Appendix L

Transcripts Received during Scoping Meetings
DEPARTMENT OF FOOD AND AGRICULTURE
STATE OF CALIFORNIA

ORIGINAL

MEDICAL CANNABIS CULTIVATION PROGRAM (MCCP)
PUBLIC SCOPING WORKSHOP AND COMMENT PERIOD

Wednesday, September 14, 2016

Red Lion Sierra Room
Redding, California

SHARON L. DUNBAR, CSR 4051
Court Reporter
Comment 200  STATEMENT OF CARRIE NOAH

My name is Carrie Noah, and I am a professor at the university here in Redding. I'm been in the cannabis industry for half a dozen years now.

I am very concerned with the regulations as they are going to come down the pike that people aren't looking at the financial impact and the pricing of the product.

I believe that what's going to happen is where everyone is licensed to grow, that trying to keep such a tight rein on it and keep it in the State of California mainly, it will drastically reduce the value of the product, and all of this regulation will be for naught.

Currently an outdoor pound of cannabis is going for about $1,200 in the fall when it is produced. Greenhouse is about 1,800, and indoors about 2,400.

What I see happening is it is the same rule of thumb of supply and demand. And now we will have most people, I believe, will want to be licensed and want to be legitimate and not risk any prosecution, so they will want to be licensed. But what they are all not seeing is that now we have a grip on how much is being produced, and we are
tracking it, and we are keeping it, trying to keep it in
the State of California.

So I would suggest wholeheartedly someone look at
the fact that we need to at least be able to head towards
free trade amongst the states that already have legal
cannabis rights on the books, and that we can freely trade
as if it's corn or another commodity from one state to
another.

California produces more cannabis than any other
state. However, most of that is not staying within the
state. So yes, that's illegal, but it is providing a roof
over the heads of many, many families. And there is a lot
of children that are able to go to birthday parties with
gifts for their friends where they couldn't before.

And now you are taking all of these moms and pops,
and you are going to have them run away from the business,
because who can make any money if all of a sudden the price
is dropped to $200 a pound?

So I am -- My degree is in healthcare
administration, and I help teach people to write business
licenses and look at the economics of things. And it's
just obvious to me that this has got to be addressed. It's
even more serious than the environmental impact.

Most people that smoke or use cannabis, they are
not into prescription drugs. They despise prescription
drugs, and they wouldn't go to the doctor if he was the 
last living thing on this earth to get treatment for.  
They want to use herbal medicine, and cannabis is an 
herbal medicine. 

I am very passionate about this plant. It saves 
lives. Prescription drugs kill people. Cannabis and herbal 
medicine cure people. It should have never been taken away 
from people in the first place, but there is nothing that we 
can do about that now. 

We have to push forward and hope that the big 
pharma industry doesn't get ahold of it and throw, you know, 
throw out the little guys, because I just don't see how they 
are going to be able to make ends meet, unless we can get it 
to the point where we can freely trade. 

I do believe within the next 25 years, 50 years 
maybe at the most that it will be legal in every state. 
But then to try to keep each state growing for each state 
for themselves and having 50 different sets of rules for 
50 different states just keeps illegal activity continuing. 

I guess that's it. Thank you. 

(End of statement.) 

--ooOoo--
REPORTER'S CERTIFICATE

I SHARON L. DUNBAR, CSR 4051, Certified Shorthand Reporter, do hereby certify:

That the said statement was taken before me at the time and place therein set forth and was taken down by me in shorthand, and thereafter transcribed into typewriting under my direction and supervision;

I further certify that I am neither counsel for, nor related to, any party to said issues, not in anywise interested in the outcome thereof.

In witness whereof, I have hereunto subscribed my name.

Dated: September 15, 2016

Sharon L. Dunbar
SHARON L. DUNBAR, CSR 4051
Court Reporter
Medical Cannabis Cultivation Program

Public Scoping Workshop

Tuesday, September 13, 2016

Sacramento Convention Center (Room 202)

1400 J St, Sacramento, CA 9581

4:15 p.m. - 6:19 p.m.
ROGER MORGAN: My name is Roger Morgan. I'm going to -- in the Take Back America Campaign, we're entirely opposed to internalization of marijuana called medical marijuana. What's overlooked in the whole program is the fact that this is a dangerous, harmful drug, and I'm giving you some information in this pamphlet that addresses that. There's also a file here that we have filed a petition with the FDA for clarification. In fact, that's -- it's a Schedule I drug. It goes to the DEA. On behalf of all of my colleagues in all of California, we feel it's the government's responsibility to protect the people. All three of these bills that have been signed in the law, we feel, are outrageous and dangerous for particularly our youth and our environment. Okay.

MARK SCHAEFER: So with respect to the PEIR Program, P-E-I-R, I am wondering if it would be possible if the final analysis, they would determine that -- that a baseline for determining whether or not an environmental impact packet report needs to be done would be the number existing grows through -- in the jurisdiction prior to the issuance of licenses in order to help local jurisdictions determine the extent of analysis they have to do to satisfy CEQA.

YAMIL SALAS: One thing as far as the one-acre
cannibi growing there, I think that a good amount. But
they should allow more space in between the plants so the
growers can work around the plants. So making the site
three acres and the grows, the cannabis, one acre and the
grow side to be three acres, so they can allow room for
the cultivators to work around it. So that's one.

The other one, I believe, you know, the
cultivators should be able to zone up to four acres if
they have a capacity to do it. Not allow other people to
grow more than others just because they own a dispensary
for their type of business. They should be even across
the board. I had more stuff, but I think those are the
big one. The pesticides that these labs do not test for,
so they are design what they are looking for. So there
are other pesticide that are brought from the other
countries and the states and used on the plants. But
when they do the test analysis for pesticides, they don't
show up because they are not looking for those
pesticides. And so the state should have some kind of
system to be able to test for all those kinds of
pesticides that would make it affordable for all growers
to pay the price. Cultivators should be allowed to get
together and own a distribution center. Something that
is not allowed as far as the regulation they have in
place right now.
WADE V. LAUGHTER, JR.: Back in 2007, I started working with high-CBD plants. My name is Wade Laughter. By the way, you know that. And I just, in senior years, developed a pretty important group of patients that I work with on a regular basis as well as I've continued to try and find other plants of interest. And I think that the new medical marijuana regulations, although cumbersome and challenging, are a great idea because there are so many people who claim medical as a shield for their work, and yet don't respect the plant or the environment that they're working in or the people they're providing their medicine to. I feel like the cannabis is, in fact, a healing plant and that if it is treated and grown in a manner that's appropriate for healing, it can, in fact, do wonderful things for humans. And we should make it as simple as possible for people who need cannabis as medicine to be able to grow their own and to be able to make their own medicine into a form that is suitable for treatment of their conditions without needing licenses or fees. There is a legitimate need for cannabis on the part of many patients, and these regulations will make it challenging and hard for those people to get access to their medicine. It will not -- I hope -- will, in fact, make it harder for what I think of as unskillful or criminal operators of cannabis
cultivation. There are too many of those folk, and I like that the new rules will change that. But I am concerned that it will put a lot of people like myself out of the opportunity to work with this plant. I could speak a lot more, but I think I'm going to stop now. Thank you. Prop 215, the spirit of that was that a patient should be able to get their medicine and not have to go to a store to buy it or to a druggist to get it. They should be able to grow their own. That is the spirit of 215. And I think California can do better than turning cannabis into a Walmart sort of commodity. Thank you.

(Comment 205) STEPHEN SEQUALIA: My name is Stephen, with a p-h, S-e-q-u-a-l-i-a. I'm with Cultivate California. As far as like water pollution, we should look into zero waste indoor cultivation facilities that have zero water waste. We can do that by refiltering and reusing our water. Also, with personal litigation, we can implement like standards for commercial cultivation facilities through carbonized mechanisms, I guess, chemical mechanisms. Those are things I care about. That's why I said those, and it seems to be a big issue.
STATE OF CALIFORNIA
CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE
MEDICAL CANNABIS CULTIVATION PROGRAM
PUBLIC SCOPING WORKSHOPS AND COMMENT PERIOD

* * *

REPORTER'S TRANSCRIPT
Thursday, September 15, 2016
4:00 P.M.
* * *
Red Lion Hotel, Pacific Room
1929 4th Street
Eureka, California 95501

Jennifer L. Yang, CSR 12367

KCW COURT REPORTERS & VIDEO SERVICES
1018 Second Street
Eureka, CA 95501
707.443.7067
1080 Mason Mall, Suite 4A
Crescent City, CA 95531
707.465.4987
Fax: 707.268.1283
scheduling@kcwdepos.com
kcwcourtreporters.com
APPEARANCES

NICHOLAS COMMUNICATION
2617 K Street
Suite 200
Sacramento, California 95816
REBECCA NICHOLAS
rebecca@nicholascommunication.com
(916) 267-8856
PUBLIC COMMENTS

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EUREKA, CALIFORNIA                  THURSDAY, SEPTEMBER 15, 2016

4:00 P.M.

