlings. This list includes names such as Au Bon Climat, Qupé, MacRostie, Sanguis, Bedrock Wine Co. and so many more. In fact, Bien Nacido has the most single vineyard designations in the world.

"The cool, coastal vineyard has been highly sought after by winemakers since the early days because of its unique cool climate, rocky soil and mysterious wine qualities," says Theresa Heredia, chief winemaker at Gary Farrell Winery. Heredia makes a Pinot Noir with the coveted block Q, planted in 1973 to Pommard. "The soil is very diverse, made up of sandy loam, chalk, gravelly loam and marine loam, creating intense, extremely terroir-driven wines that are simultaneously powerful, polished, exotic and sexy."

Located in Santa Maria AVA, in California's central coast, Bien Nacido is considered a cool climate region. To put this into perspective, this spot has a similar heat summation as Central Otago in New Zealand, Champagne in France and the Rheingau in Germany.

Bien Nacido is in a unique position, situated in a rare coastal transverse mountain range on a cold body of water—16 miles due west from the Pacific Ocean. "The mountains have turned sideways," says Will Costello MS, the ambassador for Bien Nacido and Solomon Hills Estates. "They allow for all of the cold air to flush through on the way to the desert."

This cold air can push the vines into winter dormancy—frost is common this time of year—which is not always possible in the new world, notes Costello. An article published by the The Arnold Arboretum explains that these "chilling hours" spent at cool temperatures help the vine regulate bud break, a particularly important phase in the vine's lifecycle. This a consideration for winegrowers, as parts of the world experience climate change and increased temperatures.

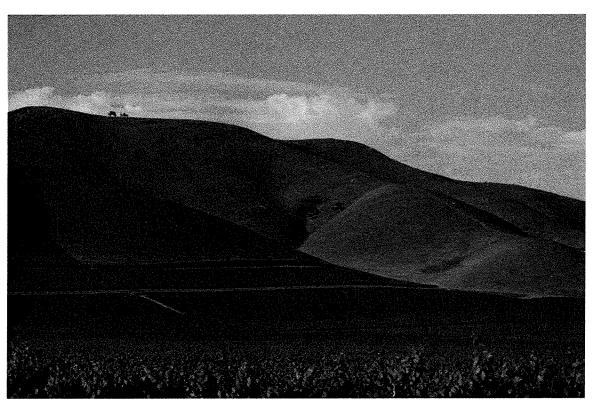
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There are three main environments within the vineyard: a front bench, steep hillsides and flatland. "We can match location to style," says Nicholas Miller, second-generation proprietor of the vineyard and estate. "Its not one ticket to play."



SANTA MARIA VALLEY, SANTA BARBARA COUNTY, CA - 2009: The Bien Nacido Vineyard is seen in this 2009 ... [+] GETTY IMAGES

California Winegrowing Pioneers

Planted by Stephen Miller and his late brother Robert in the late 1960s, Bien Nacido ground has an agricultural history dating back to 1837 when Tomas Olivera obtained the plot through a land grant. The ranch supported livestock and grain crops, as well as wine grapes. The Ontiveros Adobe from

this time, still standing today, holds meaning for the wine community of Santa Maria.

The Millers, a farming family since 1871, had a vision for what this plot of land could be. As pioneers in post-prohibition planting in Santa Maria, they decided to "plant their flag on quality first, at Bien Nacido," according to Miller. They originated the name Bien Nacido, which means "well born."

These were ungrafted vines from UC Davis, planted on their own rootstock. In fact, the vineyard operated as nursery for budwood. Costello notes that there are few ungrafted vineyards in the world, isolating these original plantings at Bien Nacido as "pure expression" of what the varieties can be. Rootstock, while at many times essential to protect a vineyard against soil borne pests, is like a "mask" according to Costello, potentially lessening that expression.

The vineyard had early success with Chardonnay, with many sparkling wine producers eager to acquire this fruit. The Millers began to leverage some of these purchasing packages to sell Pinot Noir, which eventually became the variety of choice for many of the top winemaking names associated with Bien Nacido Vineyards. That and the cool-climate Syrah which Miller says can "play at the world class level in both cool and warm climates."

By the 2000s, the Millers began making their own wines from this vineyard under the Bien Nacido Estate label. "We also wanted to tell our own story as a window into our vineyard," says Miller. Winemaker Anthony Avilla—who started as a harvest intern—is now a part of this story, as is vineyard manager Chris Hammell. "Chris grew up in the area very close to the vineyard and lives on the property, always keeping a close eye on everything," says Heredia. "He works with each winemaker, ensuring that farming practices are to their specifications."

With outstanding wines coming from the estate and scores of other wineries, Bien Nacido Vineyard stands to be one of the most influential of our time, with bottles to suit many consumer tastes and budgets. Each block is grown to the standard of the customer, with pristine, sustainable farming methods. "This is a unique model," says Miller. "A time and place not replicated anywhere else in the world."

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Exhibit 4



BOARD OF SUPERVISORS AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors 105 E. Anapamu Street, Suite 407

Santa Barbara, CA 93101 (805) 568-2240

Department Name:

Planning & Development

Department No.:

053

For Agenda Of:

March 20, 2018

Placement:

Departmental

Estimated Time:

2 hours

Continued Item:

If Yes, date from:

Vote Required:

Majority

TO:

Board of Supervisors

FROM:

Department

Glenn S. Russell, Ph.D., Director, Planning and Development

Director(s)

(805) 568-2085

Contact Info:

Daniel T. Klemann, Deputy Director, Long Range Planning

(805) 568-2072

SUBJECT:

Cannabis Amendments to the Santa Barbara County Uniform Rules for Agricultural

Preserves and Farmland Security Zones

County Counsel Concurrence

Auditor-Controller Concurrence

As to form: N/A

Other Concurrence: As to form: N/A

As to form: Yes

Recommended Actions:

That the Board of Supervisors (Board):

- a) Consider options for amending the Santa Barbara County Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules) to address cannabis uses and development allowed pursuant to the Cannabis Land Use Ordinance and Licensing Program on lands subject to agricultural preserve contracts;
- b) Make the required findings for approval of amendments to the Uniform Rules, including California Environmental Quality Act (CEQA) findings (Attachment 1);
- c) Adopt a resolution (Case No. 17ORD-00000-00019) amending the Uniform Rules (Attachment 2); and
- d) Determine for the purposes of CEQA that:

- i. Approval of the amendments to the Uniform Rules (Case No. 17ORD-00000-00019) is within the scope of the Cannabis Land Use Ordinance and Licensing Program, and the Cannabis Land Use Ordinance and Licensing Program Final Programmatic Environmental Impact Report (PEIR) [Case No. 17EIR-00000-00003, State Clearinghouse No. 2017071016] (Attachment 4) adequately describes this activity for the purposes of CEQA.
- ii. Pursuant to CEQA Guidelines section 15162(a), after considering the PEIR certified by the Board of Supervisors on February 6, 2018, that no subsequent EIR or Negative Declaration is required because: i) no substantial changes are proposed which require major revisions of the PEIR; ii) no substantial changes have occurred with respect to the circumstances under which the ordinance is undertaken which require major revisions of the PEIR; and iii) no new information of substantial importance concerning the ordinance's significant effects or mitigation measures, which was not known and could not have been known with the exercise of reasonable diligence at the time that the PEIR was certified, has been received.

Summary Text:

Pursuant to Government Code § 51231, the Board is the decision making body for amendments to the Uniform Rules regarding allowed uses on lands that are subject to agricultural preserve contracts. Based on this authority, at the February 6, 2018, hearing regarding the Cannabis Land Use Ordinance and Licensing Program, the Board directed staff to return on March 13, 2018 (later rescheduled for March 20, 2018) to present options to the Board regarding amendments to the Uniform Rules to allow certain cannabis land uses and development on lands that are subject to agricultural preserve contracts.

Two options for amending the Uniform Rules are discussed in detail below. The first is the recommendation of the Agricultural Preserve Advisory Committee (APAC), as shown in Attachment 3. The second is the P&D staff recommendation that was recently prepared after meeting with stakeholders, reviewing public comment letters, and reviewing the Uniform Rules in light of the Cannabis Land Use Ordinances adopted on February 6 and 27, 2018. Although the APAC recommendation is a feasible option to amending the Uniform Rules, P&D staff is recommending that the Board adopt a more permissive option due to certain unique features of cannabis cultivation that do not apply to other compatible uses set forth in the Uniform Rules.

An additional direction from the Board on February 6, 2018, was for staff to return for consideration of capping retail cannabis permits to eight with a maximum of two per district. Further direction was received from the Board on February 27, 2018, to add cultivation to the discussion on caps. This discussion is presented separately under the item for the Cannabis Business License Ordinance.

Discussion:

The County's Uniform Rules implement the Williamson Act locally by defining eligibility requirements and addressing compatible uses. Each participating landowner must comply with the Uniform Rules in order to be eligible for a reduced tax assessment for lands in contract (Revenue and Taxation Code § 421 et seq.). The Government Code sets forth principles that the Board must consider when determining which uses and development are compatible on lands that are subject to agricultural preserve contracts (Government Code § 51238.1). These principles are set forth in Attachment 5. Based on these principles, the Board has adopted both general compatibility guidelines and guidelines that currently apply to specific uses (e.g., guidelines that apply to agricultural preparation and processing facilities,

animal boarding and breeding facilities, recreational uses, and temporary filming and special events) (Uniform Rules, Uniform Rule 2).

