

Attachment E

This page intentionally left blank.

May 25, 2021

Ana Ambriz, Chair
Monterey County Planning Commission

Subject: May 26 agenda item 6, proposed zoning ordinance to expand areas in which commercial cannabis cultivation is allowed (REF150048)

Dear Chair Ambriz and members of the commission:

This letter is on behalf of concerned property owners in Monterey County. My clients point out that there is no urgency to this item because the deadline of July 1, 2021 does not apply to the item proposed.

The proposed zoning ordinance is subject to CEQA.
There is no imminent deadline because the July 1, 2021 deadline does *not* exempt the proposed ordinance from CEQA..

You are being asked to rush this project through your review. The staff's stated basis for the need to rush is due to a subdivision in the *licensing* chapter of the division 10 of the California Business & Professions Code that will expire on July 1, 2021. The fact that the section is in the *licensing* chapter is significant because the proposed ordinance has a far broader scope. The proposed zoning ordinance would be a wholesale expansion of the acreage and locations where cannabis is allowed. Thus, the subdivision does not exempt the proposed ordinance from CEQA – and there is no need to meet a deadline that does not apply to the proposed project.

The staff report cites to Business & Professions Code section 26055, subdivision (h) but does not give you the text. The text is as follows:

Without limiting any other statutory exemption or categorical exemption, Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to the adoption of an ordinance, rule, or regulation by a local jurisdiction that requires discretionary review and approval of permits, licenses, or other authorizations to engage in commercial cannabis activity. To qualify for this exemption, the discretionary review in any such law, ordinance, rule, or regulation shall include any applicable environmental review pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code. This subdivision shall become inoperative on July 1, 2021.

The proposed ordinance materially exceeds the scope of subdivision (h) because the ordinance would rezone large amounts of acreage throughout the County. That is outside the limited scope – “permits, licenses, or other authorizations” – to which the 26055(h) text is applicable. Subdivision (h) exempts from CEQA a public agency's

enactment of any regulation that requires discretionary review of licenses to engage in "commercial cannabis activity." (*Union of Medical Marijuana Patients, Inc. v. City of San Diego* (2019) 7 Cal.5th 1171, 1190, fn. 7.)

The proposed zoning ordinance is a project and CEQA analysis is required.

You should not act on the ordinance until you have reviewed the CEQA analysis of potential environmental impacts. Proposed ordinance would have potentially significant impacts that have not been analyzed in a CEQA document.

The proposed project would cause potentially significant environmental impacts. The Ag Advisory committee specifically conditioned its recommendation regarding the ordinance – the specific condition is that "Water that is used for irrigating cannabis to be recycled and reused." (See attachment.) That critical recommendation is not part of the proposed ordinance. The Ag Advisory Committee may not have recommended approval if that critical water condition were omitted. Water supply is a critical issue throughout the County, and all of the major aquifers are overdrafted. Increased demand in the inland areas causes further water quality problems, further drawdown, and additional saltwater intrusion in the coastal areas. Increased water demand affects every part of this County. The County has tried for decades to get control of the issue, to no avail. The ordinance as written would make things even worse.

It is not disputed that the proposed zoning change would have potentially significant adverse impacts. The County staff report "recognizes that the proposed ordinance would have potential environmental considerations such as increases in water demand, increases in traffic, increases in energy demand, and potential conversion of soil-dependent farmlands into non-soil dependent greenhouses." In addition, it would have potentially significant impacts to greenhouse gases, because of the large amount of energy required for cultivation process including the lighting and the ventilation fans. Noise impacts are potentially significant due in part to the ventilation that typically requires large extractor fans, which generally emit a low hum that can be audible for a significant distance. Odor is also a potentially significant impact. New security fences have the potential to harm wildlife corridors.

To summarize the key points: None of the following impacts have been considered under CEQA despite the requirement to do so.

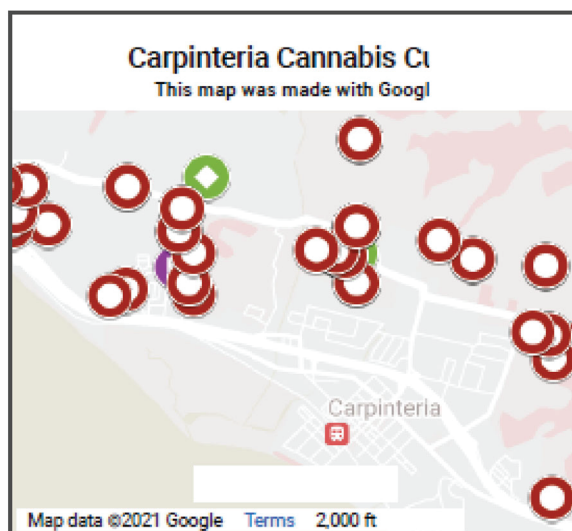
- water demand
- water supply
- increases in traffic
- increases in energy demand
- conversion of soil-dependent farmland to non-soil dependent greenhouses
- greenhouse gases
- noise
- odor

The case by case future CEQA analysis suggested by the staff is not appropriate here or under CEQA. In any event, even if it were, which it is not, then the first applicant for approval under the newly changed rules would be responsible for the environmental review for the County-wide cumulative impacts, which, as staff states, are known to be some 7.5 million square feet (175 acres) in the Farmland district based solely on existing applications, not including foreseeably future applications, and not including the industrial districts.

You have inadequate information – you need maps of the Farmland and industrial districts that would be rezoned by the proposed ordinance.