* * *

(Comment 206) SUZANNE MAESE: My name is Suzanne Maese and I'm currently working here in Humboldt County facilitating cannabis farmers to become compliant and prepare applications for legalizing -- or not legalizing -- permitting their properties with the county.

It's very apparent that the general industry is very frightened of all of the new regulations, but you have many good farmers who are willing to take the chance to enter the system legally and continue to produce cannabis.

Something that has come up in nearly every discussion in the last eight months is the track-and-trace system and the fact that to tag a plant versus to tag a batch will impact the system dramatically to the point where it may or may not be feasible. To implement such a system that requires every plant to be tagged, due to the nature of the business of agriculture, it's a system that will not work, nor is it a system that exists in any other agricultural industry. Thank you.

* * *

(Comment 207) PATRICK ROHDE: I'm an environmental and regulatory compliance consultant with 26 cannabis
cultivation clients in several counties in both Northern
and Southern California. I have clients that are both
indoor and outdoor cultivators, and, based on the
assessments of myself and other environmental
professionals working with me, we have found that many of
our clients are currently facing the following issues:
Waste-water and waste-stream issues, like solid waste,
hazardous waste, and other environmental -- other wastes
that cause environmental impacts. Many of my clients,
they need to acquire disposal permitting in order to
mitigate these waste issues. We also have a lot of ground
water and soil impacts that we suspect may be occurring on
site due to legacy issues. We need remedial programs to
mitigate and clean up these site impacts.

My company has the ability to remediate these
sites; however, we would like to work with the Department
of Agricultural and the other agencies regulating medical
marijuana to do so.

There's a need for a voluntary compliance
program that our clients can start working with the local
and state regulators without having to worry about
negative law enforcement interactions, and we also have
issues of pesticide use, both indoor and outdoor. There's
indoor air quality issues, OSHA issues, and much more.

I'd like the Department to contact me if they
can. My number is (949) 205-8421, and my name is Patrick Rohde, Emerald Environments LLC, and I would like to share some of my information with the Department to help them more accurately to gauge regulation.

* * *

(Comment 208) ANONYMOUS: Okay. My biggest -- my question is regarding the definition of mixed-light cultivation and how ambiguous it is. I believe the State should engage more growers to help form these regulations.

Mixed-light should be defined as using artificial, supplemental lighting for fruiting and no other part of the life cycle. Regulators need to understand that artificial light is a part of the life cycle regardless of if it's outdoor, or if it is outdoor, so mixed-light needs to be understood more in terms of where within the life cycle they're going to draw the line at artificial lighting, because all product at some point of the life cycle uses artificial lighting.

Another comment is about regarding industrial hemp in the act. I am concerned about industrial hemp because if it is cultivated in proximity to our medical cannabis, then our crops will become hermaphrodites and become unsaleable.

I want to bring up the continued discrepancy with agriculture and the agricultural industry. The
agricultural industry has very much more lax regulations regarding pesticide use, water use, and cannabis, as an industry, is coming under a lot of scrutiny, and I hope that this is recognized and that it can, you know, move forward into the future and be more on par as an actual agricultural product instead of being basically demonized and, really, subject to more stringent regulations than wine.

Go to Santa Rosa and the Russian River, that brings us to the question of water. Water is a big deal, and, like you know, agriculture, the same wine producer in Mendocino is not coming upon any kind of regulation in the way that cannabis is, and if you do studies, I am sure you will find that, above and beyond, while there are some bad apples in the barrel, cannabis growers, as a whole, are -- have a bar super-high. The bar is super-high, and they are doing not just best practices, but next practices.

Then bringing on to the question of water and water rights and water impacts, the State Water Board two weeks ago had a public meeting here regarding registering small-irrigation use and their in-stream flow policy. As an engineer with a hydrology background, it seems to me extremely difficult and complicated for them to come up with any real type of regulation in the short amount of time that they have and with the limited data they have,
and these concerns about water impacts are very important; however, I feel that there's also going to be a big discrepancy based on the impacts already occurring in these watersheds, so I hope they can address that fairly.

Let's take the example of the Eel River, which is diverted to Lake Pillsbury and Lake Mendocino and diverted to the Russian River for Sonoma wine growers, so it seems to me that for, particularly, the Eel River watershed, there's not going to be a lot of water to allocate, and that is concerning to me for this industry.

In addition to consider for the in-stream policy is the young age of the stands of trees from legacy logging. Basically, you have young Doug Firs that are very thirsty and they are also impacting the watershed and it's not just pot. That's it.

Oh. One last thing. There's a lot of focus on production and -- and regulating these practices, which is really important, and I think this is really great. The key component that I'm not yet seeing a lot of emphasis on is how exactly we are going to effectively distribute pot to the market and how this product is going to reach the market.

You know there are limited dispensaries. I don't know how many distributor licenses are going to be given out, but really addressing this connection between
the people and the product, and, as of yet, I haven't
heard anything regarding that. That seems like it's, you
know, they've kind of worked that out, so thank you.

* * *

(Comment 209) ANONYMOUS: To start off, I've been part of the
California medical cannabis industry for 11 years, I
collected signatures for 215 over 23 years ago, and so I
come to this meeting really worried about protecting and
grandfathering in all the work that's been done up until
now for legitimate providers of medical cannabis in
California, all right? Think for a second.

Yeah, you know, I just -- I have a fear of our
industry being taken over by big business. I know for a
fact that the alcohol industry helped write the rules and
regulations already and I see that being a problem with
distribution in the way it's been -- already been modeled.

We've been given precedent-setting court cases.
The Calvin case was a precedent-setting case by the Third
District justices that was reviewed to start accepting
distribution for clinics. It also made it so clinics
didn't have to grow on-site, and this court case, it gave
us the right and it says in the court case we could come
from Humboldt to Los Angeles with our product and that we
were allowed to take groups of growers and provide these
medicines to Los Angeles, to other collectives in larger
city areas, and this is what gave the right to
distribution from grow to clinic, and so, being a part of
that case, I am hoping that some sort of grandfathering
will come about through all that with distribution and for
there to be some way for growers to have a hand in the
distribution so that it doesn't get stolen from what has
already been set up for us through California, whatever
precedential law or -- I didn't say that right. So yeah.
I don't know where else I should go with that.

Yeah, I've been a medical cannabis grower for
20 years, also, and have always advocated for growers
through distribution, and so without growers having a
say-so and some sort of control over the distribution end
of it, it's going to really create a lot of fraud and stop
people from entering the system, from regulating.

I believe that California has -- already has a
substantial supply of medical cannabis on the market and
there's not a huge room for new production to even enter
the market, if that makes sense. I don't know.

I guess that would be it, I think.

* * *

(Comment 210) NATALYNNE DELAPP, EPIC: I am most interested in
how CDFA is going to handle protection of forest resource
lands and work with Cal Fire, Department of Fish and
Wildlife and even the Federal Fish and Wildlife Service
specifically as it pertains to Northern Spotted Owl. Northern Spotted Owl were just listed under the California Endangered Species Act.

I am interested in how the less than three-acre conversion exemption is what landowners currently use to be able to open up more forestland, and there is, I think, a real threat to California's forest resource lands on the North Coast and the southern Sierra Foothills for forestland conversion for commercial cannabis agriculture, much like oak wood glens were converted for wineries, so how is CDFA going to assess the environmental impact of forest resources, cumulative impacts dealing with legacy impacts, because a lot of these lands are previously timber company lands, so there's old, old problems, old problems with roads and slides, landslides.

So forest resources, what is CDFA going to do to -- you know, how will -- are they going to analyze the environmental impact of opening up cannabis cultivation into our forest resource lands? That's it.

* * *
STATE OF CALIFORNIA  
COUNTY OF HUMBOLDT  

I, the undersigned, hereby certify that the public comments in the foregoing Medical Cannabis Cultivation Program Public Scoping Workshop & Comment Period were taken in shorthand by me, a Certified Shorthand Reporter, at the time and place therein stated and that the public comments were thereafter reduced, by computer, to typewriting under my direction and supervision.

I further certify that I am not of counsel or attorney for either or any of the parties in the foregoing caption named, nor in any way interested in the event or outcome of this cause and that I am not related to any of the parties thereto.

IN WITNESS WHEREOF, I have hereunto set my hand this 30th day of September, 2016

Jennifer L. Yang, CSR No. 12367
Coalinga, California

Thursday, September 22, 2016; 4:00 p.m.

Harris Ranch

(Comment 211) MS. BEVERLY DAVIES: I just hope this program addresses all cannabis growers, not just growers that have a lot of funds. Not a lot of growers today have had the opportunity to accumulate large amounts of cash to pay for all the licensing, property, water, insecticides, or whatever. They just never had the opportunity to do the ordinances of every county in the State of California to make a lot of money to have -- to get into this new project that the State of California wants to endeavor. That everyone is considered, from the small cultivator to the large cultivator, or maybe have grants so specialty growers can get involved.