Given the Board's decisions on February 6 and 27, 2018, to allow certain types of cannabis uses and development on agricultural lands (many of which are subject to agricultural preserve contracts), the Board should amend the Uniform Rules to provide clear guidance regarding under what conditions (if any) cannabis uses and development may be allowed on lands that are subject to agricultural preserve contracts. Cannabis is similar in certain ways to other uses that are currently considered to be either qualifying or compatible uses pursuant to the Uniform Rules. For example, cannabis cultivation involves the growing of plants similar to crop production that may count towards the minimum cultivation requirements of the Uniform Rules (Uniform Rule 1, § 1-2.3). Furthermore, similar to certain types of crop production, cannabis cultivation requires at least a minimal amount preparation (e.g., drying and trimming) of cannabis in the raw state for the market, which under circumstances may not compromise the viability of agricultural lands. Also, certain cannabis products (e.g., oils and food products) require processing beyond the raw state, similar to how certain agricultural commodities are processed for the market (e.g., processing of grapes into wine).

However, cannabis differs from many of the uses that are currently considered to be qualifying or compatible uses pursuant to the Uniform Rules. For example, cannabis is a highly regulated, illegal controlled substance under federal law, the cultivation of which presents security and law enforcement challenges that generally do not apply to other types of crop production. Cannabis cultivation also creates odors to which many are unaccustomed and find more objectionable than the odors produced from more conventional types of crop production.

In summary, there are both important similarities and distinctions between cannabis activities, on the one hand, and agricultural uses and compatible uses which are currently allowed on agricultural preserves, on the other hand. As such, there are a number of legislative policy options that are available to the Board with regard to the allowance of cannabis activities on lands that are subject to agricultural preserve contracts. Historically, the Board has valued and supported the Williamson Act provisions by designating numerous agricultural preserves in Santa Barbara County and implementing specific rules for their protection. With the recent cannabis regulations, the Board provided a structure to permit and regulate cannabis activities without giving cannabis cultivation a "right to farm" status. Given the Board's direction on these issues to date, as well as input from the public, agricultural industry, and cannabis industry, staff recommends that the Board focus its consideration on the following two options—APAC's recommendation and an alternative P&D staff recommendation. Additional approaches that have been considered are also listed below under *Other Considerations*. However, if the Board decides to pursue a different option, staff recommends that the Board direct staff to return to the Board at a later date with the necessary findings, resolution(s), etc., for the Board's consideration of adoption.

APAC Recommendation

In 2017 APAC reviewed the draft Cannabis Land Use Ordinance and Licensing Program and associated Draft EIR, to assess the Cannabis Land Use Ordinance and Licensing Program's consistency with the Uniform Rules. On August 11, 2017, November 3, 2017, and December 1, 2017, APAC held publicly noticed meetings at which it reviewed and considered the suitability of cannabis uses on lands that are subject to agricultural preserve contracts. On December 1, 2017, by unanimous vote, APAC

recommended that the Board adopt specific cannabis-related amendments to the Uniform Rules (Attachment 3). In summary, APAC recommended that the Board amend the Uniform Rules as follows:

- 1. Add definitions related to cannabis.
- 2. Specify that cannabis cultivation and ancillary facilities in support of cannabis cultivation are compatible—but not qualifying—uses on contracted land.
- 3. Specify that manufacturing (excluding extraction), retail sales, testing, and marketing of cannabis or cannabis products are prohibited on Williamson Act lands.
- 4. For contracts involving lands with prime and non-prime soils, specify that cannabis cultivation and ancillary facilities may be located within the designated development envelope and/or outside of the development envelope of a premises. However, the amount of land dedicated to cannabis cultivation and ancillary facilities that are located outside of the development envelope cannot exceed 5% of the premises or 5 acres, whichever is less.
- 5. Specify that processing, distribution, and manufacturing (extraction only) of cannabis from off-site sources is allowed, however it shall be limited to no more than 49 percent of the total volume of cannabis that is processed, distributed, and manufactured on the premises.
- 6. For contracts involving superprime lands, specify that all cannabis cultivation and ancillary facilities must be located within the designated development envelope.

APAC's recommendation is consistent with how certain compatible uses (e.g., agriculture preparation facilities, and processing of wine grapes) are currently addressed in the Uniform Rules. However, by taking the approach of setting limits on the amount of cannabis activity that can occur on Agricultural Preserves, it substantially limits the amount of area in the County that can support cannabis operations and it would potentially displace existing medicinal cannabis operations and facilities. Furthermore, given that cannabis cultivation is similar to crop production that counts toward the minimum cultivation requirements of certain agricultural preserve contracts, and would not involve the permanent conversion of farmlands, the Board may want to treat cannabis differently than other compatible uses in the Uniform Rules. Neither the final Cannabis Land Use Ordinances adopted on February 6 and 27, 2018, nor the P&D recommendation described below, have been presented to APAC. Thus, the Committee has not reviewed these issues since its December 1, 2017, meeting.

P&D Staff Recommendation

Since the APAC recommendation was finalized, stakeholders have argued that the recommendation is too restrictive. Many of the concerns are related to the acreage limits which would potentially displace existing medicinal cannabis cultivation and ancillary facilities, prevent consolidation of operations, and discourage vertical integration strategies on contracted lands. Staff considered these concerns in light of the goals of the Agricultural Preserve Program and keeping in mind the unique features of cannabis that warrant different regulations from those which apply generally to agriculture. Staff concurs with APAC that the optimal approach is to allow certain cannabis activities as compatible uses on lands that are subject agricultural preserve contracts; however, staff recommends that cannabis cultivation and ancillary facilities should not be subject to acreage limitations, provided that the property owner complies with the minimum cultivation of non-cannabis crops and/or grazing requirements that are set forth in the eligibility requirements, as well as the applicable contract. In summary, the P&D recommendation (Attachment 2) would:

- 1. Add definitions related to cannabis.
- 2. Specify that cannabis cultivation and ancillary facilities in support of cannabis cultivation are compatible —but not qualifying—uses on contracted land.
- 3. Specify that retail sales and marketing of cannabis or cannabis products are prohibited on Williamson Act lands.
- 4. Specify that processing, distribution, and manufacturing of cannabis from off-site sources is allowed, however it shall be limited to no more than 49 percent of the total volume of cannabis that is processed, distributed, and manufactured on the premises.

This alternative would maintain the current criteria for commercial agricultural production, clarify that cannabis cultivation does not count towards the minimum eligibility criteria for commercial agricultural production, yet afford a considerable degree of flexibility to conduct certain cannabis activities on lands that are subject to agricultural preserve contracts. In doing so, it would address many stakeholder concerns while staying largely consistent with APAC's recommendation, and would not undermine the principles of compatibility for agricultural preserve contracts.

Other Considerations

While the two options discussed in detail above appear to best balance the objectives of the Cannabis Land Use Ordinance and Licensing Program with the provisions of the Uniform Rules, other options have been evaluated by staff and discussed with stakeholders. Some of the options explored are listed below with a brief explanation as to why they were not preferable to the APAC and P&D staff recommendations.

- 1. <u>Prohibit Cannabis on Agricultural Preserves</u> This option would disallow any cannabis activities on contracted lands. Thus, it would prevent any conflicts with the Uniform Rules and minimize any potential incompatible uses on contracted lands. However, it would (1) conflict with the objectives of the Cannabis Land Use Ordinance and Licensing Program, (2) potentially displace established medicinal cannabis operations, and (3) potentially result in a significant number of landowners filing for non-renewal, which could induce a loss of agricultural preserves in the County.
- 2. <u>Limited Cultivation Only as Compatible Use</u> This option was evaluated in the PEIR as Alternative 2, which specified that up to 22,000 square feet of cannabis cultivation could be allowed as a compatible use on contracted lands, while ancillary uses such as manufacturing, testing, distribution, and sales would be incompatible. This would have similar consequences as stated for No. 1 above, and would not address stakeholder concerns regarding consolidation of operations and vertical integration.
- 3. <u>Unlimited Cannabis Activities as Compatible Use</u> This approach would be the most permissive in favor of the cannabis industry and would specify that all permitted cannabis activities are compatible with the principal agricultural use of the land under contract. While this would address most industry concerns, the permitted cannabis uses would potentially conflict with the general compatibility guidelines in the Uniform Rules (Rule 2-1). In addition, the resulting Uniform Rules would be substantially less restrictive toward ancillary cannabis uses than toward

supportive agricultural uses such as development of preparation facilities, processing facilities, and retail operations (Section 2-2). A more comprehensive update to the Uniform Rules would be recommended in this case to achieve a balance of allowed uses.

4. Cannabis is Defined as Agriculture and Allowed as a Principle Use — Under this scenario, cannabis cultivation would be defined as an agricultural use and its production would be used to meet the eligibility requirements for a Williamson Act contract. Such an approach would likely raise concerns regarding "Right to Farm" protections that may affect the County's ability to mitigate impacts from cannabis (e.g., odor abatement measures). General public concerns have also been raised regarding the potential government subsidy of cannabis activities that would occur under this option.

Environmental Review

The Cannabis Land Use Ordinance and Licensing Program Final PEIR, (Attachment 4), was certified on February 6, 2018. Both options described in this Board Letter and shown in the attached Uniform Rules amendments (Attachments 2 and 3) are adequately covered by the Program EIR.

Fiscal Analysis

The fiscal impacts associated with the cannabis land use ordinances are described in the Board Letter dated February 6, 2018 (Attachment 6). No additional impacts would result from the changes proposed under this action (17ORD-00000-00019).