The staff report has failed to include maps of the vast amounts of Farmland and industrial zoned areas in the County that would be affected by the proposed zoning changes. The report improperly relies on “current permit applications” which are a fraction of the potential applications and land that would be subject to the proposed ordinance. The staff report fails to provide information as to the locations of the “62 applications on file” within the Farmland zoning district. Those 62 applications alone represent potential for 7.5 million square feet expansion, or some 175 acres. That would not include the many properties which have not yet submitted an application. The information supports the argument that there would be potentially significant impacts county wide, throughout the areas zoned Farmland.

The County should provide you with this basic information. Staff has the information now, as shown by the selective statements in the staff report. Before you proceed it is essential that you quantify the current situation and the potential growth. You need a map to show the locations of the districts, the pending applications, and the type and proximity of the adjacent uses. As an example of the kind of information you need, here is a map from Santa Barbara County:



This map shows locations of cannabis greenhouses in Carpinteria with pending permits (red dots). | Source: [County of Santa Barbara](#)

Proposed significant expansion of cannabis cultivation in all Industrial zones.

The Ag Advisory Committee did *not* make a recommendation as to cannabis in the industrial zones. You do not have a presentation of any of the amounts of acreage or square footage of existing industrial buildings that would be affected by the proposed change. Despite these serious omissions, the draft resolution (Exh. A to the staff report) specifically recommends this action:

2. Delete language limiting permitting of commercial cannabis cultivation to occur within industrial buildings legally established prior to January 1, 2016 within industrial zones;

The proposed change would allow for unlimited amounts of cannabis cultivation within any size industrial buildings in all industrial zone districts in the County which is potentially tens of millions of square feet, if not hundreds of millions. The County has not yet made any reasonable investigation into the potential impacts and breadth of the proposed changes. The staff report admits that “It is unknown what the demand or potential for cannabis cultivation would be in industrial zones.” This begs the question as to the reason why the ordinance proposes to include the industrial zones. The fact that most of the industrial zoned lands in the unincorporated areas have been developed with structures means that the potential conversion to cannabis use is significant, with all the associated environmental impacts that have been raised to date by my clients and others. Given that “demand for indoor cultivation areas in light industrial zoning districts is also relatively small,” as the staff report states, you should not rush into expanding into light industrial and industrial zones.

Request.

The planning commission should:

1. Require that 100% water reuse and recycling is a mandatory part of any ordinance, consistent with the Ag Advisory Committee recommendation.
2. Require more information as to potential scope and acreage and locations of the zoning districts that would be affected by the ordinance.
3. Continue the item to allow time for CEQA compliance.

Thank you.

Sincerely,
STAMP | ERICKSON
/s/ Molly Erickson
Molly Erickson

Ag Advisory Committee conditioned its recommendation on water recycling and reuse. Water condition was ignored in draft ordinance presented to Planning Commission.

PUBLIC COMMENT: Janet Louie, Robert Roach, Cat Mineo, Norm Groot, Bill Lipe, Christopher Bunn

MOTION: Recommend approval of an ordinance amendment for the expansion of commercial cannabis cultivation in greenhouses subject to the following:

1. Only allow expansion of greenhouses on properties that already contained one or more greenhouses legally established prior to January 1, 2016; and
2. Require new construction to meet all zoning and building standards including the 50% lot coverage limitation applicable to greenhouses within the Farmland zoning designation (21.30.060.D); and
3. Water that is used for irrigating cannabis to be recycled and reused.

It was moved and seconded by Committee Members Gollnick and Ferguson and **passed** by the following vote to recommend approval.

AYES: Darington, Ferguson, Gollnick, Huntington, Shea, Storm,
NOES: Heacox, Pearcy
ABSENT: Eastman, Marci, Violini, Williams
ABSTAIN: None

III. Adjournment

There being no further business before the Committee, the meeting was adjourned at 11:59 a.m.

Santa Barbara County in an Uproar over Cannabis Odors

From Carpinteria to Santa Ynez Valley, Lawsuits, Public Hearings, and Civic Protests Complain About the Smell Emitting from Greenhouses and Fields

By Nick Welsh | Published June 6, 2019



If County Supervisor Das Williams led more with his nose and less with his chin, perhaps he'd be getting more love in his own

hometown. Carpinteria, the cozy coastal community which Williams represents, has become ground zero for this year's most hotly disruptive news story – the unintended consequences of legalizing cannabis, and the stink it is causing, both in the air and on the ground.

But it's not only Carpinteria. Almost all corners of Santa Barbara County are in an uproar.

About a month ago, an angry, disparate group of activists – from the very north to the southern tip of the county – came together to form the Santa Barbara Coalition for Responsible Cannabis Cultivation. Singularly missing from their roster are any actual pot cultivators, but there are plenty of Santa Ynez Valley vintners, who worry that the skunk-like scent of cannabis wafting from nearby cannabis fields will destroy the economic viability of their wine tasting rooms and avocado orchards.

Besides odious odors, the coalition also has a laundry list of complaints, including round-the-clock generator noise, late-night lights, new fences, barking guard dogs, and security personnel, some of whom are reportedly armed.

A couple of formidable former county officials and at least one big-money philanthropist are behind the group, which has already filed one lawsuit. And beginning this week, members of the coalition will be embarking on a campaign of house-to-house political warfare, challenging every one of the 16 land-use permits the county has issued to the cannabis industry.

First District Supervisor Williams, who has lived in Carpinteria for six years, is known for his brash legislative style. But is it fair to say he could have cooled the intensity of this public outrage if only he had shown more sympathy when the cannabis critics first began complaining? After all, Williams is only one of five supervisors. But there's a reason he and North County supervisor Steve Lavagnino are unofficially dubbed the "Doobie Brothers." They are behind the record-setting speed with which the county's new cannabis ordinance was approved.

Red Shirts and Clothespins

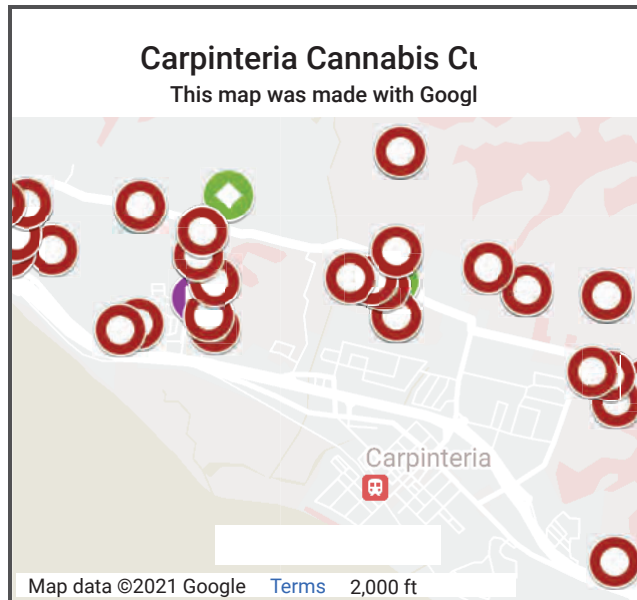
The issue blew up last Thanksgiving when the popular social media website Nextdoor Carpinteria all but melted down with complaints about the penetrating stench of cannabis rippling out of Carp greenhouses. By January, angry Carpinterians, wearing red shirts and carrying symbolic clothespins, stormed the supervisors' chambers, demanding relief. Williams was singled out for personal vilification. Never one to shy away from a fight, Williams launched a verbal counterattack against one particularly outspoken critic. And from the dais, no less. As a rule, elected officials who operate at the retail level — such as county supervisors and city councilmembers — don't do that.

So it is perhaps understandable that Williams opted not to attend a special meeting convened by the Carpinteria City Council on May 28 to discuss cannabis woes. To be fair, the meeting posed a lose-lose proposition for Williams, a political pro who combines a preacher's fervor with a policy wonk's granularity. Over the past 16 years, Williams, a liberal Democrat and an environmental flag-waver, has gotten himself elected first as a Santa Barbara city councilmember, then as a state assemblymember, and now, in 2017, as the Santa Barbara supervisor. Recently, he took out papers indicating he plans to run for reelection in 2020. (His critics in the anti-cannabis front have already been trolling for candidates to run against him.) Or he could decide to run for state Senate when Hannah-Beth Jackson's term expires a year from now. So if Williams showed up at the Carpinteria council's cannabis fest, he'd have found himself assigned the unhappy role of human piñata.

The numbers surrounding

Santa Barbara's cannabis industry are changing all the time. They fluctuate almost daily and, like all "facts," are subject to bitter dispute. For example, state stats indicate there are 42 acres of cannabis under cultivation in Carpinteria. But such metrics depend on how one defines "canopy." Is it the bushes themselves or the buildings they inhabit? If you assume the latter, Carpinteria has closer to 200 acres in the cannabis permit pipeline. But

Carpinteria, it turns out, has a cap of 186 acres. So where does that leave us? In the county, one must first secure the necessary land-use permits. Then one can apply for the necessary business license. Only one operator has achieved both facts



This map shows locations of cannabis greenhouses in Carpinteria with pending permits (red dots). | Source: [County of Santa Barbara](#)

Total Temporary Licenses, Santa Barbara County: 928

Total Temporary Licenses, Humboldt County: 773

Total Temporary Licenses, State of California: 2,858
Total Number of Individual Operations: 52

Total Acreage: 174.33 acres*

(*This assumes 42 acres in Carpinteria rather than 200)

Land-Use Permit Applications Filed: 153

Land-Use Permits Approved: 16

Land-Use Permits Issued: 9

Land-Use Permits Appealed: 5

Business License Applications Filed: 15

Business Licenses Approved: 1

Williams first said he didn't attend the meeting due to confusion over the timing. He then said he didn't want to get "derailed" from the important issues that made him run for office in the first place: environmental sustainability, climate change, public safety. He stressed his willingness to meet with anyone – "I'm showing my face all the time," he said – just as long as they're serious about "solving problems and finding solutions." Too many of his critics, he worried, "are just looking to fight."

If the debate over cannabis becomes at times poisonously personal, there's no shortage of theories why. A spokesperson for the cannabis industry blames post-traumatic stress disorder. The Carpinteria Valley did come within a hair's width from being wiped out during last year's debris flow, but that doesn't explain the hotbeds of discontent boiling over in the Santa Ynez Valley and the scenic Tepusquet Canyon outside Santa Maria.

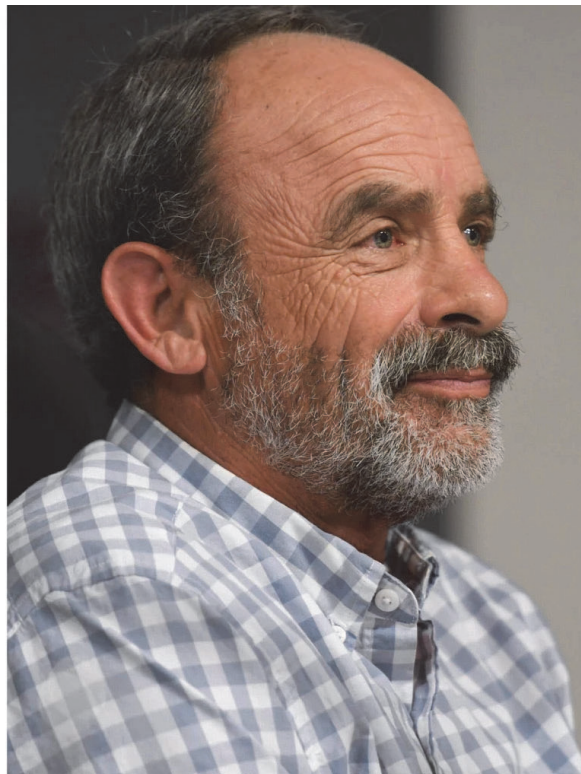
The Psychology of Smell

Smell is a strange and powerful thing. Humans, it turns out, don't experience smell the same way we experience the other four senses. Smell bypasses the part of the human brain that governs rational thought, where the other four senses are first processed. Instead, smell goes directly to a part of the brain governing emotions and memory. Consequently, smell wields a profound effect on mood and behavior. But because humans lack the same detailed and descriptive vocabulary where smell is concerned, it's hard to talk about. And what can't be put into words is hard to acknowledge.

Smell is also notoriously subjective. Different people can experience the same odors at the same location completely differently. Once experienced, a smell memory can be easily retriggered, and the brain reaction is not necessarily proportional to the stimuli. Unlike sound and

light, there are no agreed-upon metrics by which units of smell can be measured and recorded.

Smell was the main topic of conversation at last Tuesday's Carpinteria City Council meeting – smell and the county's apparent lack of interest in it. Joan Esposito, a longtime resident and a former professional hell-raiser on behalf of kids with dyslexia, blamed cannabis odors for migraine headaches and asthma attacks. **Even with the aggressive odor-control systems touted by the industry** and Supervisor Williams, Esposito said, **"It still stinks."** Charlotte Brownlee, representing Cate School, the elite prep school located near Lion's Park, said there are **five greenhouses located within a mile of their campus: "We continue to suffer from noxious, persistent odors."** And another woman described how her throat started to constrict after she drove through a curtain of fumes around Padaro Lane on her way home one night.



Carpinteria Vice Mayor Al Clark (left) accused the county of treating the city residents like "guinea pigs," and Councilmember Gregg S. Carty said: "I hope Das Williams is watching on TV. I don't see him in the audience."

Councilmember Al Clark, the old man of the mountain with more than 20 years seniority, said Carpinterians were being treated like "guinea pigs." "We're experiencing reported health complaints while we're waiting for

something to happen,” he said. That “something” was a regulatory and enforcement scheme that is supposed to address the so-called bad actors. Councilmember Gregg Carty said, “I hope Das Williams is watching on TV. I don’t see him in the audience.”

A handful of cannabis growers did show up, braving the sea of rolling eyeballs as they sought to put the industry’s best face forward. Council chair Wade Namura frequently found himself forced to remind those in attendance to be respectful. But not all 20 of those making public comments took heed. Scott Van Der Kar, a longtime avocado rancher, sarcastically noted that he hadn’t realized he was allergic to cannabis smells until Sophie Van Wingerden, a third-generation greenhouse farmer and a main player in the Carpinteria cannabis industry, walked by. Then, he said, his eyes began to water and his throat began to constrict.

Though the Carpinteria meeting was only supposed to be informational, the City Council voted unanimously to take some kind of action on June 17. Just what action remains to be seen. More letters? And if so, to whom? An official resolution? Another threatened lawsuit?

A Hot, Steaming Mess

Carpinteria and the rest of Santa Barbara County are experiencing the collective, localized whiplash inflicted when state voters attempted — three years ago — to overturn 90 years of just-say-no federal drug laws. Back in 1937, the federal government effectively outlawed cannabis by taxing it into oblivion. Then in 1970, the United States government declared marijuana a dangerous drug with no redeeming medical virtues — on par with heroin. In 1996, however, Californians, in opposition to the federal laws, voted to decriminalize pot for medicinal purposes. And then, in November 2016, the state voted overwhelmingly to legalize weed for the sheer euphoric, recreational fun of it.

Ever since, it's been a hot, steaming mess.

The unintended consequence of this initiative has been a case study in hyperactive incoherence and operational dysfunction. While California growers are reportedly producing eight times more legal product than state consumers can ingest, 380 of 540 cities and counties are refusing to allow retail outlets to open shop within their borders. No wonder the price of cannabis has been in perpetual freefall. Two years ago, the price per pound hovered above \$2,000; today, it's closer to \$500.

Some alarmed state legislators have pushed desperate remedies; one proposed bill, for example, would mandate local governments to approve one retail outlet for every six licensed liquor stores in their jurisdiction. Late last week, that bill died in committee. Meanwhile, the industry is calling for tax relief. State taxes and fees are tough enough, they say, but those exacted by cities and counties are killers. This high cost of doing business, they claim, puts the legal cannabis industry at a serious competitive disadvantage with black-market operators.



Sofia Van Wingerden (left) a third-generation greenhouse farmer, praised the industry, while Maureen Foley Claffey, who has been complaining about her neighbor's next-door cannabis grow, is now taking her case to the planning commission.

Even in Santa Barbara County, one of the few California counties to embrace cannabis, the only city to have retail outlets is Lompoc, an agricultural town once famous for flower fields but currently in the

depths of fiscal despair. (Santa Barbara is on the verge of opening two retail dispensaries, and Goleta is allowing six. When these open remains a long way down the road, as are the eight that might be allowed in unincorporated Santa Barbara.) Worse is the bottleneck stopping up the supply chain because California only has a very small number of laboratories able to test if cannabis products are pesticide-free — a critical component, since the state's initiative promised it would be. To date, there is not one such lab operating in Santa Barbara County, though an application is pending in Goleta.

Most of the greenhouses in the Carpinteria Valley are not within the City of Carpinteria, which has never been cannabis-friendly. It always worried that the county, which has jurisdiction over the Carp Valley, would not provide enough protection for city residents. This might explain why, even though California law allows adults the right to grow six cannabis plants for their own personal use, Carpinteria city law requires that they be grown indoors and no retail storefront dispensaries are allowed.

Earlier on, in fact, the Carpinteria council had given serious thought to suing the county over the cannabis ordinance and had set aside funding for just such an effort. Although nothing would come of such saber-rattling, city administrators testified at public hearings and submitted reams of protesting letters. The city has, however, indicated an openness to locating a cannabis lab and a distribution center in the industrial park section of town located on the mountain side of the freeway.

And the \$64-billion question remains, as it always has, what to do with all the cannabis cash its growers and retailers are hoping to earn. Federally insured banks are naturally gun-shy about accepting revenues generated from a federally prohibited product. To help navigate all this confusion, a new cottage industry has emerged populated by lobbyists, political consultants, \$800-an-hour attorneys, land-use agents, and commercial real estate speculators. It's enough to make anyone want to take a bath.

Big Tree in the Forest

The State of California gave counties the option of passing their own rules to regulate and tax the cannabis industry. Santa Barbara County, already home to a massive, quasi-underground medicinal cannabis business, jumped in headfirst. In a series of votes, the county supervisors opened their arms to the new incarnation of an old industry. By bringing the “gray market” operators out of the shadows and into compliance, the supervisors maintained they could create a safer, saner industry for consumers, while generating the tax revenues, as much as \$25 million a year, needed to eradicate the criminal element and black-market operators.

When the dust of legalization settles, it’s all but certain Santa Barbara will be the tallest tree in the forest when it comes to cannabis cultivation. Right now, Santa Barbara has the most temporary and provisional licenses of any county in the state by far. In fact, Santa Barbara County has roughly 32 percent of all the provisional licenses California has issued.



Graham Farrar (left) one of the best faces forward for the cannabis industry, confronts a sea of rolling eyes, while Anna Carrillo, who continues to birddog the cannabis process like no one else on behalf of the Carpinteria Valley Association, is far from happy with the results.

Many of these are for greenhouses along Highway 192 that until only a few years ago were sprouting gerbera daisies for global beautification. But when that market disappeared, cannabis emerged. Today, Carpinteria Valley is home to 25 greenhouse cannabis operations.

For champions of the new industry, cannabis means, among other things, economic vitality and lots of high-paying new jobs that pay considerably better than tourist-trap wages. It means fewer big 16 wheelers rumbling through the Carpinteria Valley, laden with daisies. It means less pesticides being used, and cleaner, safer cannabis products, properly labeled for potency and strain. At the Carpinteria council meeting, Graham Farrar, a major greenhouse operator, talked wistfully about riding his bike through Goleta's lemon orchards as a kid, only to grow up and see them replaced by condos. Cannabis, he said, could save agriculture in Carpinteria from a similar fate.

But there's a hitch. Greenhouses are hot inside, and hot air rises. As that happens, the rich, ripe aromas blooming inside these cannabis plantations escape out rooftop vents and fan out everywhere the winds blow.

Getting it Right

Since 2018, Carpinteria residents have filed 166 complaints with various county officials about the intrusions by cannabis odors. Given how unclear it's been which government agency was responsible for processing such complaints, that number does not reflect the magnitude of the problem. The real question now is: Has it gotten better or worse, and how effective is the technology to neutralize fugitive smells before they can escape?

In Carpinteria, the possibility of odor control appears to be technically feasible. Many greenhouses there have been fitted with an expensive

odor-neutralization system created by Byers Scientific out of

noisy fans that
use energy

Bloomington. It shoots vapors infused with essential oils 10 feet above the greenhouse roof lines at speeds of 106 miles per hour and costs about \$150,000 to install and about \$15,000 a month to operate. However, the precise number of greenhouses fitted with odor-control systems is hard to come by. The City of Carpinteria says it doesn't know how many of the 25 greenhouses now operating have odor-control systems installed. The county says there are 33 greenhouses with applications; of those, they claim 15 are currently under cultivation and 14 have odor-control systems. Mark Byer of Byers Scientific claims he has 95 percent of Carpinteria's market of odor-control systems.

**The new odor-control system
doesn't mask the smell but
instead changes the
fundamental chemistry into
something that human brains
don't register as smell.**

According to company chief Marc Byers, these vapors "surf" the same air currents occupied by the odor-producing terpenes associated with cannabis. It doesn't mask the smell, Byers stated; it changes the fundamental chemistry, creating new compounds that the human brain doesn't register as smell. Byers estimated that when his systems first went in, they reduced odor problems by about 80 percent. Since then, he noted, the number of operations and the number of plants have increased, so existing systems will need to be reconfigured. Byers said he's recently hired a "dream team" of experts to conduct the most

comprehensive study of Carpinteria's odor issues ever undertaken.

Nothing, he stressed, will make the problem go away 100 percent. Smell being so subjective and some residents being so sensitive, he said, some people will smell things that aren't even there.

Industry representatives insist that these high-end odor-control systems are already making a big difference. To critics who insist the county's typical process was short-circuited to benefit the new industry at the public's expense, growers point to the lengthy collaborative public process that resulted in the county's cannabis ordinance. Bad actors had been targeted in numerous law enforcement and eradication raids – 30 to date, involving the destruction of 850,000 plants – which, they stressed, were paid for with funds generated by the new industry. Santa Barbara's regulatory straitjacket, they insisted, was the tightest of any county in the state. If county government was so in the thrall of the new industry, they asked, why has only one cannabis grower been able to obtain the two required licenses? Anecdotally, reports of the smell remain all over the map. Tracking them down is akin to hunting ghosts. Independent intern Skyler DePaoli, who attended an open house held at the Ever-Bloom greenhouse, said the stretch of road up Cravens Road toward Foothill Road "reeked" of cannabis. But at the greenhouse itself, she said, there was precious little smell. Reports of odor infestations near and around Carpinteria High School – which has long been a target for anti-cannabis outrage – have not evaporated but seem significantly fewer and further in between. John Stineman, who lives within 500 feet of Ever-Bloom, said that for months the greenhouse infused the community with strong, skunk-like odors. Since the odor-control systems have been installed, he said, they've been replaced by a more subtle smell reminiscent of burnt leaves.

energy-using and potentially noisy fans

Into the Great Wide Open

Controlling odors in greenhouses is one thing. But how can odors emitting from a 70-acre cannabis field be contained? It's a question **grape growers and vintners** in North County are asking. Leading the charge for the new coalition is Blair Pence, a former developer from Bakersfield who has reincarnated himself as a Santa Ynez vintner on Highway 246. Pence — who grows 50 acres of grapes on his 200-acre ranch — claims he's now all but totally hemmed in by three nearby grows, ranging in size from 40 to 70 acres. His wife suffers constant headaches from the smell, and they've had to move. Though he hasn't suffered any consequences himself, he smells it all the time, and some of his workers are having problems. Now his **tasting room has been compromised by the ambient odors.** Since there's no way to install an odor-control system on a 50-acre field, Pence said, he's begun filing administrative challenges and appeals against neighbors who've converted over to cannabis. Beginning this week, the county's Planning Commission will begin hearing these appeals.

The front line of attack for Pence and other critics is that they believe many cannabis operators falsely claimed they had been raising cannabis medicinally before January 2016 and thus, under county regulations, are entitled to certain legal privileges not afforded cannabis growers who applied after that time. When supervisors adopted this plan, the only thing required of these medicinal growers was to sign a one-page affidavit claiming they were cultivating prior to 2016. (Santa Cruz County, by contrast, requires an eight-page affidavit.)



Cannabis

County administrators decided it would take too much time and resources to verify these affidavits, so planners rely on the county sheriff and the District Attorney's Office to do so. To date, the District Attorney has filed six criminal perjury charges against operators who made false claims on their affidavits. Pence and his posse plan to challenge the validity of land-use permits issued to many other cannabis growers.

At the planning commission, this will be a huge, complicated mess.

It is this legal loophole that has many cannabis critics most enraged, even more than the odors or PTSD. They have been told time and time again by Supervisor Williams to have patience in the process. Bad apples will be winnowed out. Growers who make it through will have to comply with the county's strict rules regarding odor control. Those who fail to comply will be shut down. But all this takes more and more time. But many residents are smelling the cannabis now.

In Carpinteria, the clock is ticking for the cannabis growers now applying for their permits. Only 186 acres of cultivation are allowed there, and that ceiling will soon be breached. Delays of the kind Blair Pence intends

could prove fatal. On the table are various legislative fixes for cannabis growers. But the political quid pro quo could well be a temporary moratorium on new applications. It's not certain who has the votes to get what. To effectively navigate these waters, Supervisor Williams will need to rely less on his chin and more on his nose.

Air Conditioning | Heating | Refrigeration

the NEWS

Reducing Cannabis Odors is a Growing Concern

Local authorities clamping down on unique smell emitted from grow facilities



INTENSE SMELL: Cannabis will emit odors in the form of terpenes at virtually all stages of growth, however, the odors are more intense during the flowering stage of the plants. **Courtesy Fogco Environmental Solutions**

April 28, 2020

Joanna R. Turpin

Cannabis farms are cropping up around the country, often encroaching on existing communities, and property owners are starting to complain about their distinct smell. In response to these complaints, local governments and municipalities are mandating new laws — or even suing the growers — to significantly reduce the smells emanating from these facilities.

This is an ongoing challenge for cultivators, many of whom are more familiar with growing high-quality cannabis than addressing odor issues. Fortunately, odor mitigation is possible with a variety of air cleaning technologies that are designed to alleviate the strong, pungent cannabis odors that can severely impact the property values in the surrounding community.

Dealing With Odors in Cannabis Grow Facilities

Cannabis grow facilities can produce a constant source of odors, but

there are certain times in the plant's cycle when odors are more pronounced, such as when the flower is budding, said Aaron Engel, vice president of business development at Fresh-Aire UV.

“The terpenes and terpenoids are typically the source of the odor and are produced by the cannabis plants,” he said. “Even the different types of cannabis can have different odor profiles. For example, Cannabis indica is often described as skunk-like, whereas Cannabis sativa is described as sweet or spicy. Although strains may vary, their complex chemistry makes odor control within the facility challenging.”

While cannabis plants usually become more pungent during the last six weeks of growing, some farms harvest year-round, which means they are generating odors continuously, said Trent Thiel, business development manager - North America at Camfil's molecular contamination control division.

“Another challenge is that odor is usually not generated in just one location of the facility,” he said. “There are three sources of odor: the final weeks of growing, the drying process, and the trimming process, so the odor needs to be controlled at each of these stages of production.”

The type of structure involved can cause challenges, too, noted Thiel, as greenhouses are designed to breathe, which makes odor control more difficult.

The same is true for indoor operations that are housed in retrofitted buildings that are poorly sealed or have improper air balancing, which allow the odors to bypass the odor control devices and escape through fugitive routes.

While most cities, counties, or municipalities require grow facilities to have an odor mitigation

READ MORE ABOUT

- Marijuana Market
- Grow Facilities
- Odor Control

plan in place before they will issue an occupancy permit, they rarely define which type of system a grower needs to utilize, said Gary Wintering, president of Fogco Environmental Solutions.

“They do require that the system work effectively, and they can shut down facilities that have an ineffective odor system in place,” he said. “Typically, the municipality leaves the choice up to the grower, although we have seen more municipalities asking us for specific documentation confirming our system’s effectiveness. Field-based testing is the only objective way to obtain this level of certification.”

Cannabis Odors and UV Solutions

There are various technologies available that can help address **odor issues** both inside the facility and, more importantly, those that may be **exhausted to outside**, said Engel. These typically include carbon filtration, masking or neutralizing agents, air treatment systems, and oxidation systems.

“Many facilities are not overly concerned about odors within the building but are very concerned about the odors being exhausted,” he said. “Depending on municipal regulations, the facility may require an in-line IAQ system to address the exhaust odors. Activated carbon and oxidation systems are ideal for addressing these odors.”

Care must be taken with high-output oxidation systems, noted Engel, as these produce ozone, which — along with other reactive oxygen species — should not be used within the envelope of the building, as the aggressive oxidizers may damage the sensitive plants.



ODOR DESTROYER: Odor Exhaust Oxidation (OEO) system uses high-output UVV oxidation lamps to destroy odors as they exhaust to outside. **Courtesy Fresh-Aire UV**



DISINFECTING WITH UVC: The APCO disinfection-odor control installed in the AHU disinfects and reduces odors with proprietary UVC and carbon ceramic lifetime tiles. **Courtesy Fresh-Aire UV**

Fresh-Aire UV offers another solution — the APCO carbon ceramic UV system, which is designed to disinfect and control odors within the grow facility. Installed within the air-handling unit, the UV-C light disinfects the surfaces and airstream, and the subsequent photocatalytic reaction between the UV and carbon ceramic cells mitigates odors within the facility.

“For high-level odor control for exhaust applications, Fresh-Aire UV uses the Odor Exhaust Oxidation (OEO) systems,” said Engel. “These are specially designed high-output UVV lamps that produce ozone, oxidizing the outgoing air. What’s great about the Fresh-Aire OEO system is that it can treat the air with no airflow restriction, and the only consumables are the UVV lamp that needs replacement every two years. It’s a low-cost, easy installation that works exceptionally well.”

Neutralizers And Odor Mitigation Systems

Odor mitigation systems using neutralizers are also used in cannabis facilities, and they can typically be classified into two different categories: perimeter treatment of a facility or point-of-source treatment of the odor, said Wintering. Perimeter treatment includes an oil-based neutralizer that is used with either a water-based evaporative system or a water-based high-pressure fog system. Point-of-source systems involve air filtration combined with water-based high-pressure fog and an oil-based neutralizer.



POINT OF SOURCE: The majority of Fogco systems utilize the point of source odor elimination concept, so they are incorporated into the operation of the **exhaust fans** of a facility.

This type of system is designed to address the odor exiting the facility via the individual **exhaust fans**. It can be designed so that each bay of a greenhouse and each **fan** is a separate zone, and each zone will only run if and when an **exhaust fan** within that zone is turned on, explained Wintering. The system’s operation is tied to the individual exhaust fan start signals and will automatically turn on whenever an exhaust fan is turned on.

“The point-of-source odor mitigation is more commonly applied in cannabis facilities, because it addresses the odor at the source, which can eliminate the possibility that the odor is dispersed outside the facility,” he said. “The most effective point-of-source odor mitigation combines the use of high-pressure fog with a specially developed oil-based neutralizer.”

Fans use energy and can be noisy

“The newest technology for point-of-source odor mitigation is the use of a vaporized oil-based

neutralizer,” he said. “The advantage of this technology is that it does not involve the use of water, so it is better suited for environments where freezing can occur.”

It is important to note that the oil-based neutralizers offered by Fogco are not a masking agent, said Wintering; instead, they eliminate odors through a process called subtractive odor control, which simply means changing the way a given odor smells.

“Essentially, when these oils are dispersed within the fog or vapor system, they come into contact with the odor molecules, and through a combination of chemical reaction, antagonistic pairing, and absorption/adsorption pluralistic effects, the odor is neutralized and eliminated as the air exits the facility,” he said.

Fogco also designs and manufactures both high-pressure fog and vapor systems.

Another Odor Control Option: Molecular Filters

For indoor growing facilities, another odor control option is the molecular filter, considered to be a gas phase air cleaning device, said Thiel. Molecular filters contain a media designed to adsorb a specific subset of molecules to eliminate odors, irritants, and toxic or corrosive gases. In this case, they target beta-myrcene, which is the terpene (aroma-producing organic compound) most frequently found in cannabis.

“The term ‘carbon filtration’ has been commonly used for all odor control,” he said. “Carbon filters are a type of molecular filter and a term commonly misused to categorize all molecular filters. A filter should be designated by its function and not the type of media in the filter; for example, activated carbon is a type of media.”

Molecular filters are typically incorporated into an HVAC system, and they can either be initially supplied with the system or else retrofitted at a later date. In an exhaust system, a face velocity of 250 fpm is desired for maximum lifetime and removal efficiency, said Thiel. However, if 250 fpm is not achievable, a maximum face velocity of 500 fpm cannot be exceeded.

“It is recommended that a minimum of MERV 9A particulate prefilters be installed ahead of a molecular filter to ensure that the active sites are not unnecessarily filled with particulate,” he said. “A dusting filter is not necessary unless there is a concern for activated carbon dust from the exhaust stream.”

For greenhouses, molecular filtration may not be enough on its own, said Thiel, so the recommended method is to combine two technologies: molecular filtration deployed in a recirculating air cleaner inside the greenhouse and a dry-vapor system that neutralizes the fugitive emissions externally. This type of system is offered by Byers Scientific & Manufacturing, which treats over 9 million square feet of canopy throughout North America, including the world’s largest

permitted cannabis facility in Canada.

“The Byers’ system uses patent-pending technology to emit an odor neutralizer formulated specifically for cannabis around the greenhouse or other grow environment, such that the airborne cannabis gases emitted from the facility mix with the neutralizer, thereby eliminating the odor,” said Marc L. Byers, owner of Byers Scientific & Manufacturing. “We employ Camfil scrubbing media as part of a comprehensive approach: vapor for the outdoor applications and Camfil molecular filtration on indoor applications in order to fully sequester terpenes wherever possible.”

Thiel added that for odor control, customers should be encouraged to purchase equipment that offers proof of performance. Molecular filtration solutions, for example, should have their performance validated in accordance with ASHRAE Standard 145: 2015 and/or ISO 10121: 2014, which are recognized test standards for gas phase air cleaning devices.

As can be seen, there are a variety of methods available to control odors in cannabis grow facilities. or HVAC contractors just starting in this market, the choices may seem daunting, but they don’t have to be, said Wintering.

“Look for vendors with backgrounds and experience in industrial odor control who have also been involved in the cannabis industry for at least the last five years,” he said. “Do your homework. Talk to growers. And finally, get input from multiple odor mitigation suppliers to be sure you are getting what you need.”



Joanna Turpin is a Senior Editor. She can be contacted at 248-786-1707 or joannaturpin@achrnews.com.

Joanna has been with BNP Media since 1991, first heading up the company’s technical book division. She obtained her bachelor’s degree in English from the University of Washington and worked on her master’s degree in technical communication at Eastern Michigan University.

To: Monterey County Planning Commission

From: Robert Roach

Date: June 9, 2021

Subject: Public Comment on Item #6, Denial of Expansion of Greenhouses for Cannabis Cultivation

This is a confused motion at cross purposes with itself. It intends to promote the “adaptive reuse” of derelict greenhouses, but it does the opposite. The expansion would make parcels with a small amount of existing greenhouse square footage and some room to grow more attractive for cannabis development. Of course, the existing greenhouses would have to be renovated first.

Similarly, by increasing the number of greenhouse parcels attractive for development, it actually makes it more equitable by spreading the benefit.

As for this denial recommendation protecting productive farmlands, has anybody looked at a soils map? When the Japanese growers came here to buy land, all the good land was already taken. The nurserymen got the seconds, in terms of row crop potential. Most of these parcels would never be developed as row crop land because of site conditions, especially with the current food safety metrics. Also, after many years of use as a nursery business, the land could be contaminated with traces of organochlorine pesticides, petroleum products and other contaminants and would require remediation.

To: Monterey County Planning Commission

From: Robert Roach

Date: May 26, 2021

Subject: Public Comment on Item #6, Expansion of Greenhouses for Cannabis Cultivation

Part A is good. It will allow properties that already are cultivating to expand when they still have room to grow with new greenhouses and stay under 50% lot coverage.

Part B reminds me of the CSV expansion proposal of the Outdoor Grow Pilot Program; not really completely thought out and possibly raising unnecessary concerns among our agricultural community, nor was not considered by the Agricultural Advisory Committee.

Are we going to recommend an ordinance that would allow cannabis greenhouses in the oil fields of San Ardo, at the dolomite mines at Natividad? Those are Heavy Industrial zoning. Does this proposal really allow that by deleting the last half of MCC 21.67.050(B)(2)? The other big concentration of Heavy Industrial is along Hwy 101 in the Potter-Spence Roads area. Why would we want to put greenhouses there? There are many more sensitive receptors of odor, including the freeway. We don't have a nuisance odor problem here now. We have many underutilized greenhouse parcels in the Farmland Zone where there are no complaints.

Indoor cannabis production is a proven compatible use in industrial areas, e.g., the Moss Landing Industrial Park. Indoor grows can control odor more easily and fit in an industrial setting. Indoor cultivation is less than 3% of our licensed canopy area.

Cannabis farming is agriculture and should be allowed and encouraged in agricultural zoning. Greenhouses growing cannabis are generally not compatible with industrial uses.

This page intentionally left blank