



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: April 23, 2024
Placement: Departmental
Estimated Time: 1 hour
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Supervisors

FROM: Department Mona Miyasato, County Executive Officer
Director(s) Lisa Plowman, Director of Planning & Development
Contact Info: Wade Horton, Assistant CEO, (805) 568-3400

DocuSigned by:
Mona Miyasato
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Lisa Plowman

SUBJECT: Briefing on Cannabis Odor Abatement Plan Compliance Monitoring in Santa Barbara County

County Counsel Concurrence

As to form: Yes

Other Concurrence: N/A

As to form: No

Auditor-Controller Concurrence

As to form: N/A

Recommended Actions:

That the Board of Supervisors:

- a) Receive and file this report on cannabis odor abatement plan compliance monitoring in Santa Barbara County;
- b) Determine that this report does not constitute a project under the California Environmental Quality Act (CEQA), pursuant to CEQA Guidelines Section 15378(b)(5); and
- c) Provide direction to staff, as appropriate.

Summary Text:

During the Board of Supervisors hearing regarding cannabis taxation, compliance, and enforcement on November 28, 2023, the Board of Supervisors (Board) directed the County Executive Office (CEO) to work with the Planning and Development Department (P&D) to return with a Departmental item that addresses the following:

- 1. How cannabis growers are moving through tiers in Odor Abatement Plans (OAPs);
- 2. Whether cannabis growers in North County are compliant with OAPs;
- 3. Staffing for processing cannabis permits and enforcement; and
- 4. Successes and challenges of cannabis odor abatement in the inland and coastal areas.

Background:

P&D coordinated with the CEO in the preparation of this briefing on the compliance and monitoring of cannabis Odor Abatement Plans (OAPs), including:

1. Summary of cannabis odor abatement requirements and components of approved OAPs;
2. OAP inspection findings and compliance;
3. Operator-initiated changes to approved OAPs;
4. Cannabis odor complaints;
5. Nasal ranger surveys and data collection;
6. Staffing for permits and enforcement;
7. Power supply/capacity for cannabis operations in the Carpinteria area; and
8. Successes and challenges of cannabis odor abatement in the inland and coastal areas.

1. Summary of Cannabis Odor Abatement Requirements and Components of Approved OAPs

On February 27, 2018, the Board adopted a series of ordinances, including Ordinance Nos. 5027 and 5028, amending the Land Use and Development Code (LUDC) and Article II Coastal Zoning Ordinance (CZO), respectively, to implement development standards, permit requirements, and procedures regarding commercial cannabis activities within the County's unincorporated area. For the inland area, Section 35.42.075 (Cannabis Regulations) of the LUDC became effective on March 29, 2018, and for the Coastal Zone, the California Coastal Commission certified the amendment to the CZO on October 10, 2018.

Development standards for odor abatement are included in LUDC Section 35.42.075.C.6 and CZO Section 35-144U.C.6 for certain commercial cannabis cultivation projects. Pursuant to these development standards, OAPs must prevent odors from being experienced within residential zones, as determined by the Director. OAPs must include a protocol for responding to odor complaints. Additionally, a professional engineer or certified industrial hygienist must review and certify that the OAP includes equipment and methods consistent with accepted and best available control technologies (BACT) and methods designed to mitigate odor. The LUDC and CZO also require corrective actions to be implemented if P&D receives three verified odor complaints that odor from a cannabis operation is experienced in a residential zone in any 365-day period (LUDC Section 35.42.075.C.6.h/CZO Section 35-144U.C.6.h). P&D may require those corrective actions to be re-certified by a professional engineer or certified industrial hygienist. There are two criteria needed in order to verify a complaint:

1. Substantiate that odor was present at a specific location, date, and time in a residential zone, and
2. Determine the source of the odor emissions from a specific cannabis site.

There are 108 cannabis sites with approved entitlements in Santa Barbara County. Thirty-two are required to implement an OAP, five of which are located in the inland area, and 27 of which are located in the Coastal Zone.

Inland Area

Pursuant to LUDC Section 35.42.075.C.6, cannabis operations in the inland area that include cultivation, nursery, manufacturing, microbusiness, and/or distribution permits shall implement an OAP. No OAP shall be required within the Agricultural II Zone District unless the subject property is adjacent to an Existing Developed Rural Neighborhood or Urban Rural boundary or the

cultivation exceeds 51% of the subject lot area. In addition, the Santa Ynez Valley Community Plan (SYVCP) includes Development Standard 8.9 (Attachment 1), which requires OAPs for a variety of uses. In accordance with the LUDC and SYVCP regulations, five cannabis operations with approved entitlements in the inland area are required to implement OAPs. As demonstrated by Table 1 below, three of these cannabis operations are required to implement an OAP to meet LUDC standards, and two of these cannabis operations are located with the Santa Ynez Valley Community Planning area and are required to implement an OAP pursuant to SYVCP Development Standard 8.9.

The five inland area cannabis operations with OAPs are permitted to conduct outdoor cultivation either with or without hoop structures, indoor greenhouse nursery cultivation, and/or processing. As shown in Table 1 below, three of the approved OAPs include vapor phase and/or misting technologies, and carbon filtration is used to address odor for the processing areas. The other site with an approved OAP uses aromatic landscaping to address odor for the cultivation areas, but currently does not conduct processing. Regardless of what technology or method of odor control is proposed, the OAP must be certified by a professional engineer or certified industrial hygienist.

As shown in Table 1, two OAPs incorporate an additional adaptive management phased/tiered response to cannabis odor complaints for which the final tier results in an additional BACT analysis and installation of new BACT. Table 1 also includes approved cannabis sites that are not currently operating, and therefore are not emitting odor. These sites are included in the table to demonstrate the odor control methods that would be used if the site were operational.