Attachments:

- 1. Findings for Approval
- P&D Staff Recommended Board Resolution amending the Uniform Rules for Agricultural Preserves and Farmland Security Zones (Case No. 17ORD-00000-00019)
 Exhibit 1 – P&D Staff Recommended Amendments to the Uniform Rules
- 3. APAC Recommended Board Resolution amending the Uniform Rules for Agricultural Preserves and Farmland Security Zones (Case No. 17ORD-00000-00019)

 Exhibit 1 APAC Staff Recommended Amendments to the Uniform Rules
- 4. Link to Final Program Environmental Impact Report and Revision Letter (Case No. 17EIR-00000-00003 and RV 01)
- 5. Government Code Provisions for Compatible Uses on Agricultural Preserves
- 6. Link to Board Agenda Letter for February 6, 2018
- 7. Maps Depicting Contracted Lands in Santa Barbara County

Authored by:

Mindy Fogg, Supervising Planner, 805-884-6848

Exhibit 5



January 16, 2020

County of Santa Barbara Planning Commission

S.B COUNTY PLANNING & DEVELOPMENT

Re: January 22, 2020 Santa Barbara County Planning Commission Agenda Item #2—Cannabis Zoning

Ordinance Amendments

Dear Chair Bridley and Planning Commissioners:

The Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties represents over 170 growers, shippers, farm labor contractors, and supporting agribusinesses. Our members grow diverse field and nursery crops such as broccoli, strawberries, wine grapes, vegetable transplants, flowers, and tree fruit. We appreciate the opportunity to comment on the Planning Commission's consideration of potential revisions to the Cannabis Zoning Ordinance. Our Board of Directors voted unanimously to submit this comment letter.

The Association advocates for thoughtful policy that anticipates and minimizes predictable land use conflicts. Our members have experienced similar conflicts with both hemp and cannabis (marijuana). Both hemp and cannabis cultivation have been the source of significant conflict with established Central Coast agriculture.

Based on the best information we have available and the extent of conflict that our members and others in the agricultural community have experienced in trying to grow near hemp and cannabis, we do not believe that hemp or cannabis cultivation is compatible with organic or conventional Central Coast agriculture.

Our Board of Directors and members have engaged in extensive, focused discussions since August. These extensive discussions and the experience of our members growing in close proximity to hemp and cannabis through a full production cycle have better informed our current policy position. Our policy position has evolved as we have become better informed on the specifics of hemp and cannabis cultivation, end uses, regulatory context, and experience of nearby agricultural operations. The Association believes in the value of a diverse, vibrant, and robust agricultural economy and communities and we support different types of Central Coast agriculture. We further believe that innovation and adaptation is essential to support agriculture and allow for future generations to continue to be viable in domestic agriculture in the face of increasing challenges related to labor, water, market, and the cumulative effect of regulatory and economic pressures. For these reasons we are open to opportunities that complement and secure a future for agriculture on the Central Coast and are mindful of the potential precedential implications of policy decisions. However, based on the experience of our members operating in real-world Central Coast conditions, all evidence suggests that cannabis is not similarly situated to agricultural crops and these differences are driving severe conflicts.

Hemp and cannabis are fundamentally different from other agricultural crops. Unlike any other crop, hemp and cannabis have demonstrated that it is virtually impossible to farm next to even when exercising best management practices in a manner consistent with proper and accepted customs and standards and local, State, and Federal rules and regulations.

Our members have reported conflicts with neighbors growing both hemp and/or cannabis in a variety of crops and locations in Santa Barbara and San Luis Obispo Counties. The conflicts that our members have experienced are not isolated to one particular location, individual, or crop type. Although there are some limited locations that have not generated conflict, the majority of our members operating near hemp and/or cannabis have experienced significant and acrimonious conflict. The types of conflict include disputes over normal cultivation activities, such as land cultivation, application of plant protection materials, application of fertilizers, and threatened litigation; other conflicts have included harvest crews reporting concerns from strong odors sometimes several miles away. Crop types that have been embroiled in conflicts have included broccoli, wine grapes, avocado orchards, and citrus orchards. Local businesses and community members that have been impacted by this conflict include farmers, harvesters, rural residents, shippers, custom machine operators, materials applicators, and farm labor contractors. Given the great extent and diversity of intrinsic conflicts, we restate that these experiences of conflict are not isolated events and should give pause to the future of hemp and cannabis cultivation on the Central Coast.

Although the significance of advocating for regulations weighs heavily on our Association, we cannot remain silent in the face of continued increases in the number of members whose ability to exercise best management practices is crippled by their proximity to hemp or cannabis cultivation.

Until we have evidence to the contrary we urge a conservative approach be exercised to maintain the viability of the established, diverse agriculture and a future for food crops on the Central Coast. Examples of policy and information gaps include broader State and Federal licensing of plant protection materials for hemp or cannabis cultivation and better understanding of odor concerns. We further believe that addressing liability protection for agriculturalists exercising best agricultural practices and their right to farm is a key component for compatibility between hemp or cannabis and other agricultural food crops.

In light of this information we urge you to consider the widespread and significant conflicts that hemp and cannabis cultivation have generated on the Central Coast demonstrating their incompatibility with existing food crops in Santa Barbara County.

Sincerely,

Claire Wineman.

Claire Wineman, President

Exhibit 6



COUNTY OF SANTA BARBARA AGRICULTURAL ADVISORY COMMITTEE

January 17th, 2020

County of Santa Barbara Planning Commission 123 Anapamu Street Santa Barbara, CA 93101

RE: January 22 Hearing on Cannabis Zoning Ordinance Amendments

Dear Chair Bridley and Planning Commission Members:

At the Agricultural Advisory Committee (AAC) meeting on January 9, the Committee had continued discussions regarding issues surrounding cannabis cultivation in Santa Barbara County. The discussion reflected the fact that the agricultural community has a variety of viewpoints on the issue, both negative and positive. AAC would like to articulate that there are multiple points of view from the different commodity groups on AAC and that there are differing concerns in regards to the cultivation of cannabis, and that because these issues are complex and therefore don't lend themselves well to short written summaries, we would welcome the opportunity to discuss them with you in person.

Therefore, AAC continues to offer to hold a joint Planning Commission and AAC meeting or workshop to further discuss cannabis cultivation in the County and provide the Planning Commission assistance in any way we can.

Thank you for your thoughtful consideration of these comments and engagement on this complex issue.

Paul Van Leer, Chair

Committee Members

Bradley Miles
Ron Caird
Sharyne Merritt
AJ Cisney
Randy Sharer
Carrie Jordan
Claire Wineman
Paul Van Leer, Chair
June Van Wingerden
Tyler Thomas
Andy Mills, Vice Chair
Chrissy Allen

Representing

1st District Supervisor, Das Williams 2nd District Supervisor, Gregg Hart 3rd District Supervisor, Joan Hartmann

3" District Supervisor, Joan Hartmann

4th District Supervisor, Peter Adam

5th District Supervisor, Steve Lavagnino, Chair

California Women for Agriculture

Grower-Shipper Association of SB and SLO Counties

Santa Barbara County Farm Bureau

Santa Barbara Flower & Nursery Growers' Association

Santa Barbara Vintners

Santa Barbara County Cattlemen's Assn.

California Strawberry Commission

Exhibit 7

RECEIVED

JAN 17 2020

S.B. COUNTY
PLANNING & DEVELOPMENT
HEARING SUPPORT



7

1/22/20

Planning Commission County of Santa Barbara Betteravia Government Center 511 East Lakeside Parkway Santa Maria, CA 93455

RE: Special Hearing: Agenda Item VII (2): Position Statement on Cannabis and Wine compatibility from Santa Barbara Vintners

Dear Planning Commission,

With the significant growth of cannabis in Santa Barbara County, there have been several unintended consequences creating significant conflicts with the existing wine industry to vineyards and wineries. We need better governing to help mitigate these problems.

The Santa Barbara Vintners represents a large portion of wine grape growers and wine producers who are concerned about the growth and proximity of cannabis. We would like to make it clear that we have many members who support recreational use of cannabis, and who also support the freedom to grow cannabis on a farm; however, all our members also believe that such support should not be construed as relinquishing their rights to farm, protect, and control their wine grape crop's quality and viability.

Our crop's viability and quality – unlike some other agriculture products – is largely predicated on its potential to deliver organoleptic characters (sense of smell, taste and feel) that are inextricably linked to where it is grown. In other words, soil and location matter. Therefore, unlike other ag goods where availability, quantity, price, and cleanliness (free of rot) may be valued above flavor, the grape and wine industry rely heavily on place and taste to establish and sustain its value.

This may create unique incompatibilities with a crop like cannabis which cannot have any trace of pesticide AND produces a host of volatile chemicals that may impact wine grapes' <u>primary quality parameter</u>: flavor and taste. As mentioned, these are critical to row crop goods and to wine grapes; however, flavor compounds drifting from one parcel to another may threaten grapes even more as it has the potential to influence the core value of wine grapes.

As a result, our members are very concerned about terpene drift from cannabis farms being absorbed by wine grapes in nearby vineyards impacting wine characteristics and quality. This phenomenon has been documented with eucalyptus trees (which produce a terpene common to many strains of cannabis) in peer reviewed literature and anecdotally across the wine industry. Recently, an SBV member demonstrated that terpenes drift by analyzing grapes in 2019 grown near a cannabis grow. The results demonstrated the presence of terpenes known to be

associated with cannabis on the grapes. Additionally, during a recent hearing for a cannabis grow on Baseline in Santa Ynez, another study (which used some of our member's data) corroborated the possibility of terpene drift.