Something for women to be involved in.

I just want it to be fair to everyone of every monetary social level. Not all of us have a million dollars to go buy a warehouse and put up 100 lights and pay $10,000 a month for electricity. We haven't had the ability to do that through the years, and that fees are reasonable, that they don't just make them so high just a few people can afford them.

I'm not too sure about the plant numbers
everyone can do. If it's still 99 or -- that's what the
Feds say, over 99 is considered a federal cultivation
charge. Even if they issued you a license for half an
acre, it's not very clear if you're limited still with
the 99 plants.

The guns, too. They want to take guns from
people that want to protect the property who are really
responsible for those, safety and the use of their
weapons since they have ever owned them, since small.
If you ban guns, the only people that are going to have
them are the people that shouldn't have them. Anybody
responsible is never going to pull a weapon on somebody.
That should be there, they need it to protect their
crops from critters, from thieves, whatever else.
They're not going to be used against inspectors, if
inspectors have made themselves known they would be
there.

I just want it to be a fair thing, not just
single out the more influential marijuana distributors
or the people that have been involved with having
dispensaries set up and able to capitalize for the last
few years and have millions of dollars to spend. Most
of us don't. That's all I have to say.
California Department of Food and Agriculture
Medical Cannabis Cultivation Program
Public Scoping Meeting

Date: September 28, 2016

Reported By: Amber Ibarra, CSR

R and R Reporting
Phone: 951-782-0012
Fax: 951-782-0013
Email: contact@randrreporting.com
Internet: www.RandRReporting.com
Hello, my name is Max. I am a grower. I am also a bud tender here in the Coachella Valley. I have been in this industry for five years. I do believe that this is going to be one of the largest cash crops in the world -- forget California, forget the nation, the world. We will have cannabis reintroduced to the world as what it was originally, a plant that cures all. It is not just for fun. It is a very medicinal plant. The ancient Greeks used to call it the plant that cures all, "panacea."

I would love for the bureau and your department to focus on changing the perception corporate America gave cannabis. This is not demon weed. It is not the devil's work. This is a beautiful cash crop that we need to reinvent and rediscover. And part of the bureau's responsibility is to take away the stigma that we, as growers and cannabis supporters, have by so many people in this nation that it's some kind of evilness. It is not. This department should focus on us and our name and our reputation. We should not be considered some kind of crazy wild people.

We should be considered farmers and cultivators, and the bureau should be protecting us and having our back and helping us change our perceptions. Thank you.
(Comment 213) MICHELLE BATSON

I just want to say thank you to the State of California and the Department of Agriculture for putting this on. I'm very impressed and pleased to see that we are being included in the preliminary planning for what is going to be an awesome new industry for the State of California. I look forward to seeing further work on these proposals. Thanks.

(Comment 214) THOMAS WEATHERS

I represent the Santa Rosa Band of Cahuilla Indians, a federally recognized Indian tribe. The tribe has adopted its own medical cannabis law. The tribe is in the process of adopting its own medical cannabis regulations. The tribe intends to cultivate medical cannabis. We came to this meeting today to discuss how the State regulations would interact with the tribal regulations, and we were told there's no room for the tribe under the current law. So the tribe cannot get licensed even if it wanted to get licensed, and there's no way for the current regulations to recognize the tribal process or tribal licensing.

So I would like the department to consider some way that the State could work with the tribe to recognize tribal cultivation and tribal licensing.

///
SUNRISE MARKEY: We need some kind of protection for the current certified organic farmer to get into a State-licensed program because -- because I understand that this is very illegal. So if we start state license program for growing medical marijuana, make sure that the federally granted certified organic farmer will not have any conflict with program because --

LARRY MARKEY: Yeah, because certified organic is a federal program. It's not available for State programs.

SUNRISE MARKEY: I am interested in -- because of that, I'd like to maintain certified organic because it is very important to have -- create products -- produce products nontoxic.

LARRY MARKEY: No chemicals, no residues, no nothing coming into the air --

SUNRISE MARKEY: Healthy fruits that people can --

LARRY MARKEY: -- or the soil, or the environment, no poisons.

SUNRISE MARKEY: Right. But we have inspections -- annual inspection, very strict inspection. They will come, and when I start the State program, they will come and say, "What the heck is this," and I do not
want to have that. So if -- when you make the regulations, you should have some point to protect those farmers who are interested.

LARRY MARKEY: Some protection.

SUNRISE MARKEY: Yes, to make sure we can do -- to make sure we can continue certified organic program and not be punished.

LARRY MARKEY: Bottom line, we don't want to be punished for our good work.

SUNRISE MARKEY: Because I think I'm very proud of maintaining records and not, you know -- any known organic -- I think those are very important things. So if I'm afraid of federal prosecution or whatever, because of that stupid reason, I don't want to give up that certificate.

(Comment 216) ALEXIS RUBALCABA-ALTO:

I'm the tribal secretary for the Santa Rosa Band of Cahuilla Tribal Counsel. We came here today to kind of just work with the State and see at what point in the regulations we could get it, you know, to recognize tribal licensing. And I just, you know, I find it quite offensive, actually, that it's not even going to be considered. Tribal recognition and licensing is not even in the regulations at all without, you know, forfeiting some form of tribal sovereignty and sovereign immunity.
So it is really discouraging to see that we weren't consulted or even considered to be part of these regulations, and that's something that we hope to take up with the governor's office if we're not going to get any help on a State level.

(Comment 217) JEANIAN ESPINOZA

All I want to say is that I don't think it's fair for Indian tribes not to be included in anything that the State is doing. We have our sovereign immunity, of course. And as far as the State goes, everybody else is allowed to cultivate, dispense, collect, do the collectives and all that goes with the cannabis situation, but the Indian tribes are left out. We're not able to be licensed because we are a sovereign entity.

So I'm just hoping that something can happen so that the State recognizes us and puts us together with the rest of the people in California that have their cannabis enterprises.

(Comment 218) BRENT BUHRMAN

So when State is considering the licensing for either outdoor, indoor, or mixed use, they need to consider not only the environmental impact of indoor facilities -- large scale indoor facilities, but they need to consider that most people in the industry are going to want to do large scale commercial greenhouses. And that should be
considered either an outdoor or a mixed use license so that we're -- and also put in the same category able to have up to an acre per license because you're going to find that more people in the industry are going to want to have large greenhouses versus large indoor facilities, not only for cost of production but for environmental impact. And just the price to produce the product would be far less and easier on the environment if they allow greenhouses versus indoor facilities to be up to an acre in size.

(Comment 219) DARRYL COTTON

My name is Darryl Cotton. I own Inda-Gro Induction Grow Lights. We are a San Diego company that also has developed farms, which we refer to as "151 farms." That stands for a pound of cannabis, five pounds of food for one community. Please visit us at 151farmers.org. You'll see that we have a recirculating system of water that feeds our cannabis, our hops, and our food, using only five percent of the water.

(Comment 220) MANUEL SUERO

Allow cultivators to use ground water -- well water for cultivation purposes instead of city water in order to reduce cultivation costs and also to have more control on the quality of the water and the consumption of the water.
I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: _______________ OCT 10 2016 _______________

__________________________
Amber L. Anne

CSR No.: 14039
MONDO MILLAN: So my comment is in concern to the DOJ background check. In regards to the background to the DOJ, I think that's a little over excessive because just like with ABC liquor laws, all the regulations are mandated or controlled by -- as far as the background -- by the vice department. So by keeping it locally within the city jurisdictions, you should go to the already establish code enforcements.

Again, DOJ is just federal. What's the purpose of that? This is not a --not any real great mystery about it; this is just medicine. Local. Keep it local. I think everyone should be background checked, but at the local level, at the vice department. It's just like when you're dealing with liquor licenses. That's my point, because all these comments they're going to review to try to make corrections to these things. Is that long enough? Do you think -- does that make sense? Should I say anything more? That's my only comment right now in regards to that.

LAUREN FRASER: I just have a few comments, but let me pull up my notes, if that's okay. So in the distribution space, obviously, we'll be working closely with cultivators and manufacturers on maintaining the quality and ensuring the quality of the product before it gets to a dispensary. So what we realized is there's --
not only are we testing, you know, getting the product independently tested to ensure that's it's safe, but we're also responsible to hold that product in our warehouses and make sure the quality of the product doesn't degrade before it goes to the dispensary.

So, one of the issues is that when the product leaves the cultivation site and it's sealed and bagged "tampered evident," there are instances and protocols with quality control that requires you to open the bag to make sure that the moisture isn't captured in the product. It's a plant, like a fruit. It's a live product that needs to be properly stored and cared for.

So the question is, really, for distribution: If the project has to be tamper evident when it leaves the farm, how do we properly care for it? We should have some other seal that shows this is still tamper evident. So, basically, if the distributor opens it, we should then be able to close it again and seal it up before it goes to the dispensary, because mainly we have to care for it. The product -- they call it "burping it," to allow the proper oxidation and then, you know, the closing it as well at certain times. That's a concern for distribution to share something that needs to be worked through. I have a couple others.

So one of the concerns about lab testing is with
this flower, the cannabis that's produced, it will often fail for a microbial count for mold or yeast. So when it fails the lab test, then you have a decision to make, is this project -- it's not safe for someone to consume as is, but it would be potentially safe for someone to convert -- to take that project and then do some further extraction to it to pull out the cannabinoids but leave the plant matter behind with the unsafe product. So that's how people do it.

Now, if it fails for something, they send it to the manufacturer to take that out and then you would take that end product and make it into an oil, or concentrated product. And that test -- if that test is clean, no mold or yeast or micro-toxins, no residual solvents from the extraction process, then it is fit for consumption. However, with pesticide use there's a lot of pesticides that people haven't yet figured out how to extract out of the plant.

So what I think a lot of farmers are afraid of is: What's going to happen if my product is deemed unsafe or unfit? Are you going to destroy the product? Is the distributor going to be responsible for quarantining it? What has to happen to that product?

It's a lot of money that people put into this and then they're expecting to sell or do something with.
So it would be really damaging if they had to get rid of that product and have it destroyed. So there are innovative solutions that people are developing to keep the product -- or refine the product to a level that is safe for consumption, but it is something that the department is going to have to figure out. What are the protocols for managing and handling the product if it fails lab testing? Who's responsible for holding it? Who's responsible for sending it somewhere, quarantining it?

We're always curious if the people -- distributors will be able to quarantine or, like, hold custody of the product on site at the cultivation facility rather than having to transport all of the product to the distribution facility while it's in that phase of waiting for testing, because it wouldn't make sense to leave the cultivation facility to go to the distributor if it's going to go back to the manufacturer for further testing. So the question is: Where would the product -- where does it need to be while it's in that phase of testing?

(Daniel Grace) DANIEL GRACE: The scope I'm looking at here seems to limit the size of nursery production to one hour which is a rule that exists nowhere in the ordinance that passed through Sacramento, and I do not believe the
department has the authority to implement nor do I think
it's good for industry. I think it will be difficult to
operate industry for that limitation, and I'm a nursery
owner and operator.

TAL SEGEV: Okay, I'm very interested in knowing
how the environmental impact report will affect licensors
in Oakland, specifically, but across the state. Where
are the numbers -- the metrics going to come from for
where the water is coming in from, and what it -- who's
going to measure the runoff of the water? Who's going to
tell me what can be in my water runoff and where that
environmental impact report is going to come from?

THOR OLSON: My question is: I want to have a
nursery and I want to know how I can get around having
mature plants to create seeds and have a nursery which is
supposed to be immature plants. The nursery is going to
consist of clones and seeds. In order to make the seeds,
I need to have mature plants to pollinate and actually
have mature flowers to create the seeds in the flowers.
So I need to have mature and immature plants if I'm going
to do a nursery productively with new types of cannabis
strands. In order to be a good nursery, I'm going to
have to be able to give my customers new strands and new
genetics consistently.

MICHAEL J. STEVENS: I'm primarily interested in
educating the MCCP about micropropagation and tissue culture properties. It's a high-level agriculture industry process that's used for a number of other commercial crops. It brings a lot of value to streamlining the production chain for crop cultivation and also helps with a number of efficiencies with water usage, pesticide usage and fertilizer usage. I'd like to offer some insight to the MCCP about tissue culture technology and let them know a unique permit might be needed for this tier of cultivation that is coming to this industry. Again, my name is Mike Stevens, and I'll be submitting comments online as well to tissue cultivation. Thank you for your time.

(Comment 227) JOSEPH CERVANTES: What type of entities will you be licensing? Sole proprietorships? Partnerships? Is it LLC, S-Corps, C-Corps?

(Comment 228) MICHAEL ALLAIRE: So regarding licenses, cultivators, the regulation is currently not including home-based cultivations as a commercial enterprise. However, AB2516, if signed by the governor, will establish a new category called the Specialty Cottage which will then provide for home-based cultivation on a commercial basis.

I heard from Amber today that even if the governor doesn't sign AB2516, that the CDFA has
discretion in developing additional categories. So even if AB2526 passes or if it doesn't, and particularly if it doesn't, I would like to lobby for the existence of some category that allows the commercial home-based cultivation, as per the description of AB2516. I'd very much like to be a resource and reference for the development of that, either following up AB2516 or the discretionary ability of CDFA to develop a new category. I can be contacted at mallaire@westcostms.net.

(Comment 229) CRAVS SLILL: Okay. I don't like the format of this. You can't hear what's going on; you can't find out any information. I've been here a half an hour and I got zero information so far.

(Comment 230) ALEX BECK: Allow for multiple licenses per APN per -- or based per structure, meaning instead of limiting the licenses per APN, limit to the amount of structures on the parcel.

(Comment 231) PAUL HANSBURY: So I believe that the cottage license, there should be a special license for the cottage industry. The square footage should be a canopy, not a plant count, because highly medicinal CBD plants are very small and yield very little. So the canopy would be many more plants than 25 plants.

Further, and this is where the industry part comes in, you should be able to grow 25 hundred square
feet provided that you only use the plants that you grow. You should be able to manufacture your own medicine, transport it to the patient and/or the dispensary and sell it to them directly. This would be like a lemonade stand as opposed to a huge business because there would be small quantities but the people would be able to do the research, supply the medicine and get it to the patient directly at a much lower cost than going through a distributor and paying a transporter.

This cottage industry is where the industry began. The people that are doing this, we're the pioneers and have been doing it for 40 years. This specialty license needs to happen. Of course, they would do the reporting that is required by each license that they hold, but on a smaller scale. And they want have to have individual licenses.

(Comment 232) EDEN KELLNER: I think there should be a one cap canopy license limit. I think there should be a 10A license limit; there should not be unlimited amount of 10A licenses.

I think that there should be an allowance for more than one license per parcel, and that each license should have the plant count for that license on the parcel, not an umbrella amount of plants for the parcel if there's many licenses on the parcel.
I don't think that nurseries need to have separate licenses if they're going to be doing seeds because of the fact that they're flowering plants. I think that's null and void.

I think that we also should make sure that growers can grow on land where they live. I think there should be a limit to how many licenses people can have on multiple parcels.

I don't think there should be an incentive for people to join first, because that's going to create a lot of divisiveness in our community. I think it needs to be by date, but not necessarily whoever is first online gets it.

I think that there definitely needs to be provisional licenses for small farmers to give people the time to re-manage their land in order to comply if they want to comply.

(Comment 233) ANONYMOUS: Okay, so the things I would like to learn more about are: Will there be special consideration given to sensitive sites, sites where there are already existing businesses like, for example, a winery and where you have the public coming in and it's serving alcohol?

Also, with respect to the overall CEQA process, will they consider how many licenses can happen per site.
and whether or not that is with different owners or if just one licenses -- like, how does the licensing work, I guess is my question? And can, like, one farmer have license for themselves, plus their spouse, plus, you know, other owners?

And then the third thing is, will there be a limit on numbers of licenses such that it creates a secondary market where, you know, if your area already has too many licenses, you now have to buy the license from someone else?

And then the final thing is, can you switch licenses in between the different classes, the different types of licenses, whether it’s open air or indoor growing? And I think that might be it.

One more. Will there be special consideration given to what they would call "sensitive sites," like wineries, where you have the public coming in and you have a controlled substance on the site -- like you have marijuana on the site -- but you might have a wedding, so whether there be some aspect of consideration given to that sort of a scenario?

(Comment 234) JAMES CAMPBELL: My one comment to make is if we're going to be in agriculture and out of -- like, for instance, in my county we're dealing with the police for all of our past and then next year we're supposed to go
into agriculture. We need to be treated like every other agriculturer. I think people are really going to be a little bit uncomfortable, and I don't understand why there would be a firearms contraband for cannabis cultivators if a wine grower doesn't have one, or farmer, or any other form of agro. If we're being asked to come out of the underground and work in an above board way, I think we shouldn't be treated like criminals.

And when I see things like firearms bands on cultivation sites, it feels like there is some lingering idea that we're still criminals leftover. And I never had a firearm on any cultivation site ever in 16 years, but I still think it's worth bringing up as an indicator that the cannabis cultivators aren't going to get a fair shake as agriculturers, that all the other agriculturers are going to get, and some of it is understandable.

I expect more scrutiny in this industry than maybe somewhere else -- like looking at illegal immigrants or something like that, but it doesn't seem like we should have a different level of requirements than any other form of agriculture to me. And that's about it.

(Comment 235) ASHLEY BARGENQUAST: Okay. Basically my comment is that I think what's really necessary is having law enforcement be retrained to be enforcers in this new
paradigm. It won't feel like legalization if law
enforcement doesn't receive the training they need to
punish the bad actors and reward those who are coming
into the system. I think that any officer should have to
take whatever regular courses -- their five hours
course -- in order to know what is legal so they can
differentiate it from what is illegal, and that those
individuals who -- those law enforcement individuals who
hold themselves out as narcotics or drug experts need
extra training in what is industry standard and what is
legal behavior versus what is illegal behavior. Right
now law enforcement has difficulty in differentiating
between legal and illegal cultivation, dispensaries,
cannabis businesses, and that starts at the training
level.

I think not only is this necessary so that law
enforcement can be a part of this new paradigm, but it
will be crucial in getting individuals to adopt the new
regulations. Without protection from overzealous law
enforcement who are still working under the idea that all
marijuana is illegal, you won't get the adoption and you
won't get people incentivized to be part of the new
system.

(Comment 236) SUSAN TIBBON: I'm Susan Tibbon; I'm a small
farmer. With my partner we grow 24 high CBD plants which
are about five feet high at maturity, as opposed to the
15 to 18-foot kush plants which are used primarily for
recreation. As medicine makers growing 24 plants
yielding about 25 to 30 pounds of flowers, we propose a
tweaking, an improvement, to the cottage license. We
would like to have a license where there is no fee for
cottage industry under $30,000 gross where the medicine
makers/farmers are using only their own flowers. It's
not outsourcing.

I would add that as medicine makers, many of us
at California Growers Association, and we number
approximately fifteen hundred members, grow our plants in
the sun with no pesticides whatsoever and no amendment to
the soil. We use integrated pest management beneficial
to plants. And we would like to be able to survive, not
necessarily compete, against Philip Morris and the large
corporations which will come in. Instead, we would like
to honor these heritage farmers who have been up in the
hills of Northern Mendocino County, Trinity, for
generations.

We would like to be part of the program, but it
must be made fiscally profitable for us as medicine
makers and farmers. We would also like to protect the
economies of our small Northern California towns which,
without the small farmers, will pretty much cease to
exist, at least in a viable economic manner.

(Comment 237) SABRINA FENDRICH: So, yeah, this is regarding the track and trace system and to sort of maintaining the flexibility with the systems and programs that the store fronts, the brick and mortars use that can obviously feed back into one database but, you know, not enforcing or mandating one program or every single commercial cannabis operation.

(End of comments.)
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
MEDICAL CANNABIS CULTIVATION PROGRAM
1220 North Street, Suite 400
Sacramento, California 95814
916.263.0801
CDFA.MCCP@cdfa.ca.gov

PUBLIC SCOPING WORKSHOP HELD AT THE
COURTYARD MARRIOT GRAND BALLROOM
SAN LUIS OBISPO, CALIFORNIA

CERTIFIED TRANSCRIPT

TRANSCRIPT OF PROCEEDINGS
WEDNESDAY, SEPTEMBER 21, 2016
4:16 P.M. - 5:17 P.M.

REPORTED BY: TRUDY O'BRIEN, CSR #13641
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
MEDICAL CANNABIS CULTIVATION PROGRAM
1220 North Street, Suite 400
Sacramento, California 95814
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TRANSCRIPT OF PROCEEDINGS
WEDNESDAY, SEPTEMBER 21, 2016
4:16 P.M. – 5:17 P.M.

REPORTED BY: TRUDY O'BRIEN, CSR #13641
THE PUBLIC SCOPING WORKSHOP PUBLIC COMMENTS

was held at the San Luis Obispo Courtyard Marriott, Grand Ballroom, 1605 Calle Joaquin Road, San Luis Obispo, California, 93405, and was reported with computer shorthand by Trudy O'Brien, CSR License No. 13641, on Wednesday, September 21, 2016, commencing at the hour of 4:16 p.m.

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ON RECORD AT 4:16 P.M.

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(Comment 238) MS. SUSAN HARVEY: I want the CDFA to contact planning department heads, and, specifically, Jim Bergman, in the County of San Luis Obispo, to have a discussion about the necessity for the State to -- or the importance of the State to conclude its development of the PEIR before the County goes ahead and does an EIR for a marijuana cultivation EIR.

Let's see. I am concerned that at local levels and at the State level -- this is a new subject -- that there be enough funding for safety personnel. Because I think that an area that has grows is going to put demands on local resources, fire, and sheriff, or CHP, that could end up being unfunded because they are local. I mean, they will have to be -- there needs to be a fairly clear and reasonably easy avenue for local entities to cover any additional costs.

I want the use of rodenticides and other poisons banned on grow sites. All of them. I mean, I want all of that stuff. I mean, I guess I essentially want, like, organic growing. Locally, we have this issue on the Carizzo Plain with the -- there's, like, 35 threatened and endangered species out there. A bunch
of -- like, 200 grows sort of sprung up in the last six months, and when the sheriff and the Department of Fish & Wildlife went out there, they had pictures of illegal -- use of illegal pesticides, you know, rodenticides, and gopher bombs, you know, dead endangered species, kangaroo rats in the area where this stuff was scattered, like, on the road. Anyway, it was depressing and sad, so thanks a lot.

MR. ERIC POWERS: Okay. I think that the plants, you know, putting identifiers on individual plants is not effective in doing anything for tracking and tracing. Knowing how many plants does not give us any information as to how much product will be available.

Essentially, you know, I have a greenhouse with 200 plants, and it's about 400 square feet. I also have a greenhouse with 15 plants, about 400 square feet. I expect they will produce about the same amount. This seems just like extra red tape, this stuff. I don't think it is going to be useful in tracking the product and controlling it. That's all I have.

MR. DON BULLICA: I'm an Arroyo Grande farmer, just so you know where this comment is coming from. I really feel as though they should just treat it like grapes. Like the grape industry. Everything is the
same. I don't understand why they are going through all these rules, regulations, licensing procedures. It's an agricultural product. It should be taxed when sold.

Otherwise, it should be treated like grapes. It certainly isn't more an intoxicant than alcohol, and possibly a considerably lesser one. It seems to me a lot of people are on both sides of this issue, are in a position to totally exploit this economically. Aren't concerned with the environment or with their neighbors. That's it.

(Comment 241) MR. GERALD JOHNSON: My comment was based on the track-and-trace program that they were just showing up there. And I was just thinking that instead of reinventing the wheel, maybe they should do a little bit of research about how the Colorado program works.

Because the federal government has actually left most of the people in Colorado alone that are doing this on a larger scale because of their track-and-trace program, because, mostly, it's so stringent. So that's about all I had to say.

My only reason for that comment was Washington tried a whole different system where they did the ABC, the Alcohol Beverage Control Board, it took almost a year and a half from when their regulations were implemented for the legalization of recreational use.
until people were actually allowed to buy it, and that whole time seemed like a waste compared to Colorado, which actually morphed their medical system right into their recreational system. That's about all I have to say.

I just think, because of the law enforcement, and the federal government, and things like that, it's best to have a very stringent program, to keep it out of the hands of kids, because we don't sell alcohol to kids in bottles behind the grocery store. That's it.

(Public comment concluded at 5:17 p.m.)
REPORTER'S CERTIFICATE

STATE OF CALIFORNIA

COUNTY OF SAN LUIS OBISPO

I, TRUDY O'BRIEN, Certified Shorthand Reporter, CSR, holding California License No. 13641, do hereby certify:

The said hearing was reported by me by the use of computer shorthand at the time and place herein stated and thereafter transcribed into writing under my direction.

I further certify that I am not of counsel or related to any of the parties hereto, nor am I in any way interested in the financial outcome of this action.

In compliance with Section 8016 of the Business and Professions Code, I certify under penalty of perjury that I am a Certified Shorthand Reporter with California, State License No. 13641 in full force and effect.

WITNESS my signature this 7th of October 2016.

TRUDY O'BRIEN, CSR #13641
CDFA,
California Department of Food & Agriculture

MCCP,
Medical Cannabis Cultivation Program

Pasadena Convention Center

Ballroom F

PUBLIC COMMENT SESSION

DATE: September 27, 2016
REPORTER: Joanne Yen
LOCATION: Pasadena, California
CDFA,
California Department of Food & Agriculture

MCCP,
Medical Cannabis Cultivation Program.

Pasadena Convention Center
Ballroom F

Thursday, September 27th
4:00 p.m.

300 East Green Street
Pasadena, California 91101

PUBLIC COMMENT SESSION

REPORTED BY:  JOANNE C. YEN, CSR. No. 14055
MATTHEW KEATLEY: For the canopy size, you know, because I have 40 acres but I need to build security fence for parameter and I also need facilities like containers to secure operations.

So the total square footage of 5,000 square feet for Type 1 might not effective. It's too small. Because I need to make a security fence around the compose.

The area might be too small to incorporate the equipment, the farm equipment because I live in A2, Zoning A2 L.A. County.

Much larger areas maybe needed as far as how many.

My e-mail address is MADMATTKEATLEY@YAHOO.COM

MICHAEL CADE: I was hoping that there can be a compiled list of local government agencies to reference to get the appointment and get the process started.

EVAN MERAT: E-v-a-n M-e-r-a-t attorney at law. Law Office of Evan Merat. Phone number 805-428-6809.

First comment. My clients that I have are very
interested to know about the protection that inspectors will wear when they go into the cultivation sites.

Pollen and infestation of bugs can be transferred from one cultivation site to another. I have clients who are very keen on not to getting anything in their cultivation sites from outside sources. They require their employees to wear full-body coverings.

Question. Will your inspectors or the state or the local inspectors be required to wear full body suites to prevent against cross-contamination or will you require the inspectors to wear one if requested by the cultivator?

This is very important. My clients don't like to use insecticides or pesticides and one way they don't have to do that is by preventing contamination by using the full-body suite.

The next issue. Will the Department of Agriculture have the attorney on staff or attorneys from the AG office dedicated to answering hypothetical questions in the form of formal written opinions?

I think it will be very important if the Department has legal staff to answer hypothetical questions in the form of formal written opinions.

As an attorney I find them very informative with the issues on various laws.

Thank you.
Another comment I have is this: The current state laws provide that the state shall give priority licensing when issuing cultivation licenses to those persons who can show that they were compliant with the medical marijuana commercial laws in effect prior to that time.

Question/statement. My experience -- a lot of people are going to have a difficult time showing that they have been operating in compliance with the laws up to this point because the laws were gray and murky to understand and enforcement was all over the place.

So I have a lot of clients concerned with how they can actually show that they were operating either 100 percent legally or 90, 80 or whatever will the Department of Agriculture be issuing some guidelines, a list, something to help people to understand what they can look for themselves to determine whether or not they will qualify for priority consideration.

The other thing too is that I can't imagine there are too many people out there who are 100 percent legal. If that is true, will the Department of Agriculture consider priority consideration of someone who might be 90 percent compliant or who can show they were 80 percent compliant. Not quite fully compliant but somewhere, you know, along the line towards that point.

This pertains to the system you guys want to put
in place -- regular green house emissions produced by indoor
cultivators. I presume either the emissions using of
lights, air-conditioning.

If the Department is planning on regulating this
particular aspect of cultivation, i.e., greenhouse emissions
then I would suggest a credit system versus a penalty
system.

A credit system is where, one, the Department
gives an incentive by crediting those who are operating with
low greenhouse emissions. Incentives that people who are
operating with higher greenhouse emissions do not receive.

I would support this and suggest this as oppose
to penalty system which would penalize those using more
greenhouse emissions than others.

(Comment 245) DANIEL DVORSKY: Daniel Dvorsky, D-v-o-r-s-k-y.

The Track and Trace program is far more
important than I believe people realize.

It has the ability to protect the integrity of
the producer, the consumer and it can also be used by law
enforcement.

The technology exists now that can, not only
validate the packaging and the content and its touch points,
but can -- but it can be serial encrypted in order that that
information cannot be counterfeited or manipulated.
A simple Track and Trace system currently used in warehouses is not adequate enough and won't protect the validity of the strains.

So I'm available to speak about this. This is an area that I work in supply chain. I've been trying to get information and it seems that the RFPs are not even written yet.

So I would certainly appreciate the ability to consult the requirements in order to take advantage of the most modern technology.

My e-mail is DDVORSKY4U@Gmail.

(Comment 246) JOE KYLE: Joe Kyle, K-y-l-e.

So with the first question, the MCRSA canopy, I would say the actual square footage of the canopy that the actual plants are not taking into account the walking space and walking aisles around the individual plants.

Okay. Flowering for our industry basically 12 hours of light and 12 hours of darkness is looked at flowering space.

Immature is looked at vegetative which is a 18-hour of light. 6-hour of darkness or it can be 24 hours of light a day. That is immature.

Mixed light cultivation, I look at as basically a greenhouse where it has sunlight and either HBS or middle
highlight bulbs as well.

Premises. I would say is basically the entire square footage of the building including canopy and walking space around canopy.

And propagate is growing.

For the question 2, either traditional paper method or online. I do agree with weapons and firearms being banned from cultivation sites, but I do -- I've been talking to other growers as well and definitely I would feel there needs to be a foot amount limit or something of that sort because a lot of people do have cultivation in their home.

So if they are commercially cultivating cannabis on their home, I would feel a feet limit would be good that way they can still have weapons within their home.

And the nonrefundable application process, their fee I agree with.

How many applications am I anticipating and submitting for cultivation?

Realistically depends on how much my county will allow but most likely just one 22,000 square foot cultivation permit.

For the 4 acres, I feel comfortable with that. I definitely feel indoor and mixed lighting should be separated from greenhouse with no lighting and outdoor.
I feel that a cultivator can use a manufacturing license realistically at almost every -- I wouldn't say every cultivation spot. I would say for one spot out of all of the applicants' facilities.

Joints dry seeding, water concentrating, rosin, which is a new process only using heat and CO2, I look at as non solvent extracts, and I do not see those within the scope of cultivation.

Those are non solvent manufacturing, whereas alcohol and butane is solvent-base manufacturing.

I would initially like to apply the for one 22,000 square foot as I stated. If my county allows for more, I would apply for the up to 4-acre combined canopy.

For the question about the "what do you think is a reasonable amount of light be used and still be considered a light cultivation site?" -- I would say that there isn't a cap on the amount of lights. It's still the amount of square footage.

Mostly, a light is used by a 4x4 square foot area underneath. In a greenhouse light deprivation area, you can potential have one light for a 10x10 area.

But to say that you can't have or cap the amount of lights in a mixed lighting seems unfair to me.

I feel for limiting the Type III license that it should be more done so on a percentage base of how many
total applicants there are versus a -- just random number of
caps.

The program will require licensees -- so to
environmental impacts, we do use targeted pest use.

Right now we are trying to make sure that they
are on the -- generally recognized as safe list.

We do use optimal watering times. We also
collect any AC runoff and dehumidified water. We recycle
water. And weekly, I would say, we use about 10 to 20
percent of our water consumption from the local
municipality. All other is recycled-water from the AC's and
dehumidifiers.

Right now for our cultivation site, we have an
alarm system, cameras, fencing.

We don't do any sale of plants to dispensaries
as a cultivation site. We do not do any research. We
sometimes plant seeds.

Right now to make sure that we are safe for
inspection, we follow the American Herbal Pharmaceutical
Association -- their guidelines, basically.

We currently keep records of which strain we
have. They are all labeled each individual plants and we
keep total yield-age as well as track loads through the
cultivation process.

Right now the current flow is to illegal
dispensary. We do not have any Track and Trace program in
effect right now.

I do not feel that the tags for vegetative state
should necessarily be charged.

But once a plant goes from vegetative into
flowering but the canopy of that cultivation -- or the
vegetative state should still be taken into account.

A reasonable time to conduct a hearing for a
violation, I would think would be 90 days.

Type of violation I consider minor would be
coming up positive for a pesticides that you are not
supposed to be using.

Serious would getting caught trafficking your --
diverting your product to the black market.

(Whereupon, the proceedings concluded
at the hour of 7:02 p.m.)
Appendix M

Comment Cards Received during Scoping Meetings
Comment Card

Name: [REDACTED]  Last: [REDACTED]

Email: Muni Services

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- Programmatic Environmental Impact Report (PEIR)
- Regulations
- Both PEIR & Regulations

Please include security requirements in the regulations for indoor and outdoor growing areas.

Please analyze the impacts of odors from indoor and outdoor cultivation sites on adjacent properties.

Please analyze the impacts of multiple cultivation sites within an urban area or a rural area. Define an overall concentration if impacts are identified.

Develop limits on the number of cultivation licenses based on geographic regions available.

(Attach additional pages as needed)

Please respond by SEPTMBER 30, 2016
Medical Cannabis Cultivation Program (MCCP)

Comment Card

Name: [Redacted]  [Redacted]  [Redacted]
Address: [Redacted]  [Redacted]
Email: [Redacted]  [Redacted]
Organization (if applicable): [Redacted]  Mum Services

Do you wish to be added to the project mailing list?

☐ YES  ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR)  ☑ Regulations  ☐ Both PEIR & Regulations

- Please include the square feet of tiered or stacked growing racks or trays when calculating square feet of allowed cultivation area.

- Please include data collection methods in the track and trace system that will facilitate audits by third parties of each category of licenses.

- Develop & develop regulations for use of pesticides & fertilizers for inhaled or ingested products.

(Attach additional pages as needed)

Please respond by
SEPTEMBER 30, 2016
Comment Card

Name:  

Address:  

Email:  

Organization (if applicable):  

Do you wish to be added to the project mailing list?

☐ YES  ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR)  ☑ Regulations  ☐ Both PEIR & Regulations

The mixed light license should include both indoor and outdoor cultivation. This would allow growers to utilize both depending on the season and stage of growth.

Any inspections should give 60 day notice.

(Attach additional pages as needed)
GOAL 1

canopy: When viewed from above the total square footage that the plant covers.
flowering: When a plant through either time (ruderalis) or darkness cycles goes into a different
pattern of growth involving more nodes developing closer together.
immature: A pant in the growing phase that has not reached full ripeness.
mixed light cultivation: A greenhouse setup using both natural light and artificial light to keep
plants in the desired phase, i.e. flowering, vegetation. Often these setups use light barriers as
well to control the darkness cycles certain time of the year.

GOAL 2

Electronic would be preferred

The weapons and firearm ban is a sign that california ag is not willing to treat cannabis
cultivators like other ag. Can an apple farmer have a firearm? Why are cannabis cultivators who
are attempting permits and licenses being treated like a criminal element?

I plan on submitting to applications.

Goal 3

Again what is a reasonable acreage for other ag. Why should cannabis have different
restrictions. The land, the codes and ordinances governing it should be what restricts the
acreage cap. Indoor I believe will not need to be scaled to intensive levels especially because of
environmental and cost factors. Indoor will be most usefull for controlled studies of certain
varieties and procedures. Mixed light should be allowed use in whatever size structure can pase
permit/inspections etc. Manufacturing license should be required for joints. dry sieve, and water
concentrating when feedstock from other cultivators is being used.

I plan on applying for two ten thousand square foot cultivation sites.

The supplemental light in a mixed light operation should not exceed by more than a few
percentage points the calculated lumens necessary to keep plants in desired phase.

The largest license types should be subject to the tightest environmental regulations and
standards as well as being offered to existing model cultivators.

Goal 4. The main way I address environmental concerns is through lowest soil inputs possible.
Soil is recycled watering is optimized and pesticides are never used.

Currently security is enforced through locks, fences and gates with plans for video surveillance.
Plants should be able to be bought direct from nursery to cultivator. Dispensaries may still sell plants. Nurseries are doing lots of development and will be propagating from seed to produce new strains. Most nurseries will be using cloning processes as well as seeds.

Goal 5

If it's safe enough for my workers it's safe enough for the inspectors. Currently I keep records of plants, employees, cost of production, sales contracts.

GOAL 6

Electronic forms of tracking need to be made available that are approved by the state. It is not necessary to track seeds. Plants should be tracked from 8 inches to planting to harvest to manufacturing to distribution.

Goal 7
Comment Card

Name: 
LAST 
Address: STREET 
ZIP 

Email: GREENROAD 

CITY, STATE 

Organization (If applicable): 

Do you wish to be added to the project mailing list? 

☑ YES ☐ NO 

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for: 

☐ Programmatic Environmental Impact Report (PEIR) ☐ Regulations ☒ Both PEIR & Regulations 

Significant misinformation is being circulated about water consumption of cannabis. The PEIR should address the range of quantifiable data for water consumption. This should include:

- Dry farming - Lowest 
- Drip Irrigation (outdoor) 
- Hydroponic (indoor) 
- Dry Irrigation (indoor) 

How do these compare?

(Attach additional pages as needed)
Comment Card

Tully & Weiss ATTORNEYS AT LAW
Organization (if applicable):

Do you wish to be added to the project mailing list?

○ YES  ○ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

○ Programmatic Environmental Impact Report (PEIR)  ○ Regulations  ○ Both PEIR & Regulations

I would suggest a mandated regulatory course for all law enforcement officers. With a new paradigm, officers need new training in order to be part of the system. Narcotic/drug team specialists should have extra training to do. Perhaps on addition 3 hours to the regular 5 hour course (AT A MINIMUM)

I believe not only would this allow for a functional legal market but would save the state civil suit settlements AND encourage adoption by existing industry. The industry needs incentive and protection for the new existing law enforcement annimosity would go a long way.

(Attach additional pages as needed)
I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- Programmatic Environmental Impact Report (PEIR)  
- Regulations  
- Both PEIR & Regulations  

No cap on the site of a nursery.

- Retrain law enforcement.

- Inspections should be done by non-law enforcement only.

- To the extent law enforcement is still involved they need to be retrained regarding the legality of cultivating, etc.

- Remove bond requirement.

- Plants should be larger than 8 inches. Closer to 12-18 inches.

(Attach additional pages as needed)
I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- Programmatic Environmental Impact Report (PEIR)
- Regulations
- Both PEIR & Regulations

I would like to speak with someone regarding the merits of establishing additional minimum requirements by insuring in addition to surety bonds. I specialize in surety insurance products. I can provide surety bonds in California as well as other states covering all cannabis licensing and construction, performance bonds. I am providing them in all the states with legalized marijuana, medical or otherwise. The bond covers licensing.

We have other insurance products specifically designed for the cannabis industry including General Liability, Product Liability, Transport Insurance, Seed to Producer Insurance, including Product Recall. These products can help the State of California named as an additional insured so the state can be sure violators expenses can be recovered. These insurance products cover ongoing operational disasters.
It would be nice to get a license before having to build out the facility. The investment risk is high on getting a license. I'm not sure how to work that out.
I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- [X] Regulations

**How is the track & trace going to be done?**

As a farmer, I feel it should be applied (caucus) the finish product. Due to the feet anything can happen to the plant can anytime, ex root rot, mold, pests. If a plant is under attack from pest or mold when does it come into affect?

I'd rather eliminate the plant that have it infest the rest of the plant. I realize there's stuff on the market to help with problems but it doesn't always fix the problems if the problem has gone unnoticed for a while. After a certain time in the plant's life they're unable to be sprayed because it will ultimately cause more problems.

(Attach additional pages as needed)
Comment Card

Email: California Air Pollution Control Officers Assn (CARPOA)
Organization (if applicable):

Do you wish to be added to the project mailing list?
[X] YES  [O] NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

Environmental impact should recognize the following air quality considerations:

- Odor/nuisance issues that require public agencies, including air districts, to investigate.
- Water requirements that sometimes result in use of diesel equipment for pumping. Portable and stationary diesel equipment are subject to various state and local air quality regulations.
- Disposition of post harvest plants - is it composted? burned? disposed as green waste? If it is expected to be burned, there are various state & local air district, residential and agriculture burn requirements, including burn bans, restrictions, permitting, and odor/nuisance prohibitions. If large scale state wild burning is expected, what will impact be in areas struggling to meet PM air quality standards?
- Pesticide usage that may cause public health impacts
- Dust control for areas of land cleared for planting
- Land clearing/burning of areas in preparation for planting

(Associated with) Medical Cannabis cultivation be considered an agricultural crop? This potentially effects air quality requirements.

Please respond by
SEPTEMBER 30, 2016
I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- Programmatic Environmental Impact Report (PEIR)
- Regulations
- Both PEIR & Regulations

The people have a ninth amendment right to the cannabis plant. Government has, and always have had, to pass a constitutional amendment to prohibit, control, or regulate a plant. The people have second amendment authority to arrest their government for treason for violating the people's ninth amendment right to the vital nutrition of the cannabis plant.

The Siskiyou County Supervisors were told exactly that and they passed their outdoor grow ban anyway. How long until the American people take second amendment authority? The entire GOP needs to be arrested for treason for exactly and enforcing unconstitutional law.

Please respond by SEPTEMBER 30, 2016
As a cultivator, I would be concerned about the number and frequency of visits I would get from inspectors of the various agencies.

(Attach additional pages as needed)
I believe a way to measure "canopy" size would be to measure from leaf to leaf of a plant and add them all up or have a layout of grow boxes and measure from left to right of the entire site visits included.
Comment Card

[Blank fields for name, organization, email, city, state, zip, and project mailing list preference]

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

- Programmatic Environmental Impact Report (PEIR)
- Regulations
- Both PEIR & Regulations

**PEIR:** Add light pollution (from greenhouses)

**Regulations:** No individual plant ID's. Batch and lot works better for agricultural practices with track and trace.

Mixed light: mixed light tiers for lights used during bloom, not for farms that use light to veg.

Please respond by **SEPTEMBER 30, 2016**
Comment 260

Medical Cannabis Cultivation Program (MCCP)

Comment Card

Name: FIRST LAST
Email:
Organization (if applicable):

Address: STREET (APT)
CITY, STATE ZIP

Do you wish to be added to the project mailing list?
☑ YES ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR) ☐ Regulations ☐ Both PEIR & Regulations

If NOV 8 MARIJUANA (RECREATIONAL) BILL PASSES IT WILL NEGATE THE MEDICAL CANNABIS ACT BECAUSE IT IS NOBODY'S BUSINESS THAT A PERSON USES RECREATIONAL WEED OR MEDICAL. THE GOVERNMENT NEEDS TO GET OUT OF THE MARIJUANA BUSINESS OF MAKING RULES THAT ARE RESTRICTIVE. IF YOU GET RICH FROM CORN YOU WOULD TRY TO REGULATE IT TOO.

TAKE WEED OUT OF THE SCHEDULE ONE DRUG WITH HEROIN AND COCAINE, LET'S GET REAL AND MAKE ALL DRUGS LEGAL. IT IS A MEDICAL PROBLEM NOT LAW ENFORCEMENT PROBLEM. DON'T MAKE AN ADDICT RIP OFF YOUR FOOD TOWARDS IT FOR A 504X $ DA.

(Attach additional pages as needed)

Please respond by
SEPTEMBER 30, 2016
Comment Card

Name: FIRST LAST

Email:

Organization (if applicable):

Address: STREET (APT)

CITY, STATE ZIP

Do you wish to be added to the project mailing list?

☐ YES ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR) ☒ Regulations ☐ Both PEIR & Regulations

PROHIBITING FIREARMS IS UNNECESSARY AND DANGEROUS. MAKING CULTIVATION SITES GUN-FREE ZONES WILL INVITE ARMED CRIMINALS. STATE INSPECTORS ARE NOT THREATENED BY CULTIVATORS AND THEN THERE IS THE 2ND AMENDMENT TO THE CONSTITUTION.

(Attach additional pages as needed)

Please respond by
SEPTEMBER 30, 2016
Comment Card

Email: 

Organization (if applicable): Sissoow Earth Consulting

Address: STREET (APT)

CITY, STATE ZIP

Do you wish to be added to the project mailing list?

☐ YES ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR) ☐ Regulations ☑ Both PEIR & Regulations

Track & trace program should be reflective of realities on the ground regarding labor costs, workflow methodology, & plant life cycle. The largest example would be unnecessary weigh ins & weigh outs for non-psychoactive plant matter.

There should be an incentive system for reduction of environmental impacts via adoption of organics/probiotics (aka elimination of salt based nutrient regimens.

(Attach additional pages as needed)

Please respond by SEPTEMBER 30, 2016
I am an environmental & regulatory compliance consultant with thirty existing cannabis cultivation clients in Humboldt, Mendocino, Ventura, LA, Orange, Riverside, San Bernardino & San Diego counties. My clients, based on our assessments, are currently facing the following issues:

- Wastewater & Waste Stream Issues
  - i.e., solid waste, haz-waste, disposal permitting
- Ground water & soil impacts
- Need for remedial programs to mitigate and clean up site impacts.
- Need for voluntary compliance program to start working with local & state regulators.
- Pesticide use, indoor & outdoor
  - indoor air quality & OSNA
  - many more!

Please contact me for more info.

Please respond by
SEPTEMBER 30, 2016
Comment Card

Name: FIRST LAST

Email:

Organization (if applicable):

Address: STREET (APT)

CITY, STATE ZIP

Do you wish to be added to the project mailing list?

☑ YES ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR) ☐ Regulations ☐ Both PEIR & Regulations

Would like to get off opioid and have medical cannabis smokable/crable

(Attach additional pages as needed)

Please respond by SEPTEMBER 30, 2016
I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:

☐ Programmatic Environmental Impact Report (PEIR) ☑ Regulations ☐ Both PEIR & Regulations

Due to the large amount of applicants, we feel it is only fair to give licensing priority to the collectives that have complied w/ all State regulations & the Board of Equalization prior to Jan. 2016.

We own 5 acres in Desert Hot Springs w/ (2) 40,000 sq. ft. greenhouses & (6) 10,000 sq. ft. of indoor growing space. The state needs to allow multiple licenses per property to meet the needs of growers.

Desert Hot Springs charges us tax per square foot on greenhouses & buildings. It is important that the state will license us to grow for the square footage we are paying taxes on.

Please respond by

SEPTEMBER 30, 2016
Comment Card

Name: Mark Nations
Email: mnations@co.kern.ca.us
Organization (if applicable): County of Kern

CITY, STATE
ZIP

Do you wish to be added to the project mailing list?
☑ YES  ☐ NO

I would like to make the following comment on the Medical Cannabis Cultivation Program, to be filed in the record for:
☑ Programmatic Environmental Impact Report (PEIR)  ☑ Regulations  ☐ Both PEIR & Regulations

Marijuana is a product that provides a marginal benefit to society: you cannot eat it, it has no nutritional value, it provides no usable fiber and you cannot feed it to animals. Therefore, every effort should be made to use as little water as possible to grow it. Growers should be required to use drip irrigation and other best practices to minimize the cultivation's impact on the state's water. Drought-like conditions are going to be the new normal in California and we should use as little of our resources as possible to the cultivation of this plant.
Appendix N

Materials Provided during Scoping Meetings
cdfa.mccp@cdfa.ca.gov

**Regulatory Goal #1**
DEFINE TERMS USED IN CANNABIS CULTIVATION

The Program will need to define terms to ensure regulations are implemented uniformly across the state. What do these terms mean to you? Terms not defined by the MCRSA such as:

Canopy - Technically canopy is the area of plant foliage described by a shadow on the ground. A problem arises when using this definition. The canopy area changes during a plant's growth. At initial planting, the foliage canopy is small and at maturity it is large. So a better definition of canopy is to use the area designated for planting and final plant size including the area between the plants that are not covered with foliage.

Flowering - Plants reproduce themselves by flowering. This flowering can be forced or is natural in timing. Cannabis has male or female plants. Currently, female plants have flowers that are more desirable. Since cannabis is an annual plant (the plant dies after flowering), flowering is the end of the plant's life.

Immature - Is the early and initial stage of a plant's growth. Since immature plants are small, they take up less space and produce less plant material that would be used by humans. Immature plants are vital for continued production because cannabis is an annual plant and dies at the end of its growth season. Immature plants must be used to replace plants that have flowered and died.

Mixed light cultivation - Is the use of artificial lighting and natural lighting, whether indoors or outside.

Premises - Is the area used for the production of cannabis. This could include areas for storage, parking lots, buildings, greenhouses, offices, and water tanks. It could also mean parcel numbers used by the county to define lots or parcels.

Propagate - Is the process of creating another generation of plants in order to continue production.

**Regulatory Goal #2**
DEFINE THE APPLICATION PROCESS AND REQUIREMENTS FOR LICENSING

The Program is considering using an online application process, as well as a traditional paper method. Which application method would you prefer?

Using both is best. Copies of ID's or other information that might not be scanned easily and emailed, could be mailed. Personally, I'd prefer online. Online should be used in tracking products through all channels.

The Program is considering a weapons and firearm ban at cultivation sites to protect State enforcement staff. How will that affect you?

This consideration is a complete violation of the 2nd Amendment to the US Constitution for self protection. Criminals choose locations that are not protected so they have easy victims. If this prohibition is required, then the department will be liable for any losses or damages that result from this regulation. Professional enforcement staff will be considered a security risk if they descend upon a secured premise without profession consideration and action. Professionals give professional consideration and make appointments. Scheduled appointments will be treated in the utmost professionalism and care. It will be with the greatest of pride to have inspectors see how well we care for the environment and how professional we are.

The Program is planning to charge a non-refundable application processing fee to cover resources required to review the application components. In order to determine the application fee, the Program will need good estimates on how many cultivation applications are expected. How many applications do you anticipate submitting?

We anticipate needing 3 levels licensing for cultivation, and one license for processing. In this age of computers, the process of licensing should be easily set up in a database program. This should cost very little to process an application.

**Regulatory Goal #3**
IDENTIFY THE CULTIVATOR LICENSE TYPES BY LIGHT SOURCE AND SITE SIZE; CLARIFY ALLOWABLE LICENSE COMBINATIONS; OUTLINE RENEWAL PROCESS AND SET LICENSING FEES

Licensees are prohibited from obtaining licenses from more than two license categories. For example, a licensed manufacturer of cannabis products may also hold a cultivator license, but would not be allowed to then obtain a dispensary license. Additionally, the Program is considering issuing the same applicant several cultivator licenses as long as the total canopy does not exceed four acres. What is the acreage you feel is reasonable for the cap?

Four acres is an artificial limit. The limit should be based upon the impact on the locale. If watering 4 acres drains a creek,
then the 4 acres are too much. If 10 plants affect a neighbor adversely, then they are too much. We have access to more than 1440 gallons of water per day in a secure area that is out of sight from any public viewing. Each mature plant will require about 4 gallons of water per week. This water can sustain 2520 mature plants. 2520 plants would cover over 8 acres of land. This area does not include any area needed to start new plants, process mature plants into product, or securely store any product. This area would not include any areas needed to research any new strains to improve