Table 1. Approved Inland Area Cannabis Operations Required to Implement OAPs

Cannabis Operation	Address	Cultivation Odor Control Method	Processing Odor Control Method	Tiered Response (Yes/No)	Currently Operating (Yes/No)
Central Coast Agriculture	8701 Santa Rosa Road, Buellton	Vapor phase	**Carbon filtration	Yes	Yes
*Westcoast Farms	1800 Highway 246, Buellton	Vapor phase	**Carbon filtration	No	Yes
92 nd G25	851 E. Hwy 246, Lompoc	Vapor phase	No processing	Yes	No
*Busy Bee's	1180 Highway 246, Buellton	Vapor phase	**Carbon filtration	No	No
Santa Rita	5423 Santa Rita Road, Lompoc	Aromatic landscaping	No processing	No	No

*OAP is required due to SYVCP requirements and not LUDC requirements.

**The cannabis operation is not processing currently.

Coastal Zone

CZO Section 35-144U.C.6 requires OAPs for all cultivation in the Coastal Zone on properties in the Agriculture I Zone District. There are 27 sites with approved cannabis entitlements that are located in the Coastal Zone. All 27 cannabis operations are permitted to conduct indoor mature plants and/or nursery cultivation, manufacturing, processing, and/or distribution. According to the CZO, all OAPs must be certified by a professional engineer or certified industrial hygienist. OAPs

may incorporate different technologies in greenhouses, which typically have vents to the outside air, compared to sealed buildings used for processing or packing activities. For example, an OAP may include the use of vapor phase in greenhouses, and carbon filtration in buildings used for processing and packing. No OAP shall be required within the Agricultural II Zone District, unless a Conditional Use Permit is required.

Table 2 below provides a current list of approved cannabis operations located within the coastal zone. Twenty-two of the approved OAPs include vapor phase and/or misting technologies in cultivation areas, and 12 approved OAPs include carbon filtration or photocatalytic oxidation (PCO) in cultivation areas. As noted in Table 2, the County Planning Commission required, by condition of approval, that four sites install carbon scrubbers within greenhouse cultivation areas. All approved OAPs with processing include carbon filtration or PCO in the processing areas.

As shown below, 11 of these OAPs incorporate an adaptive management phased/tiered response to cannabis odor complaints where the final tier results in an additional BACT analysis and BACT installation. Approved cannabis sites that are not currently operating, and therefore not emitting odor, are included in the table to demonstrate the odor control methods that would be used if the site were operational.

Table 2. Approved Coastal Zone Cannabis Operations Required to Implement OAPs

Cannabis Operation	Address	Cultivation Odor Control Method	Processing Odor Control Method	Tiered Response (Yes/No)	Currently Operating (Yes/No)
Autumn Brands/Ocean Hills	3615 Foothill Road, Carpinteria	Vapor phase	Carbon filtration	Yes	Yes
Blue Whale New Generation	5775 Casitas Pass Road, Carpinteria	Vapor phase	No processing	Yes	Yes
Bosim	1628 Cravens Lane, Carpinteria	Vapor phase	Carbon filtration	No	Yes
*Ceres Farms	6030 Casitas Pass Road, Carpinteria	Misting and PCO (PCO not installed yet)	Carbon filtration	No	Yes
CP1 Supply Systems Inc.	4505 Foothill Road, Carpinteria	Vapor phase	Carbon filtration	No	Yes
Emmawood B1 LLC	5888 Via Real, Carpinteria	Vapor phase	Carbon filtration	No	Yes
Farmlane/CVW	1296, 1400, & 1480 Cravens Lane, Carpinteria	Vapor phase and carbon filtration	Carbon filtration	No	Yes
Farmlane/CVW	1540 Cravens Lane, Carpinteria	Vapor phase and carbon filtration	No processing	No	Yes
G&K Produce K&G Flower	3561 Foothill Road, Carpinteria	Vapor phase	No processing	Yes	Yes

Cannabis Operation	Address	Cultivation Odor Control Method	Processing Odor Control Method	Tiered Response (Yes/No)	Currently Operating (Yes/No)
Life Remedy CKC Farms	5138 Foothill Road, Carpinteria	Vapor phase	No processing	Yes	Yes
*Mediedibles	4994 Foothill Road, Carpinteria	Vapor phase and PCO (PCO not installed yet)	No processing	No	Yes
*Mission Health	5601 Casitas Pass Road, Carpinteria	Vapor phase, carbon filtration, and PCO	Carbon filtration	No	Yes
*New Horizon Farming Inc.	4532 Foothill Road, Carpinteria	Vapor phase and PCO	No processing	No	Yes
Pacific Grown Organics	5892 Via Real, Carpinteria	Vapor phase and carbon filtration	Carbon filtration	Yes	Yes
Primetime Farms	5554 Casitas Pass Road, Carpinteria	Vapor phase and PCO	Carbon filtration	No	Yes
Twisted Roots (3684)	3684 Via Real, Carpinteria	PCO	No processing	No	Yes
Twisted Roots (4555)	4555 Foothill Road, Carpinteria	PCO (not installed yet)	PCO (not installed yet)	No	Yes
Twisted Roots (4701)	4701 Foothill Road, Carpinteria	Vapor phase and PCO	No processing	Yes	Yes
Valley Crest Farms	5980 Casitas Pass Road, Carpinteria	Misting	Carbon filtration	Yes	Yes
Carp Red Barn	5360 Foothill Road, Carpinteria	No greenhouse cultivation	Carbon filtration	Yes	No
Cas Road	1530 Casitas Pass, Carpinteria	Vapor phase	No processing	No	No
Creekside	3508 Via Real, Carpinteria	PCO (not installed yet)	PCO (not installed yet)	Yes	No
The Dryery	3798 Via Real, Carpinteria	No greenhouse cultivation	Carbon filtration	Yes	No
Ultra Flowers	7176 Gobernador Canyon, Carpinteria	PCO (not installed yet)	Carbon filtration	No	No
Vista Verde	3450 Via Real, Carpinteria	Vapor phase	Carbon filtration	No	No
VR1 Farms	3892 Via Real, Carpinteria	Vapor phase	Carbon filtration	No	No

Cannabis Operation	Address	Cultivation Odor Control Method	Processing Odor Control Method	Tiered Response (Yes/No)	Currently Operating (Yes/No)
Yamaoka	1552 Casitas Pass, Carpinteria	Vapor phase	No processing	Yes	No

*County Planning Commission added a condition of approval requiring installation of carbon scrubbers.