In the summary of that study (attached), the author's note it would take 1,121 days to reach "threshold" concentrations of terpenes and therefore conclude, reasonably based on that timeline, it should not be of concern; however, they do not appear to have used a fine tooth, scientific comb through their data.

- 1. First, their main conclusion ought to have been: terpene drift is a real possibility.
- 2. Second, they do not substantiate why the "thresholds" they selected are worth abiding by.
- 3. Third, they selected 2,000 plants per acre planting density, which is quite low for cannabis.
- 4. They only examined four of the 120 terpenes that cannabis emits.
- 5. Additionally, the three other compounds they evaluated but ignore in their executive summary all have fewer days to reach "threshold."
 - a. The threshold selected for those compounds all exceed 100 parts per billion (ppb), which would by anyone in the wine industry- be considered substantial and likely to have an impact on wine grape flavor.
 - i. To note one example, beta-myrcene, the authors use 330 ppb as threshold and conclude it would take 75.9 days to reach such "threshold" concentration on neighboring vineyards at the planting density selected. Ignoring the fact that planting density may be debatable, any winemaker would be concerned with levels close to 50 ppb or more (and maybe even less). That is only 15% of the concertation used as "threshold." If one selected less arbitrarily as these authors 15% of 330 ppb. it would only take 11 days to reach such concentration on the grape tissue. This, unlike 1,121 days, certainly seems plausible.

It seems clear that inadequate research has been performed to determine the environmental impact and incompatibility of cannabis growing nearby vineyards. We know pesticide migration is having real economic impact through the loss of grape crops when the vintner cannot spray, which will certainly have measurable economic impact on the value of wine grapes in Santa Barbara County. Already, some vintners are being asked if their grapes are grown near cannabis which could impact the ability to sell their grapes to third party buyers.

The Cannabis Ordinance was not written with the proper information needed to avoid conflict between agriculture neighbors. For the County to govern the relationship properly, it is clear more research needs to be done and methods to insulate each crop incorporated. (Of note, grapes are harvested once per year and it takes 12-24 months to make wine, depending on the varietal. This will not be a swift process.)

We share the concerns of our farming neighbors regarding pesticide migration and drift, and the unprecedented testing of the cannabis product. Agricultural areas are inherently contaminated with traces of crop protectants and our valley is notoriously foggy and windy. Never has conventional agriculture been confronted by a product and the incompatibility that lies therein; therefore, we request that your commission direct staff to evaluate and propose the following:

- 1. All cannabis cultivation shall be sited and operated in a manner that prevents odor from being detected beyond property lines;
- 2. All cannabis cultivation shall be sited and operated in a manner that prevents cannabis terpenes from travelling beyond property lines;
- 3. Large buffers (with potentially dense landscaping requirements) along all property lines adjacent to existing agriculture, with a smaller buffer allowed if there is an indemnity agreement between the parties;
- 4. Reduce the allowable cannabis to a fraction of the total parcel size; and
- Verify affidavits for all applicants that are currently growing or have grown cannabis on the site after January 29, 2016 prior to issuance of any land use permit.

While not our preference due to visual impacts to the valley, odor control is more important than visual aesthetic. Therefore, we support the idea proffered by some that all grows be moved indoors where filtration and control of terpenes and aromas can more likely occur, and conflicts between adjacent agriculture are less likely to ensue.

Sincerely,

Alison Laslett

Markon

CEO, Santa Barbara Vintners

Board of Directors

Stephen Janes, President

Pence Vineyards & Winery

Katy Rogers, Vice President Jackson Family Wines

Laura Booras, Treasurer Riverbench Vineyard & Winery

Wayne Kelterer, Secretary

The Hilt

Callie Gleason Gleason Family Vineyards Karen Steinwachs

Buttonwood Winery & Vineyard

Justin Willett

Tyler Winery/Lieu Dit Winery

Nicholas Miller

The Thornhill Companies

Tyler Thomas

Star Lane/Dierberg Vineyards

Riley Slack

FOXEN Vineyard & Winery

Exhibit 8



Santa Barbara County Farm Bureau

Affiliated with the California Farm Bureau Federation and the American Farm Bureau Federation

May 29, 2020

Santa Barbara County Board of Supervisors Attn: Honorable Gregg Hart, Chair 105 East Anapamu Street Santa Barbara, CA 93101

RE: Santa Barbara County Farm Bureau Cannabis Policy

Dear Chairman Hart and Members of the Board:

The Santa Barbara County Farm Bureau (SBCFB) Board of Directors would like to make you aware of its policy regarding the cultivation of cannabis in our county:

Agriculture is the number one industry in Santa Barbara County. Therefore, the encroachment of incompatible uses into agricultural areas should be prevented.

The Santa Barbara County Farm Bureau supports solely, the indoor cultivation of all cannabis within a sealed structure. This practice would eliminate any unintended consequences between conventional agricultural operations growing within the vicinity of cannabis production and processing. These structures must be equipped with an air purifying system capable of retaining all odors emanating from the planting, growing, harvesting, drying, curing, grading, or trimming of cannabis. The Santa Barbara County Farm Bureau opposes the outdoor cultivation of all cannabis.

To accomplish having cannabis grown within sealed structures, the SBCFB Board of Directors respectively ask the Santa Barbara County Board of Supervisors to streamline the permitting process for installing sealed structures on property zoned to grow cannabis.

Thank you for your consideration.

Sincerely,

Teri Bontrager Executive Director

Exhibit 9

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COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES AGRICULTURAL EXPERIMENT STATION COOPERATIVE EXTENSION DEPARTMENT OF VITICULTURE AND ENOLOGY TELEPHONE: (530) 752-0380 FAX: (530) 752-0382

ONE SHIELDS AVENUE DAVIS, CALIFORNIA 95616-8749

March 3, 2020

RE: Potential impact of terpene and odor neutralizer drift on grape and wine composition

Introduction

I am a faculty member in the Department of Viticulture and Enology at the University of California, Davis California. I have more than 15 years of experience in the field of grape and wine chemistry. My research is multidisciplinary and focusses on factors that impact grape and wine characters so that the winemaking processes could be tailored by individual winemakers to achieve the desired flavor and aroma profiles in the finished wine. Grape and wine-related research has allowed the industry to move beyond mere commercial acceptability to the production of intricately crafted fine wines. My research has a strong emphasis on the sensory evaluation of wines and has contributed to the body of work that has made descriptive analysis of wines a standard procedure for wine evaluation and has had the added benefit of making wines less intimidating for the consumer.

Currently, there are considerable concerns regarding the adverse effect that high concentrations of certain terpenes can have on wine flavor, including terpenes commonly emitted from cannabis plants. Some common cannabis terpenes are associated with other plants that have been demonstrated to adversely affect wine quality. It is and continues to be my opinion that the concentration of proposed and existing cannabis facilities in close proximity to and upwind of winegrape-producing vineyards in the Santa Ynez Valley, have a reasonable potential to alter the terpene composition of grapes grown in adjacent vineyards. These changes in winegrape terpene composition and concentration could potentially change wine characteristics and result in wines considered tainted. If wines are tainted, it will have an adverse effect on the reputation and marketability of these wines and thus the viability of the wine industry in Santa Barbara County.

The California grape and wine industry is a \$31.9 billion dollar industry, with 637,000 acres of winegrapes planted. Based on a Stonebridge Research report published in December 2015, the Santa Barbara County wine industry has a \$1.7 billion dollar economic impact on the region. Recent legislation adopted by the Santa Barbara County Board of Supervisors established regulations for the cultivation of recreational cannabis within the unincorporated regions of the Santa Barbara County. In part, these regulations permit outdoor cultivation of cannabis, including in regions where the primary agriculture are vineyards.

Santa Barbara County wine industry stakeholders have expressed concern regarding the potential impacts that outdoor cannabis cultivation may have on vineyards, winegrapes, and the resulting wines. Concerns focus on the extent that a concentration of terpenes emitted from outdoor cannabis cultivation and proposed odor abatement systems that utilize odor neutralizing essential oils (namely, the system marketed by Byers Scientific & Manufacturing) will be absorbed by winegrapes and ultimately impact resulting wine style and quality. Despite these changes in local policy regarding cannabis cultivation, the federal government continues to enforce restrictive policies and regulations on research into the impacts of marijuana (cannabis) on both health and public welfare. As a result, research on marijuana (cannabis) generally has been limited in the United States. The effects of cannabis on adjacent crops, including crops with sensitive characteristics like grapes, has also been limited, leaving grape and wine industry stakeholders and policy makers without the evidence they need to make sound decisions regarding the permitting of outdoor cannabis cultivation and odor abatement systems that utilize essential oils near vineyards and in designated American Viticultural Areas.

This lack of evidence-based information on the potential impacts of the cannabis industry on established vineyards creates a very real risk to the future viability of the grape and wine industry in Santa Barbara County and other counties that have or may adopt regulations allowing outdoor cannabis cultivation and/or odor abatement systems that use vaporized essential oils sited near vineyards. Santa Barbara County is currently considering permits for outdoor cannabis cultivation that rely upon vaporized essential oil odor abatement systems which individually and cumulatively could have potential significant impacts if sited near established vineyards. Until further research can be conducted, the wine industry and policymakers must rely on previously conducted research into how winegrapes react to volatile compounds from the atmosphere to draw conclusions about potential impacts of cannabis and essential oil vapors to existing vineyards and resulting wine quality.

