SenatorBailey_FAV_SB158.pdf
Uploaded by: Jack Bailey
Position: FAV

JACK BAILEY
Legislative District 29
Calvert and St. Mary's Counties

Budget & Taxation Committee

THE SENATE OF MARYLAND
ANNAPOLIS, MARYLAND 21401

Annapolis Office
James Senate Office Building
11 Bladen Street, Room 401
Annapolis, Maryland 21401
410-841-3673 · 301-858-3673
800-492-7122 Ext. 3673
Jack.Bailey@senate.state.md.us

District Office
Dorsey Professional Park
23680 Three Notch Road, Unit 101
Hollywood, Maryland 20636
240-309-4238

February 15, 2024

Senate Bill 158 – Cannabis Licensing – Zoning Requirements – Alteration

Dear Chair Beidle and Members of the Committee,

I am writing to introduce Senate Bill 158. This bill would restore local control over the zoning requirements for cannabis facilities that were not operational prior to October 1, 2022.

Last year's cannabis reform legislation included provisions limiting local control over zoning decisions relating to cannabis facilities. These provisions have had a significant detrimental effect on the efforts of my constituents who live near a cannabis facility that has been built with plans to further expand in Abell in a rural part of St. Mary's County known as the Seventh District.

The Seventh District community came together to share their many concerns. Through their efforts, these citizens were able to secure concessions regarding the construction and operations of the cannabis facility, which would need to be enforced through the county's zoning process. Passage of the zoning provisions in last year's legislation essentially nullified the work that the community had done to alleviate these concerns about the effect of this facility on this rural part of my district, as the County could no longer enforce the promises made by the owner of the facility.

I respect the concern about how local zoning policies can add to the regulatory burden facing our Maryland businesses. However, the enactment of last year's legislation had no effect on whether this facility would move forward or not – it would have been built with or without this provision being enacted by the State. The residents of the Seventh District and their local representatives used the process that was available to them to work with the owner of the facility on a compromise to address their concerns. I believe that this is the way the process should work. In situations like these where operations could impact a community, the members of that community should be able to be part of the conversation and process as they would for any other project of this scale. State law should not take away the opportunity that they deserve to move forward under the reasonable conditions set forth by the County.

I respectfully request a favorable report on Senate Bill 158. Thank you for your consideration.

Sincerely,

Senator Jack Bailey

Commissioner Letter Vs #2.pdf
Uploaded by: James Morris
Position: FAV

February 14, 2024

Dear Senator Bailey,

Re: Seven Points AgroTherapeutics, LLC cannabis industrial facility
at 21420 Abell Rd, Abell, MD

Our names are James and Ruth Morris and we reside at 21517 Gerard's Cove Road, Abell, MD. We have 3 daughters ages 15, 13, and 12. We are writing this letter to convey our disappointment, concern, and lack of communication regarding the facility referenced above and Senate Bill 158.

We have many concerns regarding this facility and the growing of cannabis within 650 of our home..

- Critical area: The building is located in the critical area. Owners of property in the critical area have been turned down for very minor additions, yet this building was approved. It is our understanding that this project is zoned as agricultural and that is how this LLC was able to get approval for what has been built. If you were to see this building, it is clearly industrial and belongs in an industrial zoned area.

- Communication: No residents were informed of this facility.

- Water Use: Since this facility is not in an industrial zone, it is on the same aquifer as all residential properties. Cannabis plants require a lot of irrigation and moisture. What will be the effect on my drinking water and well?

- Stormwater Management: We question where the run off of impurities is going and how can we be sure this does not get in our waterways and food resources of crabs, oysters and fish.

- Air quality: The growing of cannabis puts off a strong odor that lasts quite a long time. We have experienced this from the growing of cannabis inside the 50,000+ square foot warehouse. We can't imagine what kind of odor we would experience if this was grown outside. We lay in our bed at night and experience the odor now. We are concerned with the air quality of our neighborhood and the affects on my family's respiratory system.

- Traffic: This is a rural area. The roads have no shoulders and road widths are minimal. There have already been many large trucks and additional traffic due to this facility. There have been times when Abell Road and Gerard's Cove Road have been blocked due to these things. This facility will continue to bring such traffic and therefore the traffic problems will continue.

- Noise and lights: With a 24/7 operation comes certain state requirements for lighting and security. We are concerned about how this intrudes on our rural environment. These lights shine right onto our property through our windows at night.

- Expansion: We are concerned about what comes next. We were not informed about this building. Will there be more that go up in the same way as this one or will other ways of growing cannabis happen without informing us?

- Property Values: What will happen to our property value?

- Safety: With this facility will come workers which brings more people to our small community. More people bring more crime. Our daughters have to walk to and from the end of Gerard's Cove Road to the bus stop everyday. That means they walk right beside the facility. There are been workers that make noises at them as they walk. Also, the noise from the facility causes them not to hear traffic that is coming behind them. We were not concerned with them walking when it was a field of beans or corn. Now there is a huge, loud building with many people.

We are asking for your help. This facility should have never happened in the way it was allowed to occur. The community was not informed at all. We do not want this facility to expand in **any** way. We have lived on Gerard's Cove Road for 23 years and have always loved where we live. We were proud to tell people we live in Abell. We would say, "It's so peaceful and beautiful." That is not the case now.

Respectfully,

James and Ruth Morris

Joseph Guyther comments on SB 0158.pdf
Uploaded by: Joseph Guyther
Position: FAV

Joseph Guyther
38530 Pleasant Harbor, Abell, MD 20606
301-481-3714

February 14, 2024

I wish to express my wholehearted support of Senate Bill SB 0158. The development and promulgation of zoning regulations governing the location of cannabis facilities is a power that must reside at the local level. Other than the prohibition of outright ban or unnecessarily burdensome regulations to make the cannabis enterprise unprofitable, the local jurisdiction is in the best position to determine what is right and best for their citizens. Overregulation at the state level or facilitating the growth of the industry at the expense of the local citizenry is an abuse of the State's regulatory power. "All politics is local" - as it should be.

Untitled document (3).pdf
Uploaded by: Kathy Owens
Position: FAV

Subject: Senate Bill 158

I'm writing in response to the above Senate bill that will be presented by Senator Jack Bailey tomorrow, Thursday, February 15th. I urge you to pass this bill.

My husband and I were both raised in the 7th District. He was actually born in the 7th District, as well. We moved further north, in the county, for job purposes. Once we retired, we bought a piece of property right next to where I grew up and a block over from where he grew up. We moved in to what was supposed to be last home in 2019 and loved living down in the 7th again. We were able to reconnect with family and old friends. Well, we loved it until the 55,000 square-foot grow house was built a mile away from us. It's not so fun living here anymore, since we have to smell pot every morning and every night. Now we have to put up with that atrocious smell and worry about our lungs. We also have concerns as to how much this has lowered our property value, and how much money will lose if we were to sell. It's beyond me as to how a permit for this building was ever approved, in our little community. I was told by County Commissioners, that all the employees at the grow house would have to pass a background check. I know for a fact that didn't take place. How would you feel if your children or grandchildren were outside playing and breathing in the awful smell? My first thought is the health repercussions.

Please, pass this bill to stop any expansions to the existing building, stop any outdoor growth and stop construction of any additional buildings for growth or processing.

If you were to come down to my house, I'm sure you would agree that we have been dealt a bad hand.

Kathy Owens

39015 Van Ward Road

Abell, MD 20606

image_6483441.pdf
Uploaded by: Kimberly Gibson
Position: FAV

image_6487327 (1).pdf
Uploaded by: Kimberly Gibson
Position: FAV

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Position: FAV

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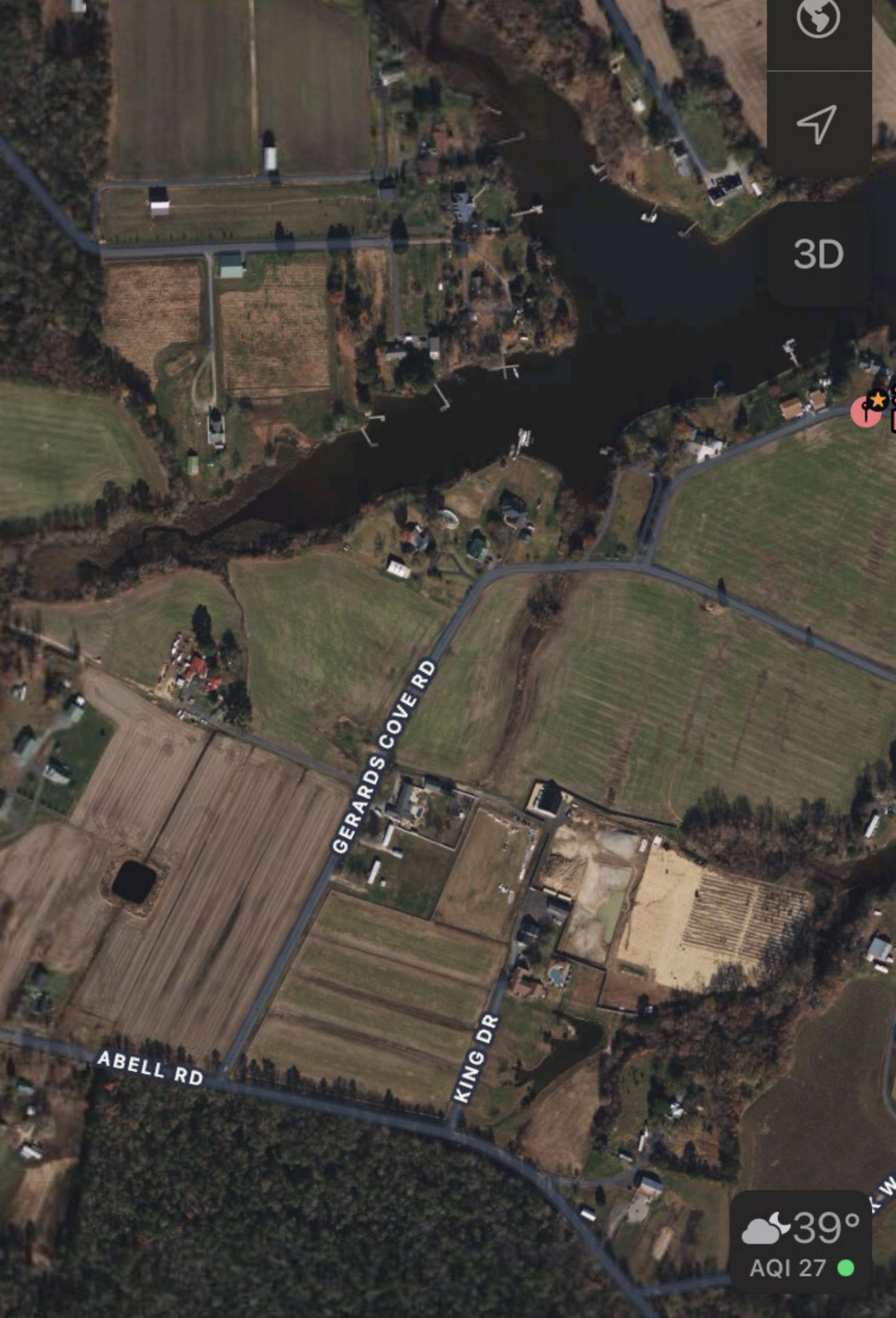
Uploaded by: Kimberly Gibson
Position: FAV


3D
GERARDS COVE RD
KING DR
ABELL RD
39°
AQI 27

testimonysb158.pdf
Uploaded by: Kimberly Gibson
Position: FAV

Testimony in favor of SB158

The 52,000 square foot industrial cannabis warehouse erected at the entrance to my neighborhood, has significantly changed the rural nature of our small town, the one that I had grown up in since birth, the one I had come to love.
I've lived off of the same road for 38 years. I currently live in the home my father was raised in, the one my grandparents built in 1959. This was the reason that I did not move away when I got married, my husband and I felt this quiet road was the perfect place to raise a family. We had dreams of continuing to raise our young children here, but gone are the days of serene quiet, and fresh air. These are treasured qualities I used to enjoy at my property that I will never get back.

There is not a day that goes by that we do not hear the buzzing of air compressor units or smell the stench of marijuana in the air.
There is now an industrial, commercial operation, improperly placed in the critical area.
The warehouse is located on the same tributary where I enjoyed fishing and crabbing with my son. It is less than a half a mile from the farm my husband hunts deer on. It is located in an area where the road is not substantial enough to handle the influx of traffic to the facility. It is located where public water and sewer are not available.

I am not providing this testimony because I am opposed to what marijuana is. I worked as a hospice nurse for 10 years and saw patients benefiting from symptom management with its use. I am giving my testimony because the improperly placed industrial warehouse affects the ability of Abell residents like to enjoy their property without being burdened. We never had an opportunity to participate in a public hearing prior to the monstrosity being erected, there were no studies done, no informational sessions. And now, any effort on behalf of citizens since the completion, leaves us with dead end phone calls going back and forth with the finger pointing between the County and the State.

If we decide we can no longer stay in our homes because of the effects, what financial loss will we suffer because of the decrease in property value? If we stay, how much longer do we endure the burdens placed on us?

Please support Bill 158 which will allow the County to establish reasonable zoning requirements for these types of facilities. It is only at the County level that the character and nature of the area can genuinely be represented and protected.

026 LOS SB158 CSMC signed.pdf
Uploaded by: Randy Guy
Position: FAV

ST. MARY'S COUNTY GOVERNMENT

COMMISSIONERS OF ST. MARY'S COUNTY

James R. Guy, President
Michael R. Alderson, Jr., Commissioner
Eric S. Colvin, Commissioner
Michael L. Hewitt, Commissioner
Scott R. Ostrow, Commissioner

Senate Bill 158
Cannabis Licensing - Zoning Requirements – Alteration

SUPPORT

February 13, 2024

The Honorable Senator Pamela Beidle
Finance Committee
3 East, Miller Senate Office Building
11 Bladen Street
Annapolis, MD 21401

Dear Chairman Beidle:

The Commissioners of St. Mary's County **SUPPORT SB 158 - Cannabis Licensing - Zoning Requirements – Alteration** which is being heard in the Finance Committee.

We support SB 158 and request a favorable report. We appreciate the introduction of this legislation and believe it will benefit the citizens of St. Mary's County. We look forward to working with you on this and other initiatives throughout the session.

Sincerely,
COMMISSIONERS OF ST. MARY'S COUNTY

James Randy Guy, President

CSMC/AB/sf
T:/Consent/2024/026

Cc: Senator Jack Bailey
Delegate Todd Morgan
Delegate Matthew Morgan
Delegate Brian Crosby
Commissioner Mike Alderson, Jr.
Commissioner Eric Colvin
Commissioner Michael Hewitt
Commissioner Scott R. Ostrow
David Weiskopf, County Administrator
John Sterling Houser, Deputy County Attorney

SB 0158 Witness Testimony Rose Guyther 021524.pdf
Uploaded by: Rose Guyther
Position: FAV

SB 0158

Cannabis Licensing – Zoning Requirements – Alterations

I fully support SB0158 to allow the local political subdivision to properly address reasonable zoning requirements for cannabis businesses. The zoning regulation of these facilities is very important for political subdivisions to better serve their citizens. Let me tell you some concerns that I have and how I have been drastically affected by the cannabis business in my area, zoned Critical Area, Rural Preservation District.

These businesses need to be in industrial areas to handle the growing/processing needs, massive electrical service, the water needs, the noise levels, and the horrendous smell emitted by this business. It is a business and thus needs to be identified by the local political subdivision as such and how the location best fits in their community.

Currently I have been stripped of my joy of living in my home. The existence of a grow facility, with NO NOTICE, NO PUBLIC HEARING, and suddenly in the works with no way to STOP IT has ruined my life. I feel like the serenity that I enjoyed for the last 38 years has turned into a beehive, with additional 24 hours lighting, an 8-foot barbed wire fence surrounding a building of 52,000 square feet, and horrendous smells that choke your breathing, that seep into your home and your yard, making it unbearable to take a walk or bike ride in the neighborhood, sit outside or work in the yard, or take some time to fish, crab, take a boat ride. You just never know when it will smell, but it is daily. It can depend on the time of day, the direction of the wind blowing, the humidity, and other factors. I cannot even drive to my home without going by the facility and smelling the "skunk" and my windows are rolled up tight. I am now known to take a face mask with me to walk and many times I have to turn around and return to my home because of the stink. The smell does take my breath away and I feel I and NO ONE ELSE IN THE STATE OF MARYLAND should have to live with this intrusion. My basic rights of living on my own property have been stripped away.

Allowing local political subdivision to establish reasonable zoning for their area is necessary to ensure that NO ONE ELSE is left with a community hating where they live, because life as they once enjoyed has been taken away due to inappropriate zoning. My opinion, these types of facilities should not be within 2 miles of residential areas OR the industry needs to find a way to curtail ALL smells emitted, reduce noise and lighting, and provide site mitigation with berms and landscaping. NOTHING should pass the property line of that facility.

Rose Ellen Guyther
38530 Pleasant Habor Way, Abell MD 20606

Senate Bill 158 - Cannabis Zoning.pdf
Uploaded by: Victoria Brown
Position: FAV

Written Testimony in Favor of Senate Bill 158

By: Senator Jack Bailey

Cannabis Licensing - Zoning Requirements – Alteration

Chair Senator Beidle and Senator Committee Members

My Name is Victoria M Brown and have lived in the 7th District for the last 14 years. I live approximately 1.3 miles from the existing Industrial Cannabis Facility, which is over 50,000 square feet, with over 119 parking spaces build on 75% of critical area. When this project started extraordinarily little was known about how this would affect the 7th District, only knowing that it was to be a small Grow House for Medical Cannabis. I have no issues with Cannabis whether Medical or Recreational, that is not the issue here. The issue is that the entire community in the 7th District has been disrupted from a beautiful and loving community to one of hatred and contempt between: Family Members, relatives, long lifetime friendships, as well as our church community. The history of the 7th district is long and solid. We in the 7th district come together to help one another in most all aspects of community,

The disruption in our community is many; our school children who walk past this facility to get on and off buses, they are exposed to the smell, noise and view from their homes that looks like a Penitentiary/jail, loud noise, and an extreme smell (like Skunk) every day. This environment that these children live in daily does not need to be expanded to further impact their likelihood. Many friends don't even talk to one another, as well as family members/relatives any longer over the changes in our community. So many of our homeowners who have investigated selling their homes to get away from this industrial facility can't even find buyers for their homes and land property valve has decreased (50%), but our taxes have not.

The 7th district has a large number of water front properties and retirement homes as it was a great place to come back to, however I will give you an example: Very close personal friend build a beautiful home, pier, and completed a living shore and have put well over 1.5 Million dollars into their retirement home. They valve lost is over 50% and each day they get up to the smell of Cannabis odor of shrunk. They are friends and relatives of the 7th district that do not speak to each other as they once did at the Post office or at our local community store. The smell is now traveling over a mile away from the location now and with any additional explanation of addition facility growth will only increase the violent Odor and continue the decrease in values of our homes and properties.

Families that have live near this facility have even suffered more, with the extreme noise all night long, the odor is now in their homes, furniture, they can't even open their window to get fresh air from Canoe Creek on which many have lived on for several generations. Canoe Creek is now Silting over with sediment from runoff. I employ you to please vote in favor of Senate Bill 158, to exempt the use of Cannabis licensee from certain county and municipal requirements.

Our County Local Government made many mistakes and have failed us, most of whom have retired or been voted out. Please don't let the State of Maryland fail our community. The 7th District needs your help. Thank You

Gmail - Confirmation of Complaint Form Submission.

Uploaded by: Michelle Caracaus Long
Position: FWA

Confirmation of Complaint Form Submission

1 message

SeamlessDocs <noreply@seamlessdocs.com>
To: michelle.caracaus@gmail.com

Sat, Nov 18, 2023 at 6:46 AM

MCA MARYLAND CANNABIS ADMINISTRATION

Submission Receipt

Thank you for submitting a formal Complaint Form to the Maryland Medical Cannabis Commission. We will review your complaint and follow up accordingly.

Please email us at enforcement.mmcc@maryland.gov if you have any questions or concerns.

Sincerely,

The MMCC

Form name	Complaint Reporting Form
Date submitted	Nov 18, 2023, 06:45AM EST

Submission Details:

Who is making the complaint?
Other

Please provide the name of the complainant, as well as any other relevant identifying information.
Michelle Caracaus

Are you filing this complaint on someone else's behalf?
No

Who/what is the complaint about?
Licensed Processor, Licensed Grower

Where did the incident occur?
Street Address
Van Ward Road

City
Abell

State
MD

Zip
20606

Name of Licensed Processor and/or Licensee #
PA-23-00004 Seven Points Agro

Name of Licensed Grower and/or Licensee #
GA-23-00009 Seven Points Agro

Please provide your complaint here, as well as any other relevant details.
For the love of God, I live a mile away from this place and yet every morning I step outside I'm hit in the face with this horrible cannabis

by product smell from the cannabis growing/processing facility on Abell Road, Abell, MD. Bad enough myself and the neighbors have to consistently endure this smell, but no one can tell me what I am breathing and that is concerning. What is in this smell? For all us residents know it's Volatile organic compounds and it can have short term and long term health effects, even causing cancer. The smell is placing an undue burden to keep residents indoors until the smell passes and that is unreasonable. Do something about this and tell us what we are breathing.

Have additional or related complaints been filed about this issue?
Yes

Please provide relevant information about other complaints that have been filed regarding this issue?
Same exact thing I just wrote I complained to MCA September 2023, St Mary's County Health Department and St. Mary's County Commissioners October 2023

Full Name
First Name
Michelle

Last Name
caracaus

Would you like to remain anonymous?
No

Would you like to be contacted regarding this complaint?
Yes

Email
michelle.caracaus@gmail.com

Phone Number
7033407261

View the submission and any attachments by following the link below and using this unique access code: E1M2Ncp8RtX1EzoL

View Submission

Questions? Contact us at: | 849 International Drive, 4th Floor, Linthicum, MD 21090

Complaint_Reporting_Form_YxAlf3rASAA6gR8p.pdf
136K

Gmail - County Right to Farm Ordinance _ Cannabis

Uploaded by: Michelle Caracaus Long

Position: FWA

Gmail

Michelle CL <michelle.caracaus@gmail.com>

County Right to Farm Ordinance / Cannabis Facilities Ordinance

1 message

John Houser <John.Houser@stmaryscountymd.gov> Fri, Jan 12, 2024 at 11:18 AM
To: "michelle.caracaus@gmail.com" <michelle.caracaus@gmail.com>
Cc: Buffy Giddens <Buffy.Giddens@stmaryscountymd.gov>

Ms. Caracaus,

It was a pleasure speaking to you on the phone today. Per that call, I am attaching copies of the County's right to farm ordinance (Ch 254 of the local code), Md. Courts and Judicial Proceedings 5-403 which our right to farm ordinance references, and a copy of the zoning text amendment adopted in August, 2022. I also found the attached pamphlet from the Maryland Department of the Agriculture related to right-to-farm ordinances and the state's right to farm law that may be helpful to you. Filing a nuisance action is, at the end of the day, a private legal action that the County Attorney's Office cannot give advice on. The most I am able to do is point someone to publicly available information.

The email the property owners' lawyers have told me citizens can direct their complaints to is communityoutreach@storypartners.com. I believe you are already aware, but the Maryland Cannabis Authority says questions may be sent directly to enforcement.mmcc@maryland.gov. There is also a complaint form available at https://mmcc.maryland.gov/Pages/Helpful-Forms.aspx.

If there is anything else I may be able to help with please feel free to email or call back.

Sincerely,

John

John Sterling Houser

Deputy County Attorney

St. Mary's County Government

41770 Baldridge Street

Post Office Box 653

Leonardtown, Maryland 20650

Phone: 301-475-4200, ext. 1705

Fax: 301-475-4660

Email: John.Houser@stmaryscountymd.gov

https://www.stmaryscountymd.gov/

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5 attachments

image001.png
51K

SMCC Ch 254 - Right to Farm.pdf
175K

MDA - Maryland Right To Farm.pdf
534K

Ordinance 22-30 Cannabis Use Types.pdf
2746K

Md. Courts and Judicial Proceedings Code Ann. _ 5-403.PDF
21K

Gmail - RE_ Agricultural Reconciliation Committee

Uploaded by: Michelle Caracaus Long

Position: FWA

Gmail Michelle CL <michelle.caracaus@gmail.com>

RE: Agricultural Reconciliation Committee Information

1 message

Lisa Ledman <Lisa.Ledman@stmaryscountymd.gov> Tue, Feb 13, 2024 at 11:04 AM
To: Michelle Caracaus Long <michelle.caracaus@gmail.com>
Cc: Priscilla Leitch <Priscilla.Leitch@stmaryscountymd.gov>, Diane Gleissner <Diane.Gleissner@stmaryscountymd.gov>, Sue Veith <Sue.Veith@stmaryscountymd.gov>

Good morning Ms. Caracaus.

As of this time, there has never been a formal complaint filed for review of the SMC Agricultural Reconciliation Committee. We are working with the County Attorney to flush out the process and will respond to you once that is in place.

Lisa Ledman

St. Mary's County Department of Economic Development

Agriculture & Seafood Division

240-309-4022

lisa.ledman@stmaryscountymd.gov (please note new email address)

From: Michelle Caracaus Long <michelle.caracaus@gmail.com>
Sent: Thursday, February 8, 2024 10:27 PM
To: Diane Gleissner <Diane.Gleissner@stmaryscountymd.gov>; Lisa Ledman <Lisa.Ledman@stmaryscountymd.gov>; Sue Veith <Sue.Veith@stmaryscountymd.gov>
Subject: Agricultural Reconciliation Committee Information

Good evening,

Would you please help me get in contact with the St. Mary's County Agricultural Reconciliation Committee? Per 254-4(a) that is the St. Mary's County agency authorized to hear a nuisance complaint against an agricultural operation. I am a county resident and would like to file a complaint.

Thank you,

Michelle Caracaus

Gmail - Re_ Complaint.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Gmail Michelle CL <michelle.caracaus@gmail.com>

Re: Complaint

1 message

Donna Koehler -MDE- <donna.koehler@maryland.gov> Mon, Nov 27, 2023 at 3:33 PM
To: Michelle Caracaus Long <michelle.caracaus@gmail.com>

Ms. Caracaus:
Cannabis sites in Maryland are licensed and regulated through the Maryland Medical Cannabis Commission. Maryland Department of the Environment Air and Radiation Administration does not permit or regulate these types of facilities/sites.

Donna Koehler
Environmental Health Specialist
ARA
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230
donna koehler@maryland.gov
410-537-3207 (O)

Website | Facebook | Twitter

Click here to complete a three question customer experience survey.

On Tue, Nov 21, 2023 at 4:08 PM Michelle Caracaus Long <michelle.caracaus@gmail.com> wrote:

> Good afternoon Donna,
>
> I appreciate your response. It's disappointing and very frustrating that both the State and County referred me to contact MDE. This is crazy no one knows who does what. See attached.
>
> Thank you,
>
> Michelle
>
> On Tue, Nov 21, 2023 at 15:10 Donna Koehler -MDE- <donna.koehler@maryland.gov> wrote:
>
> > Thank you for your email regarding the complaint for the Cannabis Growing/Processing Facility on Abell Road, Abell, MD.
> > This office does not regulate this type of facility.
> > The local health department may be contacted at 410-838-1500 with your concerns.
> >
> >
> > **Donna Koehler**
> > Environmental Health Specialist
> > ARA
> > Maryland Department of the Environment
> > 1800 Washington Boulevard
> > Baltimore, Maryland 21230
> > donna koehler@maryland.gov
> > 410-537-3207 (O)
> >
> > Website | Facebook | Twitter
> >
> >
> > Click here to complete a three question customer experience survey.

> Click here to complete a three question customer experience survey.

Click here to complete a three question customer experience survey.

Gmail - Re_ Inquiry about Odor_Air Pollution.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Gmail Michelle CL <michelle.caracaus@gmail.com>

Re: Inquiry about Odor/Air Pollution

1 message

Community Outreach <communityoutreach@storypartners.com> Mon, Feb 5, 2024 at 10:20 AM
To: Michelle Caracaus Long <michelle.caracaus@gmail.com>

Dear Michelle,

Thanks for your email. With respect to odor, the air poses no health risk, it is simply the smell of the plants. Story has installed internal air circulation systems that features various types of filtration and we are doing our best to suppress the odor. We have heard your concerns and are continuing to do due diligence in exploring supplemental ways to further reduce the odor.

Thank you,
Story

> On Feb 4, 2024, at 6:36 AM, Michelle Caracaus Long <michelle.caracaus@gmail.com> wrote:
>
> Good morning,
>
> Would you please tell me what exactly I'm breathing from the odor that is the byproduct/air pollution produced by your facility and if there are any current mitigations in place to control it?
>
> Myself and all the residents this directly and negatively impacts should be well informed about what exactly this smell is and if there are any negative health effects. We unwillingly breathe it daily. I also can't explain how infuriating it is when this odor permeates into my house, vehicle, chicken coop, or shed.
>
> Thank you,
>
> Michelle

Gmail - Re_ Inquiry.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Gmail Michelle CL <michelle.caracaus@gmail.com>

Re: Inquiry

1 message

SMCHD ENV -SMCHD- <smchd.env@maryland.gov> Wed, Nov 29, 2023 at 8:14 AM
To: Michelle Caracaus Long <michelle.caracaus@gmail.com>

Good Morning

The funding stream that the Health Department used to purchase the air quality sensors for the Breathe Well program is no longer available. The comprehensiveness of the initiative came from the sensors being placed at every public school in St. Mary's County. The air quality monitoring system that we have in place at the schools is the most comprehensive in the State. You are more than welcome to purchase the same type of air quality monitor that we use at the schools. We used Purple Air Sensors directly from Purple Air, Model PA-II-SD and were approximately $230-$300 per sensor.

I provided the link to the Maryland Cannabis Administration because that is where you can file a complaint about a specific facility and possibly obtain information on the processes that occur at a growing facility. I also provided the link to Maryland Department of Health because they should be able to answer any health related questions you have regarding the act of growing marijuana.

Thank you
Heather

On Sat, Nov 18, 2023 at 7:16 AM Michelle Caracaus Long <michelle.caracaus@gmail.com> wrote:

> Good morning Heather,
>
> I appreciate the information and while I have also contacted the state facilities, it's hard to understand why I'm being directed to them when there is a whole specific Breathe Well St. Mary's Project underway. I am requesting a sensor for the Breathe Well St. Mary's initiative be added to Abell, MD, location specifically in the immediate vicinity of the cannabis growing and processing facility.
>
> I raised this concern to the County Commissioners during their open forum on October 17th that how can our county have a whole initiative dedicated to a, "comprehensive air quality monitoring and health education initiative for St. Mary's County" (extracted from your website), but yet the closest sensor is ~6.6 miles away at Dynard instead of an area receiving a significant amount of complaints about a horrible smell from the residents? The worst part is it's not knowing what is in the smell. Is it VOCs? It's it something that can eventually seep into my groundwater or affect my outdoor animals since it's heavy enough to sit and linger in the air? Is it something that can trigger one of my family member's health issues or further complicate that? Will short term and long term exposure affect me?
>
> No one can tell me what exactly I'm breathing and that is scary. It's also concerning and disappointing that no government body seems to care or want to help either. I don't want to see some lawyer infomercial several years down the road asking me if I lived in Abell because there is now some class action suit for cancer. I hope you understand my frustration and I appreciate any assistance you can provide.
>
> Thank you,
>
> Michelle

On Tue, Oct 17, 2023 at 1:24 PM SMCHD ENV -SMCHD- <smchd.env@maryland.gov> wrote:

> Good Afternoon
>
> I'm sorry if you did not receive the previous email I sent on September 22nd. The Maryland Cannabis Administration oversees the permits for the marijuana processing facility and Maryland Department of the Environment may be able to address any questions you have regarding the Air Quality. Below are the web addresses for both and should be able to provide you with the information you are requesting. Thank you

Maryland Cannabis Administration
MDE: Air Quality Program

Heather Moritz, LEHS
Director, Environmental Health Division
St. Mary's County Health Department
Main Office
PO Box 316, 21580 Peabody Street
Leonardtown, MD 20650
heather.moritz@maryland.gov
Environmental Health Office: 301-475-4321 (phone), 301-475-4373 (fax)
SMCHD Main Office: 301-475-4330
E-mail: smchd.env@maryland.gov

PLEASE SUBMIT INFORMATION REQUESTS TO THE FOLLOWING EMAIL ADDRESS: smchd.env@maryland.gov

Public information requests submitted to this office in writing will be responded to within 30 days. This record search will be conducted without access to a title search of the property. The information provided is based on the current regulations and policies as of this date. The information may not be valid if regulations and/or policies change.

--
Administration Team
Environmental Health Division
St. Mary's County Health Department
Main Building
P.O. Box 316, 21580 Peabody Street
Leonardtown, MD 20650
Environmental Health: 301-475-4321 (phone), 301-475-4373 (fax)
SMCHD Main: 301-475-4330 (phone)
E-mail: smchd.env@maryland.gov

PLEASE SUBMIT INFORMATION REQUESTS TO THE FOLLOWING EMAIL ADDRESS: smchd.env@maryland.gov

Public information requests submitted to this office in writing will be responded to within 30 days. This record search will be conducted without access to a title search of the property. The information provided is based on the current regulations and policies as of this date. The information may not be valid if regulations and/or policies change.

Gmail - Seven Points Agro.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Gmail

Michelle CL <michelle.caracaus@gmail.com>

Seven Points Agro

1 message

Todd Liddick -MCA- <toddw.liddick@maryland.gov> Tue, Feb 6, 2024 at 5:22 PM
To: michelle.caracaus@gmail.com

Michelle,

The MCA does not have authority over the odor of the air as a result of growing or processing taking place at Seven Points Agro.

Might I suggest contacting the local zoning board who approved the facility or the EPA for your concerns

Regards,

Todd Liddick
Maryland Cannabis Administration
Regional Director
Office of Compliance and Regulation
443-955-3744

Indoor Marijuana Grow Effects.report _1b.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Health Effects Associated with Indoor Marijuana Grow Operations

By

John W. Martyny, PhD
Mike V. Van Dyke, PhD, CIH, CSP
Josh Schaeffer, M.S.
Kate Serrano, MPH

Division of Environmental and Occupational Health Sciences
Department of Medicine
National Jewish Health
Denver, CO

Introduction:

During the 1970's, most marijuana was grown in outdoor areas that were hard to find and were not readily visible to law enforcement. However, with new law enforcement techniques, including aircraft for surveillance, these large outdoor operations have become more vulnerable to detection and in much of the country growth is seasonally limited by temperature and light. In addition, restricting the pollination of the female plants in the outdoors is more difficult thereby limiting the 8-9-tetrahydrocannabinol (THC) content of the buds. These factors have contributed to an increase in indoor marijuana grow operations.

Indoor marijuana grow operations (MGO's) enable a year-long growing season in which conditions can be tightly controlled, resulting in plants with higher THC content per plant. A number of environmental factors must be monitored and kept in balance including the amount of light, the day-night periodicity, the carbon dioxide level, the humidity level and the temperature. In addition, the plants must be provided with adequate nutrition and pests must be kept under control.

Although these production factors could be provided in a greenhouse, such a growth area is very likely to be spotted by law enforcement officials or individuals wishing to steal the crop. In order to prevent detection, MGO's are frequently established in a house or a portion of a house that can be easily confined. Since a residential structure is not designed to function as a greenhouse, contamination by pesticides and fertilizers is more difficult to control, moisture can cause damage to building materials and result in excessive mold growth, and the risk of fire is significantly increased.

In order to provide the best growth environment for marijuana, temperature and humidity must be regulated. Temperature is normally kept between 21 degrees C. and 32 degrees C. (although some references indicate that the optimum temperature may be as high as 35 degrees C). The relative humidity is normally kept between 50% and 70% according to most sources although there have been some reports of relative humidity exceeding 90%. Typically, the relative humidity is dependent upon the amount of ventilation that can be provided and not the humidity that the plant needs. The allowable ventilation is likely determined by the need for secrecy, which may result in relatively high levels of humidity. The elevated relative humidity coupled with the elevated temperatures and the need for irrigation, frequently enables fungal growth within the structure. Increased fungal growth within the structure results in elevated mold exposures, of special concern when children are involved, as well as the possibility of actual structural damage to the residence.

Airborne levels of mold spores within these structures may subject the occupants, emergency personnel and other individuals to significant health hazards. Persons residing in these homes are likely to have levels of exposure that can cause hypersensitivity pneumonitis, allergic rhinitis, asthma, and other respiratory diseases. Emergency personnel and law enforcement officers entering these facilities on a regular basis have reported upper respiratory irritation, skin rashes, and other symptoms

associated with these exposures. Officers with pre-existing conditions such as asthma have reported an exacerbation of their existing conditions while dismantling indoor MGO's.

A factor that is very important in determining the THC content of plants is an elevated carbon dioxide level. The normal carbon dioxide level in the outside air ranges from 300 ppm to 400 ppm. In MGO's it is desirable to have levels of carbon dioxide that exceed 700 ppm with 2000 ppm being the highest desirable level. Most marijuana operations attempt to keep carbon dioxide levels at between 700 ppm and 1500 ppm. While these levels of carbon dioxide are not of public health concern, they do cause to ancillary problems. First, in order to keep carbon dioxide levels high, ventilation rates normally need to be reduced often leading to excess moisture. Secondly, if the carbon dioxide is generated by the use of fossil fuel combustion, carbon monoxide and oxides of nitrogen can be produced. Both of these compounds can be very dangerous and cause significant health effects in exposed individuals.

Chemicals are also utilized as fertilizers and pesticides. Although these chemicals may not usually cause a high degree of concern when used by qualified individuals, the use by individuals unaware of the dangers may result in risk to the neighborhood, children involved with the residence, and anyone unknowingly residing in the residence after its use as an MGO.

Exposure to the fore-mentioned hazards may result in a community public health concern. Although the greatest risk is borne by the individuals residing in the residence, others may also be impacted. MGO's located in multi-family buildings may allow the distribution of the chemicals used and/or produced into the ventilation system creating an exposure situation in other residences. Exposures to children living in these operations also present a public health hazard since the exposures may result in injury or death to an innocent child. Fires and explosions may cause damage to not only the MGO but also to surrounding houses. Lastly, these operations may go undetected putting an unsuspecting family buying the residence at a later date at risk of adverse health effects.

This project was designed to quantify the chemical and biological exposures associated with MGO's in Colorado and, from this information, to determine the procedures and personal protective equipment necessary for entry into indoor marijuana grow operations.

Methodology:

As noted above, there are a number of concerns associated with MGO's. Concerns include chemical contamination, carbon monoxide and other combustion products, as well as excessive fungal contamination due to the high humidity in the home. Some MGO's have carbon dioxide generators that utilize fossil fuel combustion potentially resulting in the production of carbon monoxide and nitrogen oxides. Fungal and bacterial growth may also be of great concern due to the high humidity and presence of organic materials in the house. We were also interested in the amount of THC present in the air and on surfaces within these MGO's.

Based on these concerns, we conducted an extensive sampling effort in 30 MGO operations. These operations were identified by law enforcement and were sampled shortly after the entry of law enforcement personnel.

The first step was to survey the facility to determine the chemicals utilized, including any pesticides, fertilizers, etc. Real-time levels of carbon monoxide, carbon dioxide, temperature, and relative humidity within the MGO were collected using portable, data-recording equipment. Gas Chromatograph/Mass Spectrometer samples for organics using EPA Method TO-17 were collected for analysis at a commercial laboratory. Airborne THC levels were collected using a fiberglass filter and surface THC levels were collected using a cotton swipe.

After beginning the collection for chemical contaminants, we began sampling for bioaerosols. Bioaerosol samples were collected using an N-6 Cascade Impactor and spore traps. Using the N-6, viable fungal samples were collected using malt extract and DG-18 plates at each location. A total of 4 plates were taken for 2 minutes at each location (2 malt extract and 2 DGA-18). Two spore traps were also taken at each location for a period of 10 minutes at a calibrated flow rate of 15 liters per minute. In addition, filter samples and settled dust samples were collected for analysis using quantitative polymerase chain reaction (QPCR).

The value of each of these mold sampling techniques was as follows:

- **Viable Samples** – These samples were collected using an Anderson Cascade Impactor to sample a known amount of air onto an agar plate. Two types of plates were utilized, malt extract plates for general molds and DG-18 plates for Stachybotris sp. This sampling technique allowed us to determine the types and amounts of molds present down to the species level.
- **Non-Viable Samples** – These samples were collected using a spore trap that collects the spores present in a known amount of air and allows them to be identified, generally to genus. The advantage to this type of sampling was that the organisms did not have to be grown and therefore some species were more easily identified. In addition, the actual number of mold spores present was more accurate since the spores are counted without the necessity of a growth phase.
- **PCR Samples** – These samples were collected on a filter that was then tested using polymerase chain reaction which is able to identify a number of species that may be present by looking for the rNA associated with that mold. This test is very specific for certain molds.
- **Dust Samples** – Samples of dust in the home were taken and analyzed using PCR technology again. The PCR is used to confirm the presence of specific molds that are associated with indoor mold growth and compare them with outside mold

species. This information was compared to an EPA database to determine the relative moldiness of the house.

As dismantling of the grow operation was expected increase exposures to law enforcement personnel, we also monitored any removal operation using the same methodologies outlined above.

Results:

Indoor MGO's Sampled

We responded and sampled a total of 24 indoor MGO's. The first MGO was a 4-plex that was essentially 4 MGO's in one and the 14th MGO was a large office building with 4 large grow rooms. The data provided will therefore contain information on a total of 30 MGO's.

Viable Mold Levels

In order to determine if mold spore levels are increased within a structure, we analyze several parameters. The first parameter that we examine is to determine if the total number of spores in the outside air is equal to the total number of spores observed within the structure. Since mold samples are grab samples and have a large distribution, we expect mold levels in problem houses to be 10 times higher than outside mold spore levels. An increase of 5 times may **suggest** that the structure has an elevated mold problem and that further data needs to be collected. In addition, we expect the species inside the house to be similar in abundance and species to the species and abundance outside. The rule of 10 times higher and 5 times higher again prevails.

Table #1 shows the relationship between the outside mold spore levels and the mold spore levels found in the different MGO's. The table provides the average mold spore levels observed in the outside air and the average mold spore levels found in the inside air. It also provides the range of mold spore levels found in each of those situations. In 5 of the MGO's sampled, the average mold spore level within the grow room was at least 10 times the average spore level in the outside air. This indicates that in those MGO's, the grow rooms were likely growing mold and may present a significant danger to individuals present within those rooms. An additional 3 MGO's had ranges where the highest range was elevated more than 10 times the levels found in the outside air again indicating that mold was growing in the structure. Table #1 also illustrates that in an additional 9 MGO's, the average level of spores was at least 5 times the outside levels suggesting that indoor mold growth was likely. Many of these samples contain results where the levels were as high as the method utilized could detect, indicating that the actual levels of mold were likely much higher.

The ranges have also been highlighted to show MGO's where the highest range within the grow room is at least 5 times the outside (yellow) or 10 times the outside levels (red).

Table #1

	Plant Number	Total Outside			Grow Rooms	
		average	range		average	range
1A	117	324	144-414		1048	522-1620
1B	77	324	144-414		1745	1190-2300
1C	58	324	144-414		662	486-1080
1D	28	324	144-414		1968	1640-2270
2	160	945	540-1256		2247	594-5330
3	65	464	360-738		>1366	396->5868
4	670	189	144-270		1085	612-1742
5	232	468	342-594		>6610	1746->11286
6	52	738	486-1044		3880	1638-9794
7	37	671	324-1134		950	900-1080
8	24	671	324-1134		752	576-918
9	86	671	324-1134		423	234-594
10	28	851	648-1116		911	504-1688
11	30	575	238-1026		386	323-468
12	11	1142	360-1886		360	306-450
13	290	554	342-756		441	216-918
14A	446	140	90-180		95	72-144
14B	323	140	90-180		>2862	252->5472
14C	107	140	90-180		>1544	144->5490
14D	84	140	90-180		>2840	198->5490
15	56	518	342-648		146	108-234
16		126	90-162		871	144-1724
17	188	401	252-594		>3150	144->5922
18	75	414	198-684		628	72-1134
19	64	824	504-1188		>3189	288->6430
20	100+	3086.5*	2182-4028*		>3613	1422->10836
21	240	438	252-756		>6422	>5976->6894
22	236	869	576-1242		>3582	846->6264
23	84	293	72-468		914	630-1188
24	168	1993	180-3740		>6728	>5436->8404

* - This outside level appears to be contaminated with inside mold

> - Greater than

These data indicate that the number of MGO's with elevated spore levels appear greatest when the number of plants exceeds 50. There are, however, some MGO's with larger numbers of plants that did not indicate elevated mold spore levels. Sample #20 includes an outside air sample that was taken on the steps of the MGO and was likely contaminated with indoor mold since the primary species (P. brevicompactum) was the main fungal contaminate inside and is not routinely found in high numbers on outside samples.

In some structures, the total mold spore counts were relatively similar between indoors and outdoors but the species of mold spores present was radically changed. We therefore looked not only at total mold spore levels but also mold species that were occurring within the MGO at levels exceeding outside levels. We found that Penicillium species typically occurred within the MGO's at much higher concentrations than are present in the outside air. Table #2 illustrates this difference.

Table #2

		Pen. Outside		Grow Rooms	
Grow	Plant Number	Average	Range	Average	Range
1A	117	14	0-36	18	0-36
1B	77	14	0-36	707	306-1116
1C	58	14	0-36	77	0-126
1D	28	14	0-36	23	0-36
2	160	14	0-54	155	0 - 558
3	65	14	0-54	56	0-198
4	670	36	0-108	896	0-1670
5	232	171	0-378	>5712	1350->5400
6	52	95	0-342	3088	792-9506
7	37	108	18-198	81	54-126
8	24	108	18-198	612	324-882
9	86	108	18-198	95	54-198
10	28	36	18-90	612	216-1670
11	30	125	54-272	320	255-378
12	11	5	0-18	108	54-126
13	290	5	0-18	164	54-504
14A	446	5	0-18	45	18-108
14B	323	5	0-18	23	0-54
14C	107	5	0-18	140	72-252
14D	84	5	0-18	86	36-126
15	56	50	18-90	25	0-72
16		14	0-36	63	0-234
17	188	18	0-72	>2927	54->5706
18	75	108	36-180	178	0-396
19	64	9	0-36	>2768	36->5400
20	100+	2601*	2110-3146*	>4403	1188->5400
21	240	27	0-36	>5400	>5400->5400
22	236	42	0-108	171	90-270
23	84	14	0-54	477	432-540
24	168	477	162-972	>5400	>5400->5400

* - This outside level appears to be contaminated with inside mold

> -Greater than

Twenty-one of the MGO's sampled had Penicillium spore levels that exceeded 5 times the outdoor levels in either the average spore levels, the range, or both. In some cases, the difference was over 100 times the outside level. These results suggest that the mold species most commonly associated with MGO's in Colorado are Penicillum sp. This is not a surprise since other investigations that we have conducted in Colorado have also involved Penicillium sp. In several of these prior investigations, the elevated concentrations of Penicillum mold spores were associated with hypersensitivity pneumonitis among workers in the contaminated areas. Levels of Aspergillus spores were only found to be elevated in one MGO (MGO#5).

Non-Viable Mold Levels

Non-viable mold spore measurements have the advantage over viable spore levels in that the spores do not have to be grown. Since not all mold spores that are captured using the Anderson Cascade Impactor are able to grow due to viability issues, the non-viable spore levels are usually higher than the viable mold levels. Since most of the health effects due

to mold exposure are caused by the allergens in the spores, the spores need not be viable to cause health effects.

Table #3 provides the results from of the total spore counts.

Table #3

Grow	Plant #	Total Outside		Grow Rooms	
		average	range	average	range
1A	117	241	241	711	711
1B	77	241	241	1960	1960
1C	58	241	241	1410	1410
1D	28	241	241	2860	2860
2	160	NA	NA	1380	1380-7610
3	65	509	274-744	645	505-745
4	670	221	161-281	958	345-2090
5	232	556	295-816	18020	1960-45700
6	52	1470	1370-1570	3345	2670-4020
7	37	989	928-1050	900	780-1020
8	24	989	928-1050	534	471-597
9	86	989	928-1050	489	465-512
10	28	7430	6690-8170	1893	653-2880
11	30	3670	3370-3970	279	189-369
12	11	6075	5960-6190	783	716-850
13	290	2695	2240-3150	304	0-654
14A	446	503	498-507	464	464
14B	323	503	498-507	179	84-274
14C	107	503	498-507	334	323-344
14D	84	503	498-507	157	139-175
15	56	1067	864-1270	102	70-140
16		274	273-274	1045	0-2520
17	188	787	681-893	11196	893-25200
18	75	439	168-710	863	365-1490
19	64	751	231-1270	48454	245-134000
20	100+	1840	1350-2330	6868	5130-9820
21	240	186	126-246	P	P
22	236	13850	11100-16600	2500	2010-2990
23	84	95	77-112	2988	766-5210
24	168	2380	1770-2990	10800	10100-11500

P = Particle overload on spore trap.

These results are similar to Table #1 and indicate that a number of the MGO's had spore levels that were elevated above the background level. The biggest difference between the two tables are the results for MGO#14 where the viable levels of spores were much higher than the number of counted spores. The reason for this discrepancy is unknown at this time.

Table #4 shows the non-viable spore counts for the Penicillium/Aspergillus species only:

Grow	Plant #	Outside		Grow	
		average	range	average	range
1A	117	42	42	28	28
1B	77	42	42	478	478
1C	58	42	42	246	246
1D	28	42	42	97	97
2	160	NA	NA	42	42-42
3	65	0	0-0	26	0-42
4	670	32	0-42	714	190-1860
5	232	180	0-359	13724	1080-40100
6	52	84	0-105	801	482-1120
7	37	116	0-190	74	63-84
8	24	116	0-190	285	211-359
9	86	116	0-190	32	21-42
10	28	21	0-42	750	84-1460
11	30	200	0-356	0	0-0
12	11	106	0-106	42	21-63
13	290	21	0-42	63	42-84
14A	446	11	0-21	63	63
14B	323	11	0-21	53	21-84
14C	107	11	0-21	264	253-274
14D	84	11	0-21	53	42-63
15	56	264	0-401	42	21-63
16		11	0-21	162	106-211
17	188	496	0-570	10524	317-24900
18	75	201	0-380	95	63-169
19	64	380	0-739	47194	63-132000
20	100+	1192	0-1560	6445	4260-9520
21	240	127	0-211	P	P
22	236	32	0-63	559	274-844
23	84	11	0-21	1923	295-3550
24	168	2170	0-2570	10380	9960-10800

P = Particle overload on spore trap.

This table is similar to the results obtained with the viable samples. Fourteen of the MGO's were found to have elevated or possibly elevated spore levels. The results for MGO#21 were also likely elevated but the spore trap was overloaded and could not be counted. Although spore traps can't discriminate between Penicillum sp and Aspergillus sp, it is assumed that most of the spores counted were Penicillium spores since that is what was found during the viable sampling.

Combining the information obtained from both the spore traps and the viable samples collected using the Anderson Cascade Impactors, we found the following as shown in Table 5:

MGO#	Plant Number	Viable Results	Non-Viable Results	Combined
1A	117			
1B	77	Elevated	Elevated	Elevated
1C	58	Possibly Elevated	Possibly Elevated	Possibly Elevated
1D	28	Possibly Elevated	Elevated	Elevated
2	160			
3	65	Elevated		Elevated
4	670	Elevated	Elevated	Elevated
5	232	Elevated	Elevated	Elevated
6	52	Elevated	Elevated	Elevated
7	37			
8	24			
9	86			
10	28	Elevated	Elevated	Elevated
11	30			
12	11	Elevated		Elevated
13	290	Elevated		Elevated
14A	446	Possibly Elevated	Possibly Elevated	Possibly Elevated
14B	323	Elevated		
14C	107	Elevated	Elevated	Elevated
14D	84	Elevated		Elevated
15	56			
16		Elevated	Elevated	Elevated
17	188	Elevated	Elevated	Elevated
18	75			
19	64	Elevated	Elevated	Elevated
20	100+	Possibly Elevated	Possibly Elevated	Possibly Elevated
21	240	Elevated	?	Elevated
22	236	Possibly Elevated	Elevated	Elevated
23	84	Elevated	Elevated	Elevated
24	168	Elevated		Elevated

? = Particle overload on spore trap.

There is strong agreement between both the viable and non-viable samples. Combining the results from both of the tests, we found elevated mold spore counts in 18 of the 30 MGO's for a percent elevated of 60%. We found possibly elevated levels at another 3 MGO's, which if added to the 18, result in a total of 21 MGO's with elevated spore levels (70%). The MGO's that did not show elevated mold spore levels generally had smaller numbers of plants with the exception of MGO#2 and MGO# 9. There were four MGO's that had elevated levels of mold spores but only a few plants. Two of these grows, MGO 1C and 1D were in duplexes with other larger grows were present that may have increased the spore counts for these smaller grows.

Spore Levels During Tear-out

A study conducted by DEA indicated that some of the highest mold spore concentrations occurred during the tear-out of plants from an MGO. We were able to monitor the mold spore concentrations in 10 cases where the plants were removed from the structure. The results are represented in the next tables for both viable and non-viable sampling.

Table 6.

			Viable Results			
	Total Outside		Initial Grow Room		Grow Room at Removal	
MGO #	Average	Range	Average	Range	Average	Range
2	945	540-1256	2247	594-5330	>3048	1010 - >5450
16	126	90-162	871	144-1724	>2688	1350->6840
17	401	252-594	>3150	144->5922	>2938	270->5688
18	414	198-684	628	72-1134	>7566	270->11322
19	824	504-1188	>3189	288->6430	>5837	>5796->5886
20	3087	2182-4028	>3613	1422->10836	>5560	>5400->5742
21	438	252-756	>6422	>5976->6894	>6282	>5886->6714
22	869	576-1242	>3582	846->6264	2745	1706-3948
23	293	72-468	914	630-1188	>6629	>5616->7820
24	1993	180-3740	>6728	>5436->8404	>5436	>5400->5490
	Penicillium Outside		Initial Grow Room		Grow Room at Removal	
MGO#	Average	Range	Average	Range	Average	Range
2	14	0-54	155	0-558	261	0 - 630
16	14	0-36	63	0-234	883	648-1240
17	18	0-72	>2927	54->5706	>2792	36->5400
18	108	36-180	178	0-396	>4704	162->5400
19	9	0-36	>2768	36->5400	>5400	>5400->5400
20	2601	2110-3146	>4403	1188->5400	>5405	>5400->5436
21	27	0-36	>5400	>5400->5400	>5400	>5400->5400
22	42	0-108	171	90-270	846	486-1220
23	14	0-54	477	432-540	>5198	4900->5400
24	477	162-972	>5400	>5400->5400	>5400	>5400->5400

This table indicates that the total number of mold spores in the air increased in six of the MGO's in which the plants were removed. The number of Penicillum species increased in 7 of the 10 MGO's in which the plants were removed. In some of those instances (MGO 2,14,18,22,and 23) the levels increased substantially, thereby potentially increasing the risk to the individuals conducting the operation.

The results of the non-viable samples are represented in Table 7. These results also show an increase in the total number of mold spores due to handling as well as an increase in the numbers of Penicillum/Aspergillus in the samples that were manipulated. In some instances the levels of Penicillum/Aspergillus spores reached extremely high levels (greater than 100,000 spores/cubic meter) that are not normally observed in residential samples. These high levels of spores may impart an even greater risk for exposed individuals.

Table 7

			Non-Viable Results			
	Total Outside		Initial Grow Room		Grow Room at Removal	
MGO #	Average	Range	Average	Range	Average	Range
2	NA	NA	4495	1380-7610	5555	2080 - 9030
16	274	273-274	1045	0-2520	4093	1970-7090
17	787	681-893	11196	893-25200	9838	5440-15900
18	439	168-710	863	365-1490	37260	7240-82300
19	751	231-1270	48454	245-13400	3780	3250-4310
20	1840	1350-2330	6868	5130-9820	212225	19700-534000
22	13850	11100-166	2500	2010-2990	28600	28600
23	95	77-112	2988	766-5210	190	190
24	2380	1770-2990	10800	10100-115	121500	107000-136000
	Penicillium Outside		Initial Grow Room		Grow Room at Removal	
MGO#	Average	Range	Average	Range	Average	Range
2	NA	NA	35	28 - 42	21	0 - 42
16	10.5	0-21	162	106-211	2967.5	1010-5970
17	496	0-570	10524.25	317-24900	9205	4120-15400
18	200.5	0-380	94.75	63-169	35360	6040->82300
19	380	0-739	47193.5	63-132000	1655	1560-1750
20	1191.5	0-1560	6445	4260-9520	211725	18300-534000
22	31.5	0-63	559	274-844	16200	16200
23	10.5	0-21	1922.5	295-3550	21	21
24	2170	0-2570	10380	9960-1080	121000	107000-135000

THC Levels

As part of the project, we sampled for THC in the air at the MGO's as well as on surfaces within the MGO and on the gloved hands of the investigating officers. We found airborne THC at a low level in only one MGO, suggesting that THC is not normally airborne during normal operations at MGO's. We have found THC on many of the surfaces sampled within the MGO's as well as on the hands of the investigators working in the MGO. The following results were obtained:

MGO #	**Location**	**Result (ug/wipe)**
#1	Living room table bottom north apt.	16
#1	Kitchen counter top north apt.	0.31
#1	Kitchen counter bottom south apt.	0.28
#1	Bathroom counter top north apt.	0.79
#1	Bathroom counter bottom south apt.	0.34
#1	Bathroom sink upper south apt.	0.61
#1	Kitchen counter bottom north apt.	1.2

#1	Blank	Non Detect
#2	Kitchen Counter	0.27
#2	Hand of officer	50.0
#2	Floor between grow rooms	Non detect
#2	Blank	Non Detect
#2	Upstairs Bathroom sink	1.4
#3	Kitchen counter	0.15
#3	Bathroom sink	0.29
#3	Floor in MGO	0.14
#3	Clothes Dryer	0.14
#3	Floor in grow area	Non detect
#3	Blank	Non detect
#4	Surface of inside door	Non detect
#4	Door in room #1	39.0
#4	Hands of officer	11
#4	Hands of officer	1.6
#4	Prep sink	0.83
#4	Main room floor	6.5
#4	Door to room 2	Non detect
#4	Blank	Non detect
#5	Dining Table	2.1
#5	Kitchen Counter	2
#5	Basement Grow Room Floor	37
#5	Back Bathroom	Non detect
#5	Blank	Non detect
#6	Kitchen	0.015
#6	Drying Room	0.045
#6	Grow Room Floor	0.015
#6	Bath Floor	0.0054
#6	Gloves	Non detect
#6	Blank	Non detect
#7	Bathroom Adjacent to Grow	Non detect
#7	Washer	Non detect
#7	Grow Room Floor	0.0045
#7	Kitchen	Non detect
#7	Hands	0.014
#7	Hands	0.014
#8	Kitchen Counter	Non detect
#8	Upstairs Bathroom Sink	Non detect
#8	Grow Room	Non detect
#8	Upstairs Bathroom Sink #2	0.0046
#9	Kitchen Sink	Non detect
#9	Main Floor Bathroom	Non detect
#9	Bedroom Bathroom Sink	Non detect
#9	Blank	Non detect

#10	Kitchen Counter	Non detect
#10	Bathroom sink	Non detect
#10	West Grow room table	1.9
#10	East Grow room table	Non detect
#10	Gloves	Non detect
#10	Blank	Non detect
#12	Washer in Kitchen	Non detect
#12	Coffee Table	Non detect
#12	Bathroom Toilet	Non detect
#12	Blank	Non detect
#13	Bathroom Floor	0.76
#13	Large Grow Room Floor	0.30
#13	Small Grow Room Floor	0.13
#13	Kitchen Floor	0.77
#14	Bathroom Floor	0.80
#14	Processing Counter	59
#14	Kitchen Sink	0.49
#14	Refrigerator	0.13
#14	Counter	3.9
#14	Kitchen Sink	0.94
#14	Grow Room Floor	0.29
#16	Bathroom Sink	0.69
#16	Hallway	Non detect
#16	Kitchen island	Non detect
#17	Table top	Non detect
#17	Refrigerator Top	Non detect
#17	Top of Grow Light	Non detect
#17	Blank	Non detect
#18	Top of boxes	0.48
#18	Top of water tank	0.73
#18	Top of grow room table	0.38
#18	Hand wipe after tear-out	180
#18	Hand wipe after tear-out	40
#19	Top of grow light	0.41
#19	Kitchen Table	0.1
#19	Hand wipe	6.1
#19	TV table top	0.1
#19	Hand wipe	11
#19	Kitchen counter	Non detect
#19	Blank	Non detect
#20	Basement clipping table	2000
#20	Kitchen counter	0.1
#20	Bathroom counter	Non detect
#20	Floor	Non detect
#20	Blank	Non detect

#20	Hands	2.4
#20	Hands	5.8
#21	Hand wipe after tear out	1100
#21	Hand wipe after tear out	490
#21	Table in grow room	43
#21	Kitchen counter	2.4
#22	Stove top	1.4
#22	Clone room table	3.2
#22	Hand wipe after tear out	150
#22	Hand wipe after tear out	150
#23	Kitchen counter	Non detect
#23	Grow room wipe	0.19
#23	Hand wipe	9.2
#23	Hand wipe	120
#24	Kitchen counter	Non detect
#24	Grow room wipe	1.1
#24	Hand wipe after tear out	2900
#24	Hand wipe after tear out	1300

As this table indicates, the THC levels can be rather elevated on surfaces throughout the MGO. The levels observed ranged from non-detect to a level of 2900 ug/wipe on the hands of an officer participating in the tear-out of an MGO. The highest surface level observed was on a table top used for cloning where a level of 2000 ug/wipe was documented. Most surface levels within the MGO's were found to be less than 10 ug/wipe. Wipes taken on the hands of 16 officers working in the MGO's ranged from non-detect to 2900 ug/wipe. The highest levels were observed on the hands of officers tearing out the plants at the MGO's.

Although we are still researching the toxic effects of THC relating to dose, it appears that the intoxicating effects of THC can be observed in individuals without a history of use at levels as low as 2 mg (2000 ug). Levels this high on environmental surfaces were only observed on one occasion (a cloning table) while most surfaces within the MGO were found to have levels of less than 10 ug/wipe, 2 orders of magnitude below the levels found to cause euphoria. THC levels on the hands of officers did approach levels that would be considered to be intoxicating on a couple of occasions but these were observed primarily on the hands of officers tearing out the plants at MGO's. The average amount of THC on the hands of officers was approximately 400 ug/wipe. Hand protection during tear-out would still be considered to be desirable not only due to the toxic effects of THC but also as protection against herbicides, pesticides, etc.

VOC Sample Results:

Samples for volatile organics were collected at all of the sites. Samples taken inside of the MGO's were compared to samples taken outside in order to determine if any chemicals of concern were present within the structure. Since most of the MGO's that we visited had not been using any THC concentration techniques, the presence of high

concentrations of solvents were not expected. We did detect a number of solvents that are normally present in all structures such as acetone, butane, isobutene, etc. We also detected a number of compounds that cause the smell that we characterize as the marijuana smell. These compounds are present in higher quantities in the grow rooms and are alpha-pinene, beta-mycrene, beta-pinene, and limonene. These compounds do not present a known hazard to anyone inhaling them as far as we know.

Carbon Dioxide and Carbon Monoxide Levels:

Carbon dioxide levels were not being boosted at the time of sampling in many of the MGO's. In only one instance did we find that an operator had disconnected the vent system for the furnace and hot water heater, but at the time of sampling, he was in jail and the CO_2 was at ambient levels. No other fossil fuel combustion products were observed at that unit.

In general, the carbon dioxide levels ranged from ambient (300 – 400 ppm) up to approximately 1300 ppm. Elevated levels of carbon monoxide were not identified in any of the MGO's sampled.

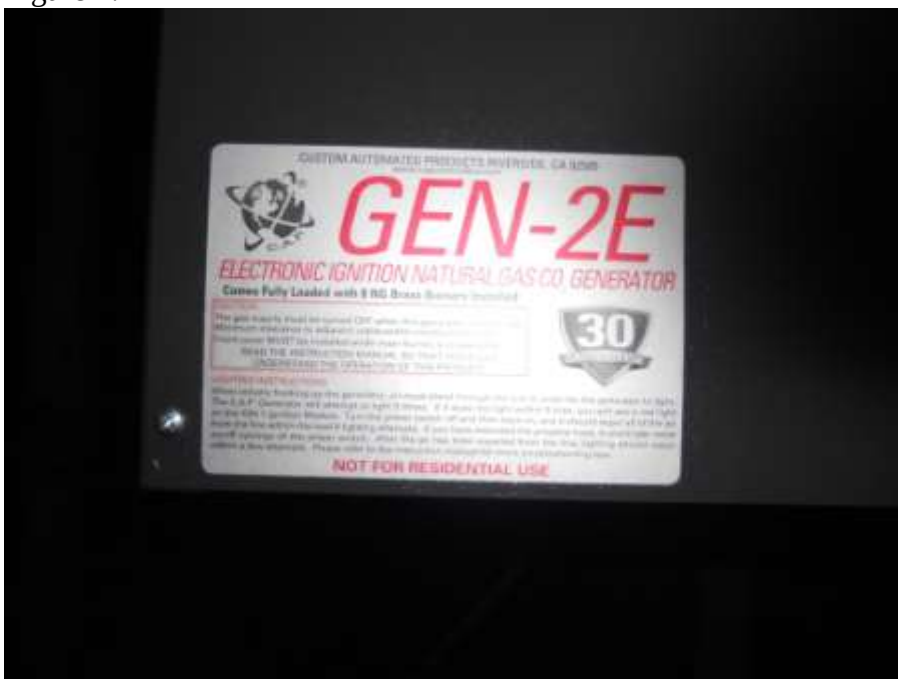
The presence of carbon dioxide tanks and regulators were observed in a number of the MGO's. In general, these setups are the best methodology for increasing the carbon dioxide levels since they do not result in the production of other combustion products that may cause pulmonary irritation or, in the case of carbon monoxide, fatalities. The typical carbon dioxide tank setup is shown in Figure 1.

Figure 1.

The second type of carbon dioxide generator that was found was a unit that produced carbon dioxide through the combustion of natural gas. These units were observed in a

number of MGO's and none of the units were ventilated to the outside. In one instance, respiratory irritation to investigators was of such a concern that the unit was turned off prior to us arriving on the scene and collecting samples. These units are labeled "NOT FOR RESIDENTIAL USE" due to the potential for the production of carbon monoxide and other combustion by-products. Although none of these units were found to be producing carbon monoxide at the time of our sampling, the potential is present and the result could be fatal if unrecognized. Figure 2 shows the warning tag on one of the units.

Figure 2.



Chemicals Utilized at MGO's

Most of the chemicals observed at MGO's fell into one of two categories, pesticides and fertilizers. Most of the compounds observed did not appear to pose a substantial threat to short duration exposures by law enforcement officers. Pesticides were primarily pyrethroids which have a relatively low toxicity. We did find, however, a number of instances of pesticides approved for outdoor use only, apparently being utilized indoors. In addition, in many instances these pesticides were being stored on the floor and within easy reach of children. In fact, a number of chemicals observed within the MGO's had label warnings to keep the chemicals out of the reach of children, yet they were still stored on the floor.

Figure #3 and #4 show the typical pesticides and fertilizers observed at the MGO's.

Figure 3.

Figure 4.

Conclusions:

A number of reports have suggested that the principal concern in indoor marijuana grow operations is the presence of excessive mold spore levels due to the elevated

temperatures, humidity, and organic material in these operations. Our study has confirmed this concern. Over 60% of the MGO's that we sampled had mold spore levels or Penicillium spore levels that exceeded outdoor levels by at least 10 times. In some cases, the levels were in excess of 100 times the outdoor level. In almost all of the MGO's, the primary species involved were Penicillium species, a species that is common in Colorado. In fact, a number of homes and commercial buildings studied by National Jewish researchers involving cases of hypersensitivity pneumonitis in patients have involved Penicillium species. It is very possible, therefore, that individuals working for long periods of time in these facilities could develop pulmonary problems such as hypersensitivity pneumonitis, asthma, and allergic rhinitis.

A study conducted by DEA personnel indicated that the manipulation of the marijuana plants results in the release of higher levels of mold spores than simply growing the plants. Our sampling confirmed that, in many cases, the tear-out of the MGO's did increase the number of airborne mold spores (especially Penicillium species spores) to relatively high levels. In one instance, the spore levels exceeded 500,000 spores per cubic meter, a level seldom observed in residential structures. These levels are high enough to indicate that respiratory protection should be worn by individuals participating in MGO investigations. Failure to utilize respiratory protection could result in respiratory irritation, headache, difficulty breathing, chest tightness, and other symptoms caused by the mold spore exposure. This is especially of concern for individuals that spend excessive time within the MGO's.

We also sampled for THC in the MGO's and found the active ingredient in marijuana to be present on many environmental surfaces. The levels found did not coincide with airborne levels suggesting that the surfaces were contaminated with large particles that had dropped onto the surfaces. The levels observed upon the surfaces do not appear to be high when related to the toxicity of THC. Although children exposed to this contamination may have some health risk, adults would not normally be expected to show symptoms. A surface in one MGO did have an excessive level of THC present but this was a cloning table with significant amounts of vegetative material on the surface.

Our investigation did not reveal the presence of any chemical concerns at the time of sampling although several reports from Canada have suggested that toxic pesticides may be present in MGO's. Although no highly toxic chemicals were observed, the use of pesticides and fungicides by individuals not trained in that use may expose responding individuals to chemicals that may cause health concerns, especially as the plants are removed from the scene.

The use of compressed carbon dioxide tanks to raise the level of carbon dioxide significantly reduces the potential for exposures to combustion by-products that may cause pulmonary concerns. Compressed gas tanks primarily present safety concerns from tanks being knocked down and breaking the valve which will then create a missile out of the tank. There are also some thermal concerns in that if gas is rapidly released, very cold temperatures can be created. In general, however, compressed carbon dioxide gas tanks create fewer health concerns than combustion sources.

A number of MGO's did utilize combustion sources to provide the excess carbon dioxide necessary. These systems are not approved for residential use and may cause health concerns due to the production of carbon monoxide as well as oxides of nitrogen. It is important that these devices not be utilized in any residential building where adequate ventilation and monitoring does not exist. In at least one MGO, the unit did cause a noticeable respiratory irritation to the investigators.

Recommendations:

Expected Hazards:

Based on the results of our study, the primary exposure of concern is the inhalation of high numbers of mold spores that we found to be present in many of the indoor marijuana grows. The highest concentrations of fungal spores were measured when the plants were being removed from the operation and not during the initial entry. However, even the initial entry at some of the MGO's was found to expose individuals to fungal spore levels that were well above outside levels. Exposure to these elevated spore levels on a sporadic basis for short periods of time may be well tolerated by most individuals. Individuals exposed to these spore levels for excessive periods of time or with an elevated frequency may develop allergic reactions to the fungal spores resulting in upper respiratory irritation and, in some cases, hypersensitivity pneumonitis. Individuals with an immune deficiency caused by transplant surgery, corticosteroids, illness, or other causes could have severe reactions to these elevated spore levels and experience life-threatening illnesses.

In addition to elevated fungal spore levels, some studies in Canada, have suggested that exposures to carbon monoxide and chemical pesticides may also be possible. Although we did not find any significantly elevated carbon monoxide levels or very toxic pesticides associated with our MGO's, the possibility does exist that these exposures could be present in some MGO's. The RCMP has recorded at least one officer that reported symptoms compatible with pesticide poisoning after working in a large MGO for a 5 hour period of time. Elevated carbon monoxide levels have also been reported in some MGO's.

Exposure to a number of physical hazards including trip and fall hazards, electrical hazards, booby traps, firearms, and fire hazards have also been associated with MGO's and a number of fire fighters and law enforcement personnel have suffered electrical shock while entering MGO's. This is not unexpected due to the poor wiring methodology associated with these grows and the significant use of water in the operations. Physical hazards must therefore be expected in MGO's.

Current Personal Protection Guidelines:

We reviewed a number of guidelines that are currently available regarding personal protective gear requirements for entry into MGO's. The publication entitled "Clandestine

Indoor Marijuana Grow Operations – Recognition, Assessment, and Remediation Guidance" published by the American Industrial Hygiene Association in 2010 indicates that the PPE required for entry must be tailored to the specific facility in question but that the following is suggested as a minimal consideration:

Initial Response:

- Chemical resistant boots with slip and puncture protection
- Eye and face protection
- Tactical ballistic helmet
- Tear and fire resistant outer garment
- Chemical resistant gloves
- Tyvek and/or chemical resistant coveralls
- For unknown atmospheres – an SCBA
- For known atmospheres – a Powered air purifying respirator (PAPR) or air purifying respirator with P-100 cartridges.

Assessment and Product Removal:

- Chemical resistant boots with slip and puncture protection
- Eye and face protection
- Tear and fire resistant outer garment
- Chemical resistant gloves
- Tyvek and/or chemical resistant coveralls
- For unknown or IDLH atmospheres – an SCBA
- For known atmospheres – a Powered air purifying respirator (PAPR) or air purifying respirator with P-100 cartridges.

The State of Arizona suggests that for tactical operations at MGO's, entry should be initiated with a full-face air purifying respirator, a Tyvek and/or chemical resistant suit, boots and gloves that provide protection from chemicals. They also indicate that the use of SCBA as a routine entry tool be considered.

A slide show produced by Network Environmental Systems and the DEA Clandestine Laboratory Training Unit suggests that entry into MGO's should be conducted with a minimum of a full face air purifying respirator with a minimum of a P-100 cartridge, nitrile-dipped gloves, Tyvek suits, and boots.

The Calgary Fire Department in Calgary, Canada considers the minimum equipment for MGO entry to consist of the following:

- Tyvek outer garments
- A full-face air purifying respirator or, if glasses are needed, a ½ face respirator with a minimum of a P-100 cartridge
- Nitrile rubber gloves or gloves appropriate for the chemicals found
- Waterproof work boots
- Kevlar gloves for tactical officers

- A 3-gas (oxygen, Carbon monoxide, and Flammability) portable monitor

The U.S. EPA does not specifically address MGO's but does provide guidance regarding mold exposures in schools and commercial buildings. They indicate that the following PPE should be worn when entering indoor areas where mold contamination has been discovered:

Minimally contaminated areas:

- N-95 disposable respirator
- Goggles or other eye protection

Moderately contaminated areas:

- N-95 disposable respirator or ½ face air purifying respirator with P-100 cartridges
- Protective coveralls
- Goggles or eye protection

Heavily contaminated areas:

- Gloves
- Tyvek coveralls
- Head covering
- Boots
- Full-face air purifying respirator with P-100 filters

In most cases, the levels of mold found in MGO's would be considered to be heavily contaminated areas by U.S. EPA definition.

Study Recommendations:

Based on the results of our study, we believe that the primary exposures present in MGO's consist of high levels of mold spores, low toxicity pesticides and other chemicals, carbon monoxide, and electrical hazards. Other than electrical hazards, very few of these exposures are expected to cause significant health effects during short exposure periods. Most individuals will not experience significant health reactions during 20 minute exposures to excessive mold spores, especially if the individual simply enters the house and leaves without manipulation of the plants or the growing equipment.

It is possible however, that some individuals will experience significant health effects to these fungal spore levels. Individuals with allergies to mold, individuals with a lowered immune response, and individuals with asthma or other chronic pulmonary disease may exhibit life threatening responses to high fungal spore levels. In addition, although we did not find any chemical exposures that would present an immediate threat to responders, the possibility of very toxic compounds being present or excessive carbon monoxide levels posing a significant risk can't be discounted. In fact, a number of MGO's have been found to be associated with clandestine methamphetamine labs that produce dangerous levels of chemical exposures. For these reasons, the

recommendations that we are providing should be considered as the minimum personal protective equipment for MGO entry and disposition. An upgrade in PPE should be immediately implemented if the status of the MGO changes or if chemicals are present that may result in dangerous exposures.

Initial Responders:

The initial law enforcement responders are frequently SWAT teams or uniformed officers that are expected to participate in the entry and apprehension of individuals in the MGO. It is expected that these officers will spend very little time within the MGO and that the primary concerns will be tactical safety, booby traps, and electrical hazards. Visibility, maneuverability, ballistic protection, and access to defensive equipment may be of prime importance. For these individuals we would suggest the following minimum PPE:

- Normal ballistic gear or uniforms as outer clothing with some fire resistance desirable.
- Gloves (chemical resistance could be desirable).
- Boots that have some water resistance in case decontamination is necessary as well as slip protection.
- An N-95 or P-100 disposable respirator with NIOSH approval should be considered by any individual with significant allergies or pulmonary problems.

In addition to this PPE, law enforcement members with immune system deficiencies should not enter MGO's without a minimum of a full-face respirator with P-100 filters. Since all respirators leak to some degree and the levels of mold spores present may be extremely high, we suggest that these individuals not participate in these activities. It is also important that individuals with these problems do not handle items being removed from the MGO and that they do not have contact with individuals that have been inside the MGO until those individuals have been decontaminated.

Assuming that no contact with chemicals has occurred during the response and that significant contact with marijuana plants and grow chemicals has not occurred, an extensive decontamination is likely not necessary. Clothing and equipment utilized within the MGO can simply be laundered in the normal fashion as soon as possible after the entry. If during the entry there was exposure to unknown chemicals or other exposures of concern, decontamination should be considered.

If there is any question as to the presence of a clandestine methamphetamine lab or concern regarding the chemicals utilized in the MGO, then chemical resistant clothing, boots, gloves, and self-contained breathing apparatus (SCBA) should be utilized.

Evaluation Period:

It is expected that during this portion of the investigation, law enforcement personnel, building inspectors, fire personnel, etc. will be entering the MGO in order to determine

what hazards are present. This portion of the investigation is expected to take a longer period of time compared to the initial entry but the removal of plants and/or equipment will not occur. In addition, chemicals will not be removed or handled in such a way as to promote spillage during this phase. Individuals participating in this phase of the operation should have the following minimum PPE:

- Tyvek coveralls designed to reduce accidental spills and to enable decontamination upon leaving. Chemical resistant clothing might also be considered during this phase.
- Water resistant and puncture resistant non-slip boots
- Gloves that are chemical resistant and water proof (nitrile gloves may work well in most situations).
- An N-95 or P-100 disposable respirator or a ½ face respirator with P-100 cartridges. Some individuals that experience headaches will find that a ½ face respirator with P-100 and organic vapor cartridges will eliminate the odor of the MGO as well as protect against fungal spores.
- The use of a 3 chemical detector capable of detecting carbon monoxide, low oxygen, and explosive environments is also recommended.

As in the initial phase, individuals with immune system deficiencies should seriously consider not participating in MGO operations. Decontamination, assuming that no chemical spills occurred, can be accomplished by simply removing the outer layer of clothing. Blowing off the clothing or shaking it should not be done prior to bagging the clothing. Chemical exposures, especially pesticides, may require full decontamination of the individual and equipment utilized. If a chemical detector is utilized, it must be maintained so that the readings can be trusted. These detectors must be calibrated on a frequent basis whether or not the detectors are used.

Removal and Destruction Phase:

It is expected that this phase of the operation will consist of sampling the plants, removing the plants, and removing equipment and supplies from the MGO. It is during this phase of the operation that we consistently observed the highest exposures and it is during this phase that the exposures may be the longest and where spills and accidents are most likely. Individuals participating in this phase should have the following minimum PPE:

- Chemical resistant and fire resistant outer garments
- A full-face air purifying respirator with a minimum of a P-100 filter. Individuals may prefer a Powered Air Purifying Respirator (PAPR) and individuals with beards must use a PAPR.
- Water, slip and puncture resistant boots.
- Water and chemical resistant gloves (nitrile may be best).
- The use of a 3 chemical detector capable of detecting carbon monoxide, low oxygen, and explosive environments is also recommended.

As in the initial phase, individuals with immune system deficiencies should seriously consider not participating in MGO operations. Decontamination, assuming that no chemical spills occurred, can be accomplished by simply removing the outer layer of clothing. Blowing off the clothing or shaking it should be minimized prior to bagging the clothing. Chemical exposures, especially pesticides, may require full decontamination of the individual and equipment utilized. If a chemical detector is utilized, it must be maintained so that the readings can be trusted.

As was previously mentioned, these suggestions are minimum PPE suggestions. Any intelligence suggesting that the MGO is combined with a clandestine methamphetamine lab or other clandestine lab should suggest that PPE be upgraded. If the initial entry or any other phase of the operation suggests that exposures may be higher than expected, then PPE should be upgraded. Finally, some individuals will be much more comfortable upgrading the PPE for a specific phase. Individuals with asthma or allergies may consider using a full-face respirator or a PAPR during any phase of operation. If at any time during an operation, an individual or individuals begin to feel ill, an immediate switch to Level B (SCBA, gloves, chemical and fire resistant clothing, gloves and boots) should be conducted until it can be determined that the environment is safe for lesser PPE.

Acknowledgements

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The law enforcement agencies that participated with this study were:

- North Metro Task Force
- Aurora Police Department
- Longmont Police Department
- Larimer County Sheriff's Office

M.Caracaus.pdf
Uploaded by: Michelle Caracaus Long
Position: FWA

Hello, I'm Michelle Caracaus Long, an Abell resident since 2017. I work incredibly hard to live there and have a right to enjoy my property and the outdoors. But depending on the day and the way the wind blows, I don't have that luxury because of the Abell cannabis growing and processing facility.

The odor/air pollution that is produced by that facility/operation is downright disgusting. Not one person can tell me exactly what I'm breathing either, how this byproduct affects air quality or if it releases anything into the land especially since we're in a critical area. I don't even live next door to the Abell cannabis operation either. I live approximately one mile from this facility and yet I'm still directly and negatively impacted by the highly offensive odor that originates from there. More recently, the unpleasant hum/buzz noise from the operation has made it my home as well. The home that once cultivated joy and happiness for myself and my husband has now evolved into a forced refuge, as it has for so many other residents.

I am in favor of Senate Bill 158, but with amendments. Based on my understanding how this bill relates to changes regarding zoning requirements, I

suggest adding additional language or some reference to identify what specific government body, be it county or state, has the jurisdiction and authority to officially handle the related enforcement actions and/sanctions, to include nuisance complaints resulting from the cannabis operation, before and after the condition of Stage One Pre-Approval for a license.

The lack of laws to positively identify these processes and authority has created a loophole between the county and state resulting in no one taking action or having regulatory oversight. This is not only unacceptable, it's extremely exhausting and frustrating leaving it to the constituent to figure out. To date, I have spent five months of my life researching state laws, county ordinances, and related news articles to gain insight of why no one could address my nuisance complaints or understand why the county and state could do nothing to help me. This was on top of a full time job, small business, a part time job, taking care of a parent with cancer, and trying to enjoy my own life. Every single contact in the county or state I've contacted had no problem pointing me to contact someone else all while

nothing was being done to address the problem in the background. I provided a cross section of my correspondence to illustrate this as well.

Please pass this bill and consider my suggested amendments.

Michelle Caracaus Long

38790 Van Ward Road

Abell, MD 20606

LOI - SB0158 - MCA (2).pdf
Uploaded by: Andrew Garrison
Position: INFO

MCA
MARYLAND
CANNABIS
ADMINISTRATION

February 15, 2024

The Honorable Pamela Beidle
Chair, Senate Finance Committee
3E Miller Senate Office Building
11 Bladen Street
Annapolis, MD 21401

RE: Senate Bill 158 – Cannabis Licensing - Zoning Requirements - Alteration – Letter of Information

Dear Chair Beidle -

The Maryland Cannabis Administration (MCA) is submitting this letter of information for Senate Bill 158 – Cannabis Licensing - Zoning Requirements - Alteration (SB0158).

SB0158 removes a zoning exemption from certain businesses that were not operational prior to October 1, 2022, but had been provided a Stage One Preapproval by the Maryland Medical Cannabis Commission, the predecessor agency of the MCA. This exemption was added in Chapters 254/255 of 2023, the Cannabis Reform Act (CRA), to prevent businesses awarded a license under House Bill 2 of 2018 (HB2) that already held control of a facility from needing additional zoning approvals. SB0158 would remove this exemption.

HB2 awarded a Stage One Preapproval for a cannabis license to 4 growers and 10 processors prior to October 1, 2022. Each firm obtaining an award was majority minority- and/or women-owned. In addition, there are two (2) dispensary firms in District 24 that were awarded a Stage One Preapproval prior to October 1, 2022, who were not operational by October 1, 2022. All other medical cannabis businesses who converted to a standard medical and adult-use license were licensed and operational prior to October 1, 2022.

MCA understands that the bill sponsor may have introduced the legislation seeking to address businesses operating in District 29. Below are the dates of licensing for all businesses in District 29. All businesses were licensed and operational prior to October 1, 2022.

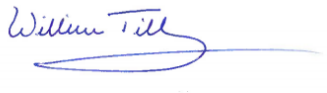
- Southern Maryland Relief, d/b/a Story of Maryland, DA-23-00002, October 23, 2017
- G&J Pharmaceuticals, LLC, d/b/a Greenwave Maryland, DA-23-00099, January 25, 2018

- Seven Points Agro Therapeutics, d/b/a Story of Maryland, PA-23-00004, April 10, 2018
- Seven Points Agro Therapeutics, d/b/a Story of Maryland, GA-23-00009, May 27, 2021

Any additional businesses that may be licensed pursuant to the Cannabis Reform Act will not hold a Stage One Preapproval prior to October 1, 2022. Therefore, SB0158 would only impact a maximum of 16 businesses.

I hope this information is useful. If you would like to discuss this further, please contact me at (410) 487-8069 or william.tilburg@maryland.gov or Andrew Garrison, Chief of the Office of Policy and Government Affairs at (443) 844-6114 or andrew.garrison@maryland.gov.

Sincerely,



William Tilburg, JD, MPH
Acting Director, Maryland Cannabis Administration

cc: Members of the Senate Finance Committee