A Model OAP (Attachment 2) was developed as a private agreement between the Santa Barbara Coalition for Responsible Cannabis and the Cannabis Association for Responsible Producers (CARP) Growers. The Model OAP outlines specific odor complaint response and corrective actions, which includes a four-level “tiered response” procedure to cannabis odor complaints, as follows:

- a. Level 1 Response – Initial Assessment and Corrective Actions
- b. Level 2 Response – Diagnostic Assessment and Corrective Actions
- c. Level 3 Response – Analytical Assessment and Corrective Actions
- d. Level 4 Response – Comprehensive BACT Analysis and Corrective Actions

P&D advised the Santa Barbara Coalition for Responsible Cannabis and CARP Growers that the County could not be party to a private agreement or enforce it. However, some cannabis applicants incorporated components of the Model OAP into their County-approved OAP. More specifically, 10 operators have OAPs that incorporate components of the Model OAP. P&D monitors compliance with approved OAPs for all sites including the 10 OAPs that incorporate aspects of the Model OAP. No cannabis operators have been required to reevaluate their BACT or install new or additional BACT in accordance with these levels.

Similarly, to-date, no cannabis operators in the inland area or the Coastal Zone have been required to implement corrective actions pursuant to the LUDC or CZO, because three verified complaints from residential zones have not been received within 365 days for any approved cannabis site.

2. OAP Inspection Findings and Compliance

As discussed above, approved cannabis operations that are required to implement OAPs are subject to the standard Odor Abatement Implementation and Monitoring condition of approval (Attachment 3), which was developed by P&D to ensure consistency with the code requirements of the LUDC, SYVCP, and CZO. The condition of approval also states that the County shall retain a professional hygienist or certified industrial hygienist, at the applicant’s expense, to conduct inspections of the odor control system upon installation and quarterly thereafter for one year. Toward this effort, on November 1, 2022, the Board approved and authorized an Agreement for Services of Independent Contractor between the County of Santa Barbara and Geosyntec Consultants (Geosyntec) to provide on-call professional services of cannabis odor monitoring and abatement for a period of three years to November 1, 2025.

The professional services that Geosyntec provides to P&D include inspecting, testing, and monitoring of cannabis odor control systems at installation, prior to commencement of the operation, quarterly, or as required per condition of approval. Geosyntec provides an Assessment Report detailing the results of each odor control inspection. Additionally, Geosyntec assesses proposed changes to the product, substance, and/or method used within the approved odor control systems. Most recently, Geosyntec trained staff on

how to use the Nasal Ranger in order to measure cannabis odor at or adjacent to cannabis operation facilities.

Between December 5, 2022 and April 8, 2024, there have been 46 odor control system inspections at 21 approved cannabis sites in the Carpinteria area, and at two approved cannabis sites in the Buellton area. Pursuant to conditions of approval, each cannabis site will be inspected at least five times, including once upon installation and four times thereafter (quarterly). Table 3 below includes the total number of inspections that have been completed. To-date, recurring quarterly inspections have occurred at 18 sites. These inspections are attended by Geosyntec, P&D staff, and representatives for the cannabis operation.

Table 3. Number of Completed Initial and Follow-Up OAP Inspections By Area

	TOTAL
Carpinteria Area Initial Inspection	21
Carpinteria Area Follow-up Quarterly Inspection	22
Buellton Area Initial Inspection	2
Buellton Area Follow-up Quarterly Inspection	1
Total	46

All of the 23 currently-active cannabis operations in the inland area and Coastal Zone that have OAPs have been inspected at least once. After each inspection, Geosyntec provides a detailed assessment report outlining whether the operation is consistent with the approved OAP, or if certain compliance components cannot be determined.

All of the sites inspected were operating the respective odor control systems during the inspections. In most cases, the cannabis operations are consistent with monitoring and maintenance requirements as outlined in the OAPs. Similarly, all of the inspected sites are generally operating their odor control system in compliance with the equipment/material manufacturer specifications. In other cases, sites have been identified as inconsistent with the approved OAP due to lacking components of the required odor control technology equipment or deviations to monitoring or maintenance actions. In these instances, Geosyntec writes recommended compliance actions in the assessment report. Examples of recommended compliance actions are to install the correct number and rating of fans consistent with carbon filters in the OAP, set carbon system fan flows to not exceed the maximum rating, and/or document routine maintenance procedures to ensure continued upkeep of the odor control system.

P&D staff coordinate and follow up with the cannabis operator to ensure compliance prior to the subsequent odor inspection. To come into compliance, operators have updated their OAP, modified odor control equipment, or made changes to the monitoring or maintenance processes, as applicable, prior to the next inspection. In the event that an operation continues to be inconsistent with the approved OAP, P&D staff pursues enforcement action. As such, one Notice of Violation has been sent due to non-compliance with an OAP. This Notice of Violation has since been abated. As noted above, the LUDC and CZO require that the OAP must prevent odors from being experienced in residential zones.