Research has conclusively shown that winegrapes have porous skins and can absorb volatile compounds from the atmosphere. Well-known examples are volatile phenols from wildfire smoke (Kennison et al., 2009; Krstic et al., 2015) and Eucalyptol (1,8 cineole) from Eucalyptus trees (Capone et al., 2012). New research also indicates Eucalyptol absorption on to grapes from the invasive plant Artemisia verlotiorum (Poitou et al., 2017) and α-pinene absorption from nearby Monterey cypress (Capone 2017). Research has further shown that cannabis emits volatile terpenes into the atmosphere (Wang et al., 2019). As such, we may use this existing research to analogize and draw conclusions regarding the potential impacts of cannabis terpenes and essential oils on winegrapes. My conclusion, based on my background and familiarity with how winegrapes react to volatile phenols transmitted in air and what we know of terpenes such as 1,8-cineole and α pinene, is that terpenes in the atmosphere will absorb on to grapes and, depending on the concentration and frequency of exposure, can potentially pose a threat to the grape and wine industry.

Known Impacts of Smoke Taint

Volatile phenols are naturally synthesized in winegrapes and are also released into wine during barrel aging, as toasting of the oak barrels will release the same compounds. However, when the amount of volatile phenols absorbed by the grape berry as well as vine leaves are excessive, this could result in an undesirable taint in the wine called "smoke taint". This taint can greatly impact the salability of the impacted winegrapes and can make the resulting wine unmarketable.

There is already a body of research that studied the impacts that wildfires have on wines produced with grapes that have been affected by wildfires. In the case of wildfires specifically, large amounts of volatile phenols are released into the air during the fires due to the thermal degradation of lignin in wood. When volatile phenols are emitted into the air and absorbed by the grape berry and vine leaves in sufficient quantities, this results in an undesirable effect called "smoke taint" in the wine. Smoke taint is characterized as a wine with excessive smoky aroma and an ashtray-like aftertaste. It is generally accepted as an undesirable characteristic of wines, rendering affected wines unsaleable.

It has been shown that the risk of smoke taint increases with repeated and continual exposure to the volatile phenols released from the thermal degradation of lignin in wood. These compounds are absorbed continually by the exposed grapes with each exposure and are stable within the grapes until harvest and processing when these compounds are released within the fermenting must (crushed grapes undergoing alcoholic fermentation). The grape and wine industry have been significantly impacted by smoke exposure in the last three years.

Based on the foregoing, there is significant evidence that winegrapes absorb volatile phenols emitted into the surrounding atmosphere, and such absorption has resulted in significant impacts to the characteristics of the resulting wines, including making such wines unsaleable.

Known Impacts of Eucalyptus Taint

In addition to the absorption of volatile phenols released during wildfires, winegrapes are known to absorb ambient terpenes. Terpenes are a large and diverse class of volatile organic compounds, produced by a variety of plants, including cannabis. They often have a strong odor and their function in the plant can be to protect the plant against herbivores or attract pollinators. Because these terpene compounds are volatile, at ambient temperature they can be released in the air (can evaporate from the plant oils where they are present) and travel with atmospheric conditions.

The most studied impact of terpene emissions on winegrapes and resulting wines is Eucalyptus taint, which is mainly caused by a terpene called 1,8-cineole or Eucalyptol. Capone and coworkers showed during a three-year vineyard study that the Eucalyptus taint in wine was not only caused by 1,8-cineole but also that this terpene originated from Eucalyptus trees nearby vineyards (Capone et al., 2012). Eucalyptus oils consist mostly of 1,8-cineole, although depending on the species this can vary from a 60% to 90% contribution. Eucalyptol in wine is described as a medicinal, camphoraceous, fresh/minty/cool character. In high concentrations this is seen as a "taint" as it overpowers the wines' other inherent characteristics and is not a winegrape varietal characteristic. Another study by Capone (Capone et al., 2011) showed that Eucalyptol can also be present in grape skins and MOG (materials other than grapes such as the stems and leaves) through absorption of the terpene in grapevine tissues. Eucalyptol, or 1,8-cineole, is present at significant concentrations in the emissions from some strains of cannabis. To clarify, this study found Eucalyptol concentrations above odor detection levels in wines which was caused by airborne transmission of terpenes and the absorption of such terpenes by both the winegrape berries and surrounding vine tissues from the air. This is separate from Capone's observations where Eucalyptus stems and leaves were present in the grapevine canopy and subsequently harvested

with the winegrapes which resulted in even higher levels of Eucalyptol in the resulting wines. More recently, Poitou et al. (2017) showed that green character observed in French Cabernet Sauvignon and Merlot wines was related to the absorption of 1,8-cineole from an invasive plant (Artemisia verlotiurum) present in some vineyards.

Terpenes present in wines have very low aroma detection threshold levels and ETS Laboratories determined that the aroma (odor) detection threshold level for California Merlot is 1.1 μ g/L. Herve et al., (2003) reported a recognition threshold of 3.2 μ g/L in red wine. Irrespective, these are detection threshold levels in the parts per billion range. In other words, very low levels of terpenes are detectable in wines and thus low levels of terpene absorption can potentially impact wine characteristics and thus wine quality.

The first part of the Capone study focused on making wines from grapes from two different vineyards harvested at set distances from the *Eucalyptus* trees. Their results clearly indicated a large impact due to distance from the terpene source, which in this case are the *Eucalyptus* trees. Above aroma threshold levels of 1,8-cineole were present in the wines made from grapes up to 50 meters from the *Eucalyptus* trees. An important fact to remember is that diffusion of volatile compounds depends on several factors including temperature, air pressure and movement. It will diffuse until the environment is in equilibrium. Thus, the distance of travel will depend on initial concentration as well as the listed environmental conditions which will be unique for each site.

In the Capone study, only two sites were utilized, which resulted in different levels of 1,8-cineole in the wines $(9.5-15.5~\mu g/L)$. The study confirmed the airborne transfer of volatile organic compounds as found by other studies (Kennison et al., 2009). The study also showed that even higher concentrations of 1,8-cineole were present in winegrape stems and leaves, potentially due to their larger surface area or difference in exposure to the atmosphere or epidermis (outer layer of tissue in a plant). Thus MOG (material other than grapes, including winegrape stems and leaves that were exposed to and absorbed airborne terpenes) can also be a source of 1,8-cineole. This is particularly concerning due to labor costs and shortage which often necessitates the use of mechanical harvesters where more MOG are included.

Capone also found that *Eucalyptus* leaves and bark can lodge in the grapevines and be included during harvest which made a significant contribution to the 1,8-cineole composition of the wine when included in the must. However, even wines made from hand-picked grapes with no MOG or *Eucalyptus* leaves and/or bark, produced wines with above aroma threshold levels of 1,8-cineole if made from winegrapes grown within the first 50 meters from *Eucalyptus* trees. Including grape stems and some grape leaves (which, as described above, also were shown to absorb airborne terpenes), as will be normal during most fermentations, will result in even higher levels of 1,8-cineole.

This study confirmed that terpenes can become airborne and absorb on to other plant surfaces such as grape berries, leaves and stems, and that such absorption has resulted in significant impacts to the composition, quality, and flavor profiles of the resulting wines. Terpenes could potentially similar to smoke taint development, continually absorb on to grapes with continued exposure to terpenes. However, this needs to be investigated. New research by Capone (2017) showed that α-

pinene can also absorb on to grapes in close proximity to Monterey cypress trees and alter the sensory profiles of the wines.

Based on scientific evidence, it is reasonable to conclude that other terpenes present in cannabis will also absorb on to grapes. Absorption of external terpenes onto winegrapes can impact the character of the resulting wines.

Terpene Drift and Potential Impact

Cannabis plants are known for their strong smell due to high concentrations of a range of different terpenes. The chemotype, growing time, and canopy area effects the concentration of terpenes emitted into the air (mostly monoterpenes, C_{10} compounds, and sesquiterpenes, C_{15} compounds). Terpene concentrations in *Cannabis* plants are in the range of g/kg quantities, whereas the threshold levels of these compounds are in the μ g/kg range (Aizpurua-Olaizola et al., 2016). This is a 10^6 order difference between the cannabis terpene concentration and terpene odor detection levels. Research has shown terpene emission rates of up to 8.7 μ gC g⁻¹ hr⁻¹ depending on the strain of *Cannabis spp* (Wang et al., 2019). Additionally, β -myrcene, eucalyptol and d-limonene were the most dominant terpenes in the emissions for the four strains evaluated. Other important terpenes in cannabis plants are α -pinene, β -pinene, linalool, α -terpineol, β -caryophyllene, hashishene, α -humulene and more. New terpenes are continually being identified in cannabis plants. A more recent report by Vizuete (2019) confirmed detectable emissions of terpene biogenic volatile organic compounds and that such emissions are dependent upon the strain of *Cannabis spp*.

Terpenes native to winegrapes are biosynthesized in winegrapes and can play an important role in the varietal character of a winegrape variety. Additionally, during the winemaking process, yeast and bacteria can also synthesize small amounts of terpenes (Carrau et al., 2016). The specific combination of terpenes present in winegrapes depends on the variety, but the total terpene levels will be in the order of $\mu g/kg$ and $\mu g/L$ amounts in winegrapes and wines respectively (Waterhouse et al., 2017). As evidenced by the studies of 1,8-cineole referenced above, it is clear that changing the level, relative ratio, and combination of terpenes within winegrapes and thus the resulting wines, could change the character of the wine significantly. Such changes could be a result of proximity to plants emitting 1,8-cineole, or other terpenes, including those emitted by *Cannabis* plants.

Furthermore, research into the effects of nearby *Eucalyptus* trees on winegrapes showed absorption by winegrapes at 1 μ g/kg to 5 μ g/kg levels of Eucalyptol, whereas initial preliminary data on winegrapes show increases of 200 μ g/kg to 500 μ g/kg of key cannabis terpenes in winegrapes grown close to *Cannabis* plants. This could indicate a much larger impact of cannabis then those determined for *Eucalyptus* trees. The Vizuete report (2019) erroneously used this preliminary data as threshold values, determining that with the calculated cannabis terpene emission levels, these thresholds will not be reached in grapes. Odor detection threshold values should be determined according to the ASTM (Designation E679 – 19) standard. The best estimate threshold value is the lowest level at which a consumer can consistently identify a sample spiked with the compound of interest as being different from another.

If one terpene or a combination of terpenes overpowers the wine (due to the introduction of foreign

terpenes), making it one-dimensional or imparting unpleasant characters to the wine, the wine may be considered tainted. Furthermore, absorption of terpenes on to the winegrapes may occur over the full growth period of the winegrapes, which is several months from pea size to maturity. However, it is currently not known whether terpenes, like volatile phenols, will have a build-up effect and should be investigated. With continued exposure, this means that there may be no specific high terpene period needed for potential impact on the winegrape's natural terpene composition.

Further research is needed to quantify cannabis-specific terpene emissions rates from *Cannabis* cultivation, as well as distance of diffusion and absorption on to winegrapes under different environmental conditions. In addition, kinetics and mechanism of absorption on to grapes need to be investigated as well as the impact thereof on the resulting wine character.

Potential Impact of Vaporized Essential Oils

The above is similarly concerning in light of the proposed odor neutralizing essential oils proposed by many of the *Cannabis* cultivation projects, namely the system installed by Byers Scientific & Manufacturing. Such systems emit vaporized essential oils into the air via piping that surrounds the perimeter of *Cannabis* cultivation sites. According to the manufacturer's materials, the efficacy of such systems is predicated on the vapors traveling in the air and making contact in the airstream with the odor compounds emitted from *Cannabis*. Upon contact, the odor molecules are "neutralized". In order for such vapors to make contact with odor compounds, the vapors are pushed through small holes in the perimeter piping away from the *Cannabis* cultivation areas and toward areas that may be negatively affected by malodors, namely neighboring properties.

Essential oils mainly contain terpenes and in reality 'neutralization' is masking of unpleasant smelling terpenes by releasing more pleasant-smelling terpenes. Thus, in effect even more terpenes will be present in the atmosphere surrounding grapes which can potentially absorb and alter the character of the grapes and thus the resulting wines.

Complexity of a Proposed Study

Investigations into the potential impact of *Cannabis* emitted terpenes on winegrapes are complex due to the significant impact of the environment on diffusion of volatile organic compounds. Distance of diffusion will depend on the concentration at the source, as well as environmental conditions. Approximately 80 different terpenes have been identified in different cannabis strains while there are approximately 50 different terpenes in winegrapes. First the presence of atmospheric terpenes at set distances from *Cannabis* cultivation needs to be shown as well as their absorption on to different grape tissues. The impact thereof will be evaluated by producing wines using standard experimental procedures, made from grapes harvested at set distances from *Cannabis* cultivation. These wines will be analyzed both sensorially and chemically to determine their terpene profiles and its relation to sensory characteristics of the wine. Additionally, best estimate thresholds of the identified cannabis terpenes should be determined. However, as compound expression is impacted by the matrix (wine) including other terpenes present, this can become very complex. Marker compounds with their detection threshold levels and their consumer rejection levels should be determined to establish risk analysis. However, due to potential synergistic impacts, this is a very complex process.

Conclusion

Based on the foregoing analysis using the research available to date on the impacts of airborne volatile compounds on winegrapes, outdoor *Cannabis* cultivation could have a potentially significant impact on the terpene composition of winegrapes grown near such *Cannabis* cultivation sites. This impact is even more likely when *Cannabis* is grown on large scale (either as a single project or multiple projects clustered together) with a large canopy area that is collectively emitting *Cannabis* terpenes into the air in regions where vineyards are in close proximity. The impact will be further exacerbated if the proposed Byers systems are used and proactively emit odor neutralizing essential oils into the air, directed toward such vineyards.

Changes to the terpene composition of winegrapes has been shown to impact resulting wine quality in prior studies of 1,8-cineole and now α -pinene. In light of the cultural significance and economic impact of the wine industry in California, it is important that care be taken to avoid adverse impacts while research seeks to provide objective metrics for allowable concentrations of high volatile organic compound releasing plants cultivated close to high quality wine grapes.

Submitted by,

Anita Oberholster, PhD

Associate Cooperative Extension Specialist Enology Department of Viticulture and Enology University of California, Davis California, 95616

Reference list:

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Estimated emissions, concentrations, and deposition of monoterpenes from an outdoor *Cannabis* farm

Final Report

Prepared for: Brett Vapnek The Hacienda Company, LLC brett@thehacienda.co

Prepared by:
Dr. William Vizuete
Chief Scientific Officer
Pacific Environmental Analytics LLC
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December 6, 2019



Table of Contents

List of Figures	<i>3</i>
List of Tables	
Executive Summary	
Background	
1: Emission Factors Using Leaf Enclosure Measurements	
2: Emission rates for Cannabis Farm	8
3: Predicted Gas-Phase Concentrations	9
4: Deposition Rates	
Reference:	

List of Figures

List of Tables

Executive Summary

The purpose of this study is to determine whether or not it is feasible for cannabis monoterpenes from the proposed project ('Hacienda' 3800 Baseline Avenue Santa Ynez California) to taint grapes on a neighboring property (Appellant, 3950 Baseline Avenue).

The appellants cite a peer reviewed publication ("Capone") which identifies 1,8-cineole (eucalyptol) as having a detrimental impact on grapes. (The monoterpene 1,8-cineole is present in eucalyptus trees and some, but not all, cannabis strains.) Averaging across three years of their reported data, the study determined amounts of eucalyptol per grape material of 2.6 ug/kg. We sought to determine if it is possible for cannabis monoterpenes from the Hacienda project to reach this same threshold value of eucalytpol per grape material – 2.6 ug/kg – at the neighboring farm.

It should be noted that 1,8 cineole (eucalyptol) is the only monoterpene to be identified as potentially causing wine taint. No other monoterpenes (such as beta-myrcene, alpha-terpinene, and terpinolene) have been found in peer reviewed studies to cause taint.

To run this model, we completed the following tasks over the last several months:

- 1) Determination of monoterpene emission factors using measurements from five Cannabis strains.
- 2) Creation of monoterpene emission rates using emission factors for the proposed Cannabis farm.
- 3) Prediction of gas-phase concentrations using the Cannabis farm's emission rates simulated over three seasons using local meteorology.
- 4) Determination of deposition rates from predicted gas-phase concentrations to grape material and comparison with the assumed threshold values.

Our model was based on the size and location of the proposed project – 3800 Baseline Ave – and utilized local meteorological data from the Santa Ynez airport.

The following work describes the results of the estimation of Cannabis farm emissions, the prediction of downwind concentrations, and the deposition to grape material of four monoterpenes produced by certain cannabis strains: 1,8-cineole, beta-myrcene, alphaterpinene, and terpinolene. The modeled rates of deposition were then compared with certain assumed threshold values defined for these terpenes.

The major findings from the completion of these tasks are listed below.

 For the cannabis monoterpenes to reach threshold values (that potentially taint the grapes), they would have to emit at the highest rate, at the average predicted gas-phase concentrations, for 1,121 days straight for 1,8-cineole. Therefore, it is highly unlikely that cannabis from the Hacienda project would taint any grapes at 3950 Baseline Ave because cannabis is only grown seasonally, not year-round, and grapes are grown seasonally, not all year long. Furthermore, the cannabis is only emitting monoterpenes for 21 days prior to harvest. And if Hacienda had a maximum of 3 harvests per year, that would roughly only result in 63 days of emissions — compared to the 1,121 that would be required to taint the grapes. In other words, it would take 1,121 continual days of cannabis strains that have eucalyptol (not all strains have eucalyptol) emitting at the highest rate, without real world deposition loss (such as photochemistry) to result in grape absorption of terpenes at the threshold level, identified in the Capone study (of 2.6 ug/kg).

- Assuming mature Cannabis plants are emitting monoterpenes for 21 days prior to harvest, we estimate the fraction of the threshold values reached would be 1.9% for 1,8-cineole.
- Our model was very conservative and did not include real-world losses of gas-phase concentrations due to photochemistry and deposition during transport and thus are upper bound estimations. In reality, gas-phase concentrations of monoterpenes in the atmosphere have an average lifetime of minutes to hours in full sunlight, further reducing the possibility that the emission would travel to the nearby farm and taint the grapes. Our study did not include the real world losses due to photochemistry.
- Only 3 out of the 5 cannabis strains we evaluated had emission factors of eucalyptol. No 1,8-cineole emissions were found in two strains Banjo, Presidential OG. The remaining strains had very small emission factors of eucalyptol ranging from 0.001-0.01 ug /g/hr.

Background

There currently exists only one peer-reviewed study that has linked the influence of 1,8-cineole in vineyards to taint in corresponding red wines [1]. This study (Capone) examined the effects that eucalyptus trees had on nearby vineyard operations. The study found the largest concentrations of 1,8-cineole in samples closest to eucalyptus trees. The study results were used to determine a threshold value for 1,8-cineole against which modeled deposition rates from predicted gas-phase concentrations could be compared.

Data from this study in Figure 1 shows 1,8-cineole concentrations in grape tissue from four grapevine rows over three vintages. Triplicate sampling was conducted at each of the three positions within each row. Using the highest measured values closest to the eucalyptus trees, a three year average was calculated of 2.6 ug/kg of 1,8-cineole per grape material. This average concentration was used as the threshold value for 1,8-cineole in the present modeling analysis.

Similarly, at the County of Santa Barbara Board of Supervisors meeting on August 20, 2019, data was publicly presented as shown in Figure 2. The figure shows terpene concentrations in grape material from two farms, one near a cannabis farm, and the second without a cannabis farm. There are three monoterpenes highlighted in yellow that were only found in the grape tissue near the cannabis farm. The data suggests the source of the monoterpenes was from the cannabis farm. The data does not suggest these monoterpenes had a deleterious effect on the quality of grape tissue, or the resulting wine produced. Nevertheless, for purposes of the present modeling analysis, the data presented was used to determine threshold values for the three monoterpenes identified: (i) 0.3801 mg/kg for beta-myrcene, (ii) 0.1931 mg/kg for alphaterpinene, and (iii) 0.5632 mg/kg for terpinolene.

The goal of this work was to determine the amount of deposition of gas-phase concentrations of 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene that could occur on grape material located approximately 700 feet downwind, and then compare those concentrations with the assumed threshold values previously discussed. This goal was achieved by accomplishing the following tasks:

- 1) Determine emission factors using leaf enclosure measurements for five different strains of Cannabis;
- Estimate emission rates for the proposed Cannabis farm based on the anticipated canopy size;
- 3) Predict gas-phase concentrations using EPA-approved dispersion modeling; and
- 4) Estimate deposition rates onto grape material located approximately 700 feet downwind.

Details on the methodology used in these tasks and results are described below.

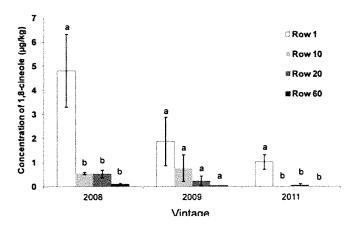


Figure 1. Concentration of 1,8-cineole (ug/kg) in grapes from different rows at set distances from the Eucalyptus trees over three vintages. Error bars represent the standard error of the mean for three replicates. Different letters indicate significant differences between the means ($p \le 0.05$).

Sample name			£ 12		10.0	Values in
sample name	beta-Caryophyllene	alpha-Humulene	beta-Myrcene	alpha-Terpinene	Terpinolene	PPM
Site 1 SB	12.4066	12.9406	0.3801	0.1931	0.5632	mg/kg
SL SB Control	7.5387	14.0317	0	0	0	mg/kg
and the second section of the second section of the second section of the second section section section sections.	anglis agreem complete, and a consequent discount regard good are second	Situate in the But could also be extended to the original transition of the desired by the first transition of the first trans	Found in Cann	abis but not in grape	·S.	*
Literature Defined						
Thresholds	3-250+	3-10	0-0.009	0.006-0.035	0.4-0.5	
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Figure 2. Monoterpene analysis on grapevine tissue at two vineyards near a hoop house grow (Site 1 SB) and a second away from a Cannabis grow (SL SB Control).

1: Emission Factors Using Leaf Enclosure Measurements

The efforts to accomplish this task were completed by Synergy Environmental Solutions (SES) and led by Dr. Alex Guenther. Dr. Guenther is an international leader in atmospheric and terrestrial ecosystem research who has published more than 280 peer-reviewed journal articles. He has led more than 40 integrative field studies on six continents in tropical, temperate, and boreal ecosystems to provide observations to advance understanding of biogenic emissions and their role in air quality and climate. Dr. Guenther led Pacific Northwest National Laboratory's Environmental Molecular Science Laboratory and was Senior Scientist and Section Head at the National Center for Atmospheric Research (NCAR). The overall goal for SES was to quantify the emission capacities of five Cannabis strains at the mature growth stage to investigate their

potential impact on atmospheric distributions of specific biogenic volatile organic compounds (BVOCs). Although there are existing models available for estimating BVOC emissions from plants generally, the lack of emission factors for specific Cannabis strains limits accurate estimation of their emission rates. Therefore, the quantification of speciated emission factors is required to know the impact of a specific strain of Cannabis.

To determine emission factors for 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene we conducted enclosure measurements from five (5) different Cannabis strains growing in a



Figure 3. Example of leaf enclosure system used to develop emission factors.

greenhouse environment (Forbidden Fruit, Banjo, Wedding Cake, Presidential OG, and Gorilla Glue), and calculated emission factors in $\mu g/g/h$ (at leaf conditions of temperature= 30° C and light = 1000 μ mol visible light m⁻¹ s⁻¹). An example of the leaf enclosure used in this study is shown in Figure 3. The primary output is a dataset of terpenoid emission factors that is suitable for use in biogenic emission models that drive air quality simulations. We found that a bag enclosure system with TD-GC-MS/FID analysis is a suitable approach for characterizing Cannabis terpenoid emission factors and leaf cuvette measurements generally agree with bag measurements. However, there are uncertainties associated with potential emission perturbations that should be further investigated. Our results found ninety-seven terpenoid compounds including: 1 homoterpene, 30 monoterpenes, 5 aromatic monoterpenes, 21 oxygenated monoterpenes, and 40 sesquiterpenes. On average, monoterpenes contributed 69% and sesquiterpenes 31% of the total terpenoid emission.

Based on measurement data emission factors were developed for 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene. It is important to note that there was a complete lack of 1,8-cineole emissions from two strains: Banjo, Presidential OG. The other strains had relatively small emission factors ranging from 0.001-0.01 ug /g/hr.

2: Emission rates for Cannabis Farm

Hacienda reported 20,000 plants based on 2,000 plants per acre and a total canopy acreage of 10 (or 15 acres of cultivation area as defined by the County). The farm also reported that the 20,000 plants were evenly distributed (4,000 plants) among five strains: Forbidden Fruit, Banjo, Wedding Cake, Presidential OG, and Gorilla Glue. We were also provided, based on grower provided information, the dry plant weight of a mature plant in the outdoor grow for each strain. Using these data, and measured emission factors, emission rates of 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene were determined from the proposed *Cannabis* farm.

Predicted Gas-Phase Concentrations

Air dispersion modeling was completed using AERMOD version 19191 to determine the 1-hour gas-phase concentration of 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene using the emission rates described above. AERMOD is a U.S. EPA approved steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and

scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain [2].

It was assumed that 10 acres of canopy will be spread over roughly 15 acres as shown in red shade in Figure 4. All model predictions were completed for August through October in 2016, 2017, and 2018 using observed meteorological data from Santa derived Ynez airport monitoring station resulting in 2,160 simulated hours. September and October are also the days with the lowest wind speed, and the highest chance for deposition. Figure 4 provides the location of the farm at 3800 Baseline Avenue Santa Ynez, CA 93460 that was modeled as an area source denoted in a red shade. The receptor location where 1,8-cineole, alpha-terpinene, beta-myrcene, and



Figure 4. The location of the farm, modeled as an area source, shown as a red shade. Also shown the receptor where model predictions were made denoted by a red cross.

terpinolene concentrations were predicted is at 34°37'57.4"N 120°04'09.8"W (located approximately 700 feet downwind) and is shown in Figure 4 as a red cross.

The model predicted 2,160 hourly averaged model predictions of concentrations at the receptor location for 1,8-cineole, betamyrcene, alphaterpinene, and terpinolene. Table 1

Table 1. Identified monoterpenes and their fraction of total monoterpene emissions from the Cannabis farm and the AERMOD predicted concentrations averaged over 2,160 hours.

Monoterpene	Fraction of total Emissions	Concentration (ug/m3)
1,8-cineole	1.0E-04	2.7E-04
Beta-myrcene	2.2E-01	5.8E-01
Alpha-terpinene	1.7E-02	4.4E-02
Terpinolene	1.6E-02	4.2E-02

shows the average concentrations for the entire modeling period. Beta-myrcene is the strongest emitter and thus had the largest predicted downwind concentrations. Given the relatively small emissions of 1,8-cineole, the predicted concentrations of this monoterpene were three orders of magnitude smaller than beta-myrcene.

4: Deposition Rates

Comparison with threshold values requires estimation of deposition rates of the gas-phase molecules into the grape tissue. Deposition from the gas-phase is an important process that has to be addressed in all air-quality models. Wesely (1989) developed a parameterization scheme for estimating gaseous dry deposition velocities, which has been widely used in a number of models [3]. A review of available dry deposition models has been reported by Wesely and Hicks (2000) [4]. Most existing dry deposition models utilize the multiple resistance analogy approach when parameterizing the deposition velocity to vegetation and other surfaces.

This analysis relied on the deposition velocities estimated in the Comprehensive Air Quality Model with Extensions, CAMx6.10 [5, 6] for this location. The model and protocols used in this study are based on the Western Air Quality Modeling Study (WAQS) for 2011 [6, 7]. The WAQS 2011b baseline model simulation period runs from June 15th to September 15th, 2011. All data and supporting documentation are publicly available via the Intermountain West Data Warehouse (IWDW) website [8]. At the location of the receptor this study predicted an average deposition velocity for the terpene (TERP) species of 6.7 e-5 m/s [6, 7]. Using this velocity, and predicted gas-phase concentrations, a flux of 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene can be determined. Assuming a yield of 3 tons of grapes per acre [9] the rate of 1,8-cineole, beta-myrcene, alpha-terpinene, and terpinolene per mass of grape tissue was calculated. These results were then used to determine how long it would take to reach the threshold values and results are shown in Table 2.

It should be noted that although terpenes, once released, are highly reactive to sunlight and other environmental factors, the modeling did not account for photochemical or other types of degradation and loss that can often occur during transport. In addition, the modeling assumed a smaller plume rise than one would normally expect from a cannabis farm of this size, and for these reasons the modeling results should be considered very conservative.

As shown in Table 2 to reach threshold values would require, at the predicted average gas-phase concentrations, 1,121 days for 1,8-cineole, 75.9 days for beta-myrcene, 1,005 days for alphaterpinene, and 1,486 days for terpinolene. Assuming that mature *Cannabis* plants are emitting for 21 days prior to harvest, the fraction of the threshold values reached would be 1.9% for 1,8-cineole, 27.7% for beta-myrcene, 4.1% for alpha-terpinene, and 1.4% for terpinolene.

Table 2. The identified monoterpenes and their reported threshold values (THV) used in this study. Also shown are the number of days to achieve the THV at average gas-phase concentrations. Assuming a 21-day growing season for emissions of a mature Cannabis plant, data is shown as the percentage of THV values that are achieved in that time period.

Monoterpene	Threshold Value (ug/kg)	Time to reach THV (days)	Season fraction of THV (%)
1,8-cineole	2.6	1121	1.9
Beta-myrcene	381	75.9	27.7
Alpha-terpinene	193	1005	4.1
Terpinolene	563	1486	1.4

Reference:

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- 2. EPA. *AERMOD Modeling System*. 2019; Available from: https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models#aermod.
- 3. Wesely, M.L., Parameterization of Surface Resistances to Gaseous Dry Deposition in Regional-Scale Numerical-Models. Atmospheric Environment, 1989. **23**(6): p. 1293-1304.
- 4. Wesely, M.L. and B.B. Hicks, *A review of the current status of knowledge on dry deposition*. Atmospheric Environment, 2000. **34**(12-14): p. 2261-2282.
- 5. ENVIRON. *CAMx User's Guide Version 6.10*. 2013 2 May, 2019]; Available from: http://www.camx.com/files/camxusersguide_v6-10.pdf.
- 6. ENVIRON and Alpine., Attainment Demonstration Modeling for the Denver Metro/North Front Range 2017 8-Hour Ozone State Implementation Plan. 2017: Western Air Quality Study Intermountain West Data Warehouse.
- 7. Adelman, Z., et al., Western Air Quality Modeling Study Photochemical Grid Model Final Model Performance Evaluation. 2016.
- 8. WAQS, W.A.Q.S. *IWDW-WAQS Wiki*. 2017 2 May, 2019]; Available from: http://views.cira.colostate.edu/wiki/#WAQS.
- 9. EViticulture. *How many grapes can I produce per acre?* 2019; Available from: https://grapes.extension.org/how-many-grapes-can-i-produce-per-acre-how-much-yield-can-i-expect-when-they-are-in-full-production/.

Round 1, Terpene Analysis on Grapevine Tissue near Hoop House Grow

							W. 1907	Values in
Date	Sample name	beta-Caryophyllene alpha-Humulene	alpha-Humulene	peta-	Myrcene alph	a-Terpinene	beta-Myrcene alpha-Terpinene Terpinolene PPM	PPM
6/8/201	6/8/2019 Site 1 SB	12.4066	A CONTRACTOR OF THE CONTRACTOR	12.9406	0.3801	0.1931	0.5632 mg/kg	mg/kg
6/8/201	6/8/2019 SL SB Control	7.5387	THE AN ARMATER AND PARTIES AND ARRANGED ARRANGED AND ARRANGED ARRANGED AND ARRANGED	14.0317		The second secon	0	0 mg/kg
				Four	Found in Cannabis		je v na výmen teh semente výmen semente výmen semente výmen semente výmen semente výmen semente výmen semente	
	Lliterature Defined							
	Terp Armoa Thresholds	3-250+	3-10	0-0.009		0.006-0.035	0.4-0.5	
NOTES:	higher value in one	higher value in one VOC does not necessarily signify it is more likely to be perecieved.	arily signify it is more	likely to be	perecieved.			



March 13, 2020

Santa Barbara County Board of Supervisors RE: Busy Bee Cannabis Cultivation Permit

Dear Chair and Supervisors of the Board

I am President of Star Lane & Dierberg Vineyards, LLC, a member of the AAC, and a member of the Board of Santa Barbara Vintner's Association. I represent several interested parties: both wine growers and winemakers. We have several concerns with the upcoming appeals of cannabis projects because, along with other agriculture entities, we believe <u>large scale</u> cannabis grows are not compatible with conventional & legacy agriculture under the current ordinance.

We urge the following actions:

- Please continue these appeals until the Planning Commission has time to make recommendations to the cannabis ordinance. The PC is pursuing amendments per your direction, are making reasonable progress, and will likely recommend amendments that could impact Santa Rita Valley Ag's operation. Its stands to reason they should be able to complete that work prior to precedent setting grows are permitted.
- 2. If #1 is not possible, please consider the following conditions to the projects:
 - a. Limit terms of LUP to 2 years.
 - b. Contain odors within the commercial cannabis activity. It is our opinion this can best be accomplished by:
 - i. Capping outdoor grows in Ag II to 10 acres or less (this would be substantially higher allowance than all other county's).
 - I drive the Highway 246 frequently and can attest that the 9 acres
 of cannabis cultivation that Busy Bee farms does smell up to 0.4
 miles east of the property at peak flowering. Keeping their grow at
 this scale will limit the frequency and time with which that odor
 occurs. If the grow is allowed to expand per their request, odor
 control will become a nuisance.
 - ii. Increase vegetative screening along eastern border.
 - iii. Adding 3,000 foot setbacks
 - iv. Prohibit onsite drying.
 - c. Require a release of liability for legally applied crop management materials, tools, and practices.

A few facts that drive our decisions:

- In at least two cases SB Vintner members lost tens of thousands of dollars of crop to powdery mildew because they changed legal spray practices due to threatened litigation from a neighboring cannabis grower.
- We've discovered that total wine sales account for ~\$165,000,000 in taxable revenue, and only 13% of wineries account for 55% (\$90+ million) of that total. The majority (85%) of these top 35 wineries are in rural Ag II areas and their business would be significantly impacted by cannabis odors.
 - We would expect to see a desire from the County to increase its revenues. We share that desire. However we would hope that revenue generation would be new, not at the expense of existing business such as rural wineries.

- Our product is principally valued on its aromas (70%) and taste (30%).
 Persistent and even semi-frequent cannabis odors will have an impact on our customer's ability to assess the value of our product.
- A cannabis grower's (Hacienda project) own study verified the potential for terpene drift to taint grapes. A fine-tooth comb through said study suggest less than 2 weeks' time is needed for drift of beta-Myrcene (the principal terpene released from most cannabis strains – see attached paper) to occur.
 - o Their model suggested it took 75 days to reach 330 parts per billion (ppb) of beta-Myrcene. Our winemakers agree that anything in near 50 ppb would generate concern. I have since purchased pure beta-myrcene and spiked wine at various ppb levels (50, 100, and 200). A series of triangle tests (3 glasses: 2 are the same and 1 is different and subjects are asked to pick the one that is different) revealed that subjects could detect a difference in the wine's aroma at 50 ppb. This was at a p-value<0.005 which is a statistical significance. P-value<0.005 is like saying there is a 0.5% chance the data occurred randomly. In other words: it causes a difference at 50 ppb.
 - If 50 ppb is a concern, and 50 of 330 is 15%, then the 75 days it took for betamyrcene to get to 330 ppb could mean it would only take 11 days to reach 50 ppb. This is well within the range of odor emissions that cannabis growers suggest will occur.

When the Board of Spervisors made their overriding considerations for the unmitigated impacts contained in the PEIR, we do not believe this evidence was taken into consideration. Please let your Planning Commission finish their work and continue these appeals until we all can revise the ordinance.

Thank you for your continued efforts to guide our county,

Tyler Thomas, President, Star Lane and Dierberg Vineyards.

Exhibit 13

Affidavit

for County Letter for Temporary State Licensing for Medical Marijuana Gultivation Locations in Compliance with Santa Barbara County Code

State of California County of <u>Santa Barbara</u>

I, <u>Brandon Michael Gesicki</u>, *(print full name)* am requesting a letter-from the County-of-Santa Barbara on my behalf or on behalf of <u>Canna Rios</u> (name of cannabis cultivation entity, if applicable) < check one box related to my medical marijuana cultivation site. I hereby swear certify and affirm that:

I am operating a medical marijuana cultivation site (hereinafter Site) located at 4651. Santa Maria Mesa Road and APN 129-040-010 (Street Address and Assessor's Parcel Number) that its a legal nonconforming cultivation site in conformance with Santa Barbara County. Code \$ 35-1003. A.2 as the Site has been operated in compliance with State law continuously since on or before January 19, 2016;

- I 国 have X have not < check one box> received a final Notice of Determination for the Operation at this location or on this property indicating a zoning violation, and

I certify (or declare) under penalty of perjury under the laws of State of California that the foregoing is thue and correct and that Affidavit was executed this 21st day of December, 2017 in Santa Barbara County

Signature

Brandon Michael Gesicki

Print Full Name

Ganna Rios II-LC 3 18 Gayuga Street Salinas CA 93901

Name and Address of Cannabis Entity (it applicable).

Possible Attachments

- (1) Any supporting documentation
- (2) Proof of authority to bind legal cannabis entity (if applicable)
- (3) Proof of property owner approval for cannabis cultivation at the cultivation site
- (4) Documentation on the status of any odor control system and security plan

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Bien Nacido Vineyards Appeal
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