Table 4 below provides a summary of where odor (cannabis and/or odor neutralizer solution) was detected by Geosyntec while conducting the 46 OAP inspections. These detections varied in intensity from moderate to faint. Notable is that cannabis odor was detected on-site at fewer operations during follow-up inspections compared to initial inspections.

Table 4. Odor Detection During Cannabis OAP Inspections

	Location	Initial Inspection	Follow-up Inspection
Cannabis Odor Detected	On Site	15 of 23 (~65%)	10 of 23 (~43%)
	*Off Site	21 of 46 (~46%)	
Vapor Phase Neutralizer Odor Detected	On Site	7 of 23 (~30%)	7 of 23 (~30%)
	*Off Site	7 of 46 (~15%)	

*Offsite odor detection by Geosyntec has been in the right-of-way and not in residential zones.

On-site odor evaluations have been conducted within approximately 20 feet of the odor-emitting activities with several evaluations extending to the onsite property line. Off-site evaluations have been performed in the public right-of-way, not in residential zones, while Geosyntec approached or departed the facility by car, and along adjacent streets, mainly downwind and within a distance of approximately one fourth of a mile from the site. Geosyntec is mapping locations where odor was observed. Attachment 4, Maps of Odor Detected by Geosyntec During OAP Inspections, includes aerial images of mapped locations of odor from cannabis and neutralizer solution. Odor has not been detected by Geosyntec in any residential zones during OAP inspections.

3. Operator-Initiated Changes to Approved OAPs

Fourteen cannabis operations have submitted revised OAPs to P&D for review and approval. Some of these are initiated by the operator to improve systems and some are in response to compliance reviews by P&D staff or Geosyntec. P&D has approved six of these revised OAPs, and the remaining eight are still in the review process, or are being altered further by the cannabis operator. Cannabis operators have requested to change OAPs in order to 1) modify existing odor control technology in response to inspections and/or 2) utilize new odor control technology. Rationale for and examples of each category of change to an OAP are summarized below.

Modify Existing Odor Control Technology

Cannabis operators have submitted modifications to their OAP in order to meet operational needs, increase effectiveness of odor abatement, and/or reduce costs. For example, a cannabis operator has modified their OAP to include an additional unit/tote of vapor phase solution to provide increased capacity. One cannabis operator submitted a modified OAP to include more carbon scrubber units. Another cannabis operator modified their maintenance procedures to allow maintenance of the odor control technology to be performed in-house or locally rather than by the technology company in order to meet operational needs and reduce costs, as needed due to the drop in crop value.

As noted above, cannabis operators have also submitted modified OAPs to resolve deviations from their OAPs discovered during odor inspections and as requested by P&D. For instance, a cannabis operation needed to update the sizes of fans and carbon filters in order to bring it into alignment with the OAP. In order to come into compliance with the manufacturer specifications, the operator submitted a revised OAP with updated fans and filters to ensure consistency between what is shown in the approved OAP and what has been installed in the field.

Utilize New Odor Control Technology

Two cannabis operators have submitted modified OAPs to add either molecular scrubbers or photocatalytic oxidizers to a greenhouse that previously was permitted to use vapor phase. The

new technology was added in order to comply with a revised condition of approval that required a commitment to use carbon scrubber technology rather than rely on vapor phase technology.

Cannabis operators have also added a new technology in order to respond to community demand, reduce operational costs, or streamline maintenance efforts. For example, a cannabis operator, which already utilized carbon filters in their processing area, opted to install carbon filters in their greenhouse to meet community demand. Other cannabis operators have submitted revised OAPs in order to comply with the conditions of approval requiring installation of carbon scrubber technology (also known as photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters).

4. Cannabis Odor Complaints

Complaints about cannabis odor can be submitted to the County using the Cannabis Complaint Form¹ located on P&D's and CEO webpage. Reporting parties may provide the location, date, and time of reported odor violation when submitting the complaint. P&D records and responds to each complaint. Some locations provided by reporting parties are fixed addresses while other locations may be general areas (i.e., along Foothill Road). If a specific location is provided in a complaint, P&D will investigate, inform the cannabis operator of the odor complaint, and provide the reporting party with the cannabis operation's contact person who is responsible for responding to odor complaints. Once a complaint is received, P&D staff will conduct its own investigation to confirm if the complaint is valid. Attachment 5, Maps of Cannabis Odor Complaints Since 2018, includes a series of hot spot maps depicting the general location of the odor complaints by year since 2018 to-date.

Complaints about cannabis odor can also be submitted directly to cannabis operators. Pursuant to the OAP development standards in the LUDC and CZO, cannabis operators shall provide property owners and occupants within 1,000-feet of the cannabis operation with contact information of the cannabis operation's representative who is responsible for responding to odor complaints. When cannabis operators receive a complaint, they are required to:

1. Respond to the complaint within one hour and commence corrective action, if applicable, within two hours;
2. Notify P&D within 24-hours of receiving a complaint;
3. Provide information to P&D about their operations that occurred on the day of the complaint; and
4. Maintain a complaint tracking system.

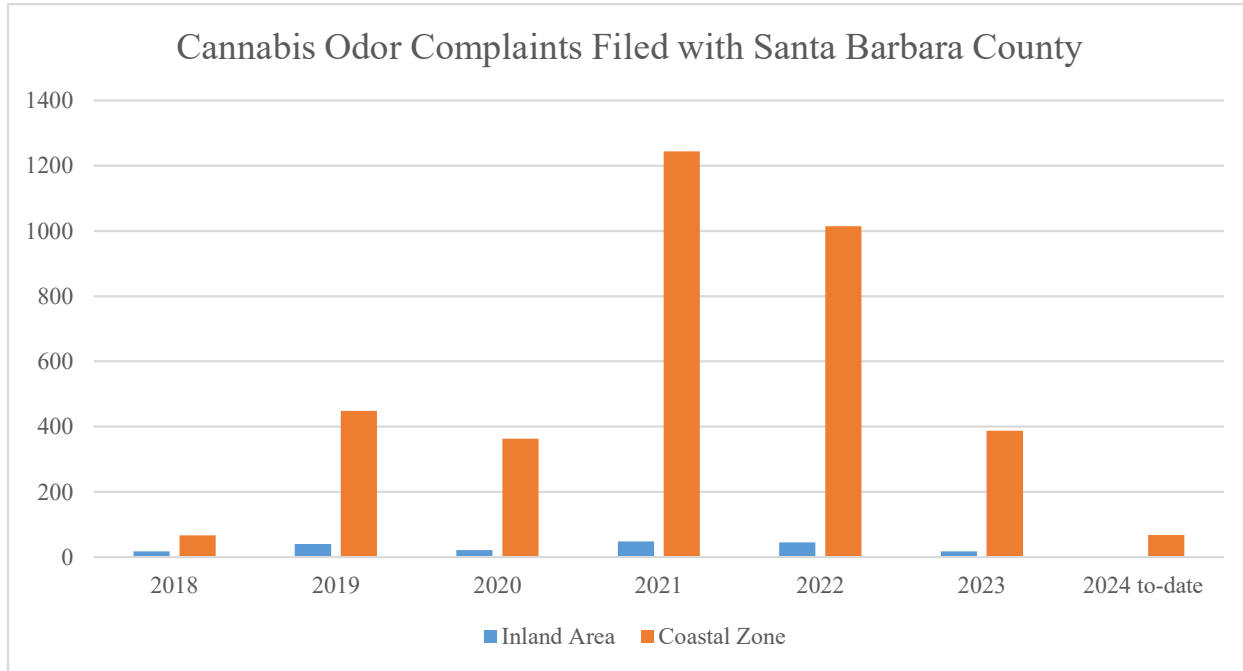
P&D is currently working on adding more OAP details to the Interactive Map of Cannabis located on the CEO's Zoning and Permitting webpage, including the name and contact information for the designated odor complaint contact for the operation. Adding this information to the map will make the designated odor contact publicly available online and further allow staff to identify areas with high numbers of complaints, which will help P&D investigate odor levels.

There are a number of factors that may influence both the number and location of reported cannabis odor complaints, including meteorological effects like wind direction, pressure systems, or climate. Additionally, people experience odor differently, and one person may experience odor while another does

¹ https://www.surveymonkey.com/r/cannabis_complaints

not, which may impact whether a person decides to file a cannabis odor complaint. Chart 1 below shows the number of cannabis odor complaints received by year since 2018 to-date in the inland area and coastal zone. The County has received more complaints in the Coastal Zone, predominantly in the Carpinteria area. The numbers of complaints increased in 2019 and then decreased in 2020. Complaints increased in 2021, but have significantly declined since then.

Chart 1.



There are several factors that could lead to the decrease in complaints. First, repeat reporting parties may continue to experience cannabis odor but do not wish to continue going through the effort of submitting an odor complaint to Santa Barbara County online or via phone. Another factor may be that odor abatement plans are effectively mitigating odor before it travels offsite. Finally, there may be an overall decrease in odor complaints, because the number of active cannabis operators has decreased due to challenges with permitting, licensing, and the economy.

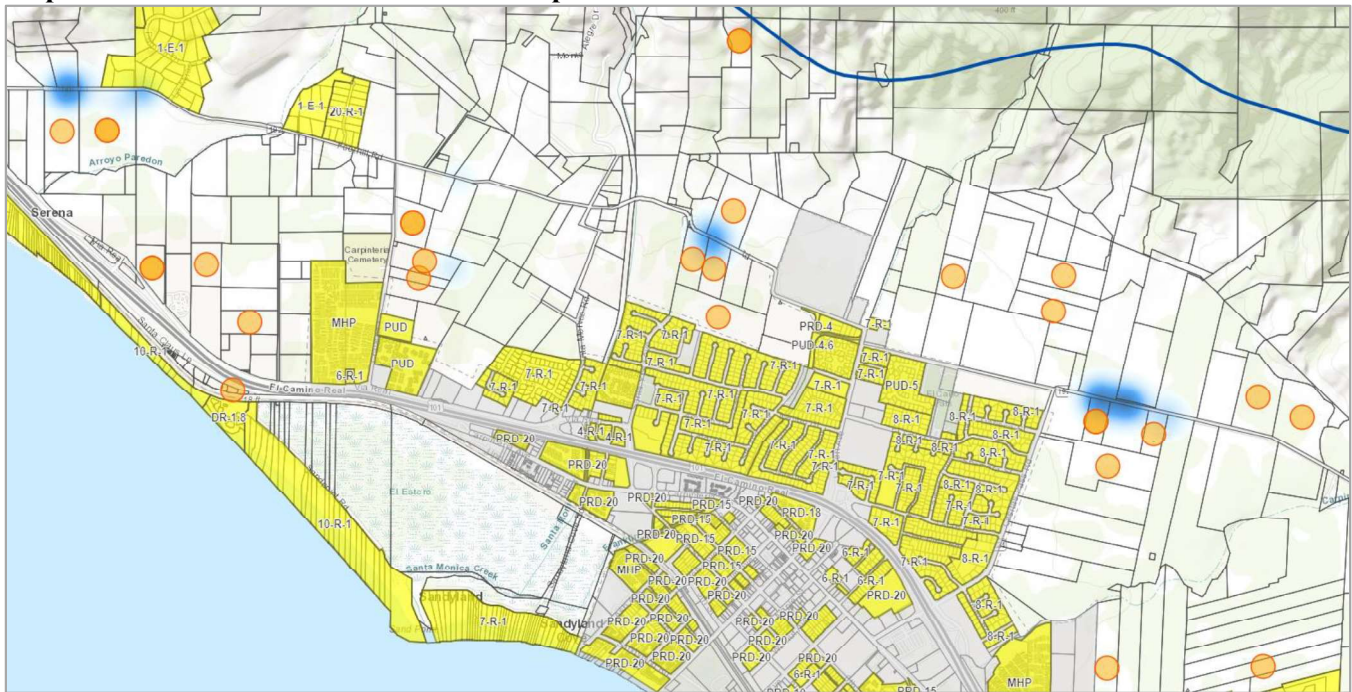
5. Nasal Ranger Surveys and Data Collection

In February 2024, P&D compliance staff began training and testing for the use of the Nasal Ranger odor detection equipment. The Nasal Ranger is a field olfactometer, and it uses a method called Dilution to Threshold (D/T). P&D staff came up with the examples in Table 5 below to provide a frame of reference for understanding D/T. A reading of 2 D/T is generally considered to be a barely perceptible odor, and 7-15 D/T is considered a noticeable or strong odor.

Table 5. Dilution to Threshold (D/T) Examples

Odor Units D/T	Intensity	Example of Odor Source
60	Exceptionally Strong	Overpowering odor (i.e. strong cologne, eau de perfume)
30	Very Strong	Overwhelming odor (i.e. cleaning supplies)
15	Strong	Odor is pervasive (i.e. opening a bag of coffee)
7	Noticeable	Odor level where public can identify the odor (i.e. peeling an orange)
4	Faint	Odor level common in a city (i.e. downtown Santa Barbara)
2	Very Faint	Odor level usually considered "just noticeable" (i.e. fresh laundry)
0	No Odor	Ambient air in a community with "no odor" noticeable

There have been 39 Nasal Ranger inspections on cannabis sites and 47 off-site inspections within the public road right-of-way and/or residential zones. Staff inspected locations where the highest number of cannabis odor complaints have been received within the Carpinteria area. Preliminary D/T data indicates where cannabis odor was detected, as shown by the dark shaded areas in Map 1 below.

Map 1. Cannabis Odor Detection in the Carpinteria Area

Areas where P&D detected high D/T (up to 30 D/T), indicating cannabis odor, are shown with dark shaded areas. Locations of approved cannabis operations are shown with orange circles. Residential zones are shown in yellow.

P&D detected odor most consistently outside of three areas: along the 3500 block of Foothill Road, 4400/4500 block of Foothill Road, and the 5600/5700 block of Casitas Pass Road, as demonstrated by Map 1. Odor readings along the 3500 block of Foothill Road ranged between null (no odor) and 15 D/T. Odor readings along the 4400/4500 Foothill Road area and Casitas Pass Road area ranged between null (no odor) and 4 D/T and between null (no odor) and 30 D/T, respectively. The majority of odor readings at each of these locations ranged between null and 4 D/T.

As additional data is gathered, there may be other areas identified where there is consistent odor detected. For instance, there are sites that are not currently operating or are not currently operating to their full permitted acreage. When those operators are operating fully, detected D/T levels may be higher.

While collecting D/T data, P&D has observed both patterns and irregularities. For instance, P&D detected odor during both the morning and afternoon, but afternoon odor readings have generally been higher. This may be due to warmer air temperatures or wind. Additionally, P&D did not detect odor in residential zones with any regularity. This may be due to topography, surface structures, meteorological data, temperature, or time of day. These factors impact how odor travels, thereby causing it to move in inconsistent ways and be detected at varying D/Ts.

Additionally, multiple factors affect how cannabis odor is perceived. For example, P&D has noticed that there is a difference in odor perceived while driving versus on foot. Odor perceived while on foot has generally been less consistent and lower in intensity. Odor perceived while driving has been stronger. For instance, in multiple scenarios, staff has pulled over to take an odor measurement with the Nasal Ranger as soon as odor is detected while driving. Then, the Nasal Ranger reading is lower and less consistent than expected once the vehicle is stopped.

P&D will continue to deploy compliance staff to collect additional data to determine trends (i.e. day of week, time of day, weather patterns) and areas of concern (i.e. residential zones). Data will be collected throughout the year with an emphasis during June through September, as this is when P&D tends to receive the bulk of complaints. Collecting additional information will help assist with data-driven decisions related to odor detection and the effectiveness of odor abatement systems. Compliance staff will continue to conduct Nasal Ranger odor testing to research baseline odor levels, monitor effectiveness of OAPs, and assess odor trends alongside findings from OAP inspections so that P&D can develop a better understanding of odor levels, and potential sources of odor in the area.

6. Staffing for Permits and Enforcement

P&D Development Review staff processes cannabis applications and revisions to approved cannabis projects, including revisions to OAPs. Current staffing levels for these reviews are adequate and applicants are not experiencing delays in project processing.

P&D Enforcement and Compliance staff reviews cannabis operators' compliance with approved cannabis permits, including compliance with approved OAPs. P&D Enforcement and Compliance staff also coordinates with Geosyntec to schedule initial and quarterly odor inspections, and reviews revised OAPs. Staffing for enforcement is adequate, and there are no delays in scheduling inspections.

P&D Building and Safety staff process building permits for structural cannabis operational components, as well as changes to odor control technology. There are currently 25 cannabis operations with associated building permits in process. Building and Safety has developed and is implementing a process improvement plan. Since October of 2023, the timelines for the intake (three to five days) and issuance (one to two weeks) of building permits have decreased and are within acceptable timeframes. The plan check review timeframes were behind, but have significantly improved (four to seven weeks) with the use of outside plan check services.

7. Power Supply/Capacity for Cannabis Operations in the Carpinteria Area

Staff coordinated with Geosyntec to obtain more information regarding the power availability or capacity needs to install photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters in cannabis facilities in the Carpinteria area.

These technologies require a 480-volt power supply in order to operate. This level of power supply is typically available in commercial areas from Southern California Edison (SCE), which is the entity that serves the South Coast region. However, the availability of 480-volt service varies by site throughout the Carpinteria area.

Based on preliminary information, it appears that a number of facilities currently only have a 120/240-volt power supply. These facilities would need to coordinate with SCE to upgrade the power infrastructure to the facility, and the facility would need to upgrade the on-site power distribution infrastructure throughout the facility to operate the systems. Newer facilities or recently-upgraded facilities may have already obtained a 480-volt power supply from SCE to install and operate the systems; however, the ability to add other 480-volt systems to their site infrastructure may also be limited and would require a site specific evaluation by the operator.

To upgrade the power supply or capacity of a facility, the operator would need to coordinate with SCE to determine if a 480-volt power supply is available. Some circumstances may determine that 480-volt supply is not available. Where 480-volt service is determined to be possible, SCE will likely need to install additional/new/or upgraded power transformers and service drops with the cost of the upgrade typically charged to the operator (potentially \$30,000 to \$50,000). In addition, due to the change in power that is delivered to the facility, on-site power infrastructure upgrades would be required. These upgrades would include a new electrical distribution panel(s), upgraded 480-volt distribution across the site to the carbon scrubbers, and other related components. These upgrades may be financially and physically prohibitive for an operator to facilitate the use of carbon scrubbers at their sites.

At this time, it is unclear or unknown what level of power supply is available from SCE to each cannabis facility, if the SCE infrastructure can accommodate the additional electrical demand, and what upgrades would be required from SCE and cannabis operators to deliver and distribute 480-volt service throughout a facility.

8. Successes and Challenges of Cannabis Odor Abatement in the Inland and Coastal Areas

The Board asked that staff provide information regarding the successes and challenges that P&D staff have identified while implementing the cannabis odor abatement compliance monitoring program. Below are lists of these successes and challenges, many of which have been referenced in previous sections of this Board Agenda Letter. Please note that each challenge includes a corresponding action.

Successes

- Generally, P&D has found that cannabis operations are compliant with the equipment and system components outlined within their OAPs.
- Geosyntec has coordinated with P&D to conduct 46 odor abatement inspections at 23 cannabis sites that are currently operating, including recurring quarterly inspections at 18 sites.

- During the OAP inspections, all of the 23 cannabis sites were operating their odor abatement systems.
- Cannabis operators are continuing to make adjustments to their operations related to production of cannabis crops and are revising their OAPs to increase efficiencies in the implementation of their OAPs (e.g., modifying the standard operating procedures, changing the size of filters and/or fans, reconfiguring the location of technology, and/or adding a new technology). Many of these OAP adjustments have been made in response to OAP inspections.
- P&D staff has been trained to use a Nasal Ranger and is deploying staff to collect D/T data to assist with data-driven decisions related to odor detection and the effectiveness of odor abatement systems.
- Geosyntec is also deploying a Nasal Ranger during odor abatement plan inspections to collect data and measure D/T levels.
- The number of odor complaints filed with P&D in the Coastal Zone has decreased from 1,244 complaints in 2021 to 387 complaints in 2023. The number of complaints filed with P&D in the inland area has decreased from 48 in 2021 to 18 in 2023.
- Four sites have a condition of approval that requires installation of carbon scrubber technology (also known as photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters) and are in process of complying with the condition of approval subject to the ability to procure the units, obtain building permits, and ensure the power capacity for the units is available. Attachment 6, Odor Control Technology Examples, includes types of these odor control technologies in OAPs.
- All formerly legal nonconforming sites have approved land use entitlements, and those with required OAPs have enabled P&D to initiate monitoring and compliance of the odor abatement systems.

Challenges

- OAP components for each cannabis operation vary with respect to technology, complaint response, and/or maintenance procedures, which causes the review and enforcement of OAPs to be time-consuming.
Action: In collaboration with Geosyntec, P&D is exploring options to standardize the OAPs and their implementation. This standardization may occur over time as OAPs are amended or revised. A consistent format for OAP information will assist in the review, implementation, and monitoring of systems.
- Ongoing and continuous OAP updates and revisions make quarterly odor inspections less relevant if the OAP is in the process of being modified.
Action: P&D reviews and processes changes to OAPs in a timely manner and coordinates with cannabis operators to adjust inspection schedules when feasible to facilitate inspections of the revised OAP.
- Complaints that odor abatement systems are not operating are received outside of business hours.
Action: P&D compliance staff requests records of runtimes for OAP systems and conducts unannounced inspections to monitor whether systems are on and operational. Pursuant to the LUDC and CZO, cannabis operators are required to designate a local contact who is responsible for responding to odor complaints on a 24-hour basis. Failure to respond to calls in a timely and appropriate manner may result in revocation of the permit. Additionally, as part of OAP

inspections, P&D requests evidence that the local contact number is up-to-date and has been shared with neighbors as required by the code.

- Approvals of cannabis permits continue to be appealed.
Action: Appeals of cannabis permits delayed the approval and implementation of nonconforming cannabis operations. Cannabis operators are reluctant to voluntarily revise their OAPs due to the chance of an appeal being filed. P&D continues to strive to process appeals of cannabis operations in a timely manner. In some circumstances, cannabis operators settled issues with concerned individuals, but then other parties appealed the cannabis projects.
- Delays in building permits can slow the implementation of new odor abatement systems. In addition to other processing factors, new legislation requires the Division to prioritize the review of building permits related to housing projects, which can slow the review of other building permit types.
Action: The Building and Safety Division has developed and is implementing a process improvement plan. Since October of 2023, the timelines for the intake and issuance of permits have decreased and are moving towards within acceptable timeframes. The contract amounts for outside plan check services have increased which has reduced plan check review timelines.
- Private agreements between the Santa Barbara Coalition for Responsible Cannabis and cannabis operators are separate from P&D enforcement of OAPs and LUDC and CZO regulations.
Action: As discussed previously in Section 1 of this Board Agenda Letter, P&D does not enforce private agreements, such as the Model OAP, or its terms, unless the terms are incorporated into the OAP. P&D continues to enforce permit conditions, including terms in the OAPs, as well as compliance with the LUDC and the CZO.
- Some cannabis operations have a tiered complaint-response program in their OAP that may require installation of new or additional BACT. However, that level of tiered response has not been triggered at any cannabis operations because respective complaints have been low or non-existent.
Action: P&D enforces compliance with OAPs that have adaptive management tiered response systems. In the event that a tiered response is required, P&D will work with the cannabis operator to monitor compliance with the necessary actions (such as conducting a BACT analysis or installing a new odor control technology). To date, there has not been a documented occurrence requiring an operator to significantly change their approved system as outlined in their adaptive management program.
- Staff has been unable to verify odor complaints based on the needed criteria, as outlined in Section 1 of this Board Agenda Letter, and thus no corrective actions have been required.
Action: P&D continues to respond to complaints and encourages members of the public to include specific details when submitting complaints. P&D has deployed staff with the Nasal Ranger where the highest number of cannabis odor complaints have been received within the Carpinteria area.
- There is support for the use of photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters, but operators are resistant to install these systems due to installation cost and/or lack of adequate electrical capacity.
Action: P&D processes applications for modifications to OAPs and coordinates with cannabis operators to facilitate installation of new technology when requested. Additionally, P&D will

require corrective actions to be implemented if three verified odor complaints are received from a residential zone for a cannabis operation in any 365-day period. P&D may require those corrective actions to be re-certified by a professional engineer or certified industrial hygienist, and corrective actions could include the use of photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters.

- Identifying the source of odor is challenging due to various factors such as temperature, topography, surface structures, meteorological data, and proximity to other operations.
Action: P&D will continue to deploy staff to use a Nasal Ranger to quantify odors at cannabis sites and in residential zones. It should be noted that the use of a Nasal Ranger in the field has limitations. The manufacturer indicates that the ideal use of the Nasal Ranger is in a lab setting (in which air is captured, taken back to the lab, and then subjected to the Nasal Ranger) rather than use in the field, due to challenges such as nose blindness and fatigue that could affect readings. As such, P&D is still exploring ways in which to monitor and detect cannabis odor.

Conclusion:

This report provides insights into the ongoing efforts to ensure compliance with cannabis OAPs. P&D is consulting with Geosyntec on OAP inspections, which have been performed at all of the approved cannabis sites with OAPs pursuant to the conditions of approval for associated permits. Through these inspections, evaluation of revised OAPs, and review of odor complaints, P&D is monitoring compliance with approved OAPs. Measuring and collecting data is also an ongoing priority. Geosyntec has been collecting data on odor at and nearby approved cannabis sites, and P&D will continue to collect odor data using the Nasal Ranger that will help determine general areas and/or specific cannabis sites to target for continued monitoring, data collection, and enforcement if necessary. This data will help P&D better understand the effectiveness of odor abatement technology and enable the Department to identify and measure increased odor. Additionally, this data can be used to guide future decisions regarding the effectiveness of odor control systems.

Potential Next Steps

In order to help guide potential changes in cannabis ordinance requirements, the Board could take the following steps.

1. Study the power supply demand and capacity in the Carpinteria area to determine the feasibility of utilizing the technologies being proposed, such as photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters in cannabis OAPs.
2. Amend the land use development codes to:
 - a. Require use of specific odor control technology that includes photocatalytic oxidizers, molecular scrubbers, and/or carbon scrubbers/filters, or an equivalent system where appropriate;
 - b. Require quarterly OAP inspections during the first year of operation and annual OAP inspections thereafter; and
3. Research the feasibility of establishing a threshold (e.g. D/T measurements) used to determine compliance with approved OAPs and to identify when corrective action is appropriate (i.e., operations would be required to deploy the most appropriate BACT for the site).
4. If the Board wishes to narrow the type of BACT that can be used to address odor to a specific technology (e.g., photocatalytic oxidizers), then staff recommends conducting additional research of

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odor control technologies. This research would include a peer review of the Initial Scrubber Efficacy Assessment and Odor Study at Roadside Blooms prepared by SCS Engineers in November 2022.

Steps 1, 3, and 4 would require additional funding and assistance from a consultant, such as Geosyntec. Once the research is completed, staff would return to the Board to receive direction regarding possible amendments to the cannabis regulations contained in the CZO and the LUDC. Alternatively, if the Board wished to give direction now, staff could conduct the necessary research and simultaneously begin work on the amendment and return to the Board with a draft ordinance and the results of the research.

Fiscal and Facilities Impacts:

Budgeted: Yes; the cost of developing this report is budgeted in the Planning and Development Department's Permitting Budget Program on Page 313 of the County of Santa Barbara Fiscal Year 2023-24 Recommended Budget.

Special Instructions:

None.

Attachments:

1. Santa Ynez Valley Community Plan Odor Abatement Plan Development Standard LUG-SYV-8.9
2. Model OAP
3. Odor Abatement Implementation and Monitoring Condition of Approval
4. Maps of Odor Detected by Geosyntec During OAP Inspections
5. Maps of Cannabis Odor Complaints Since 2018
6. Odor Control Technology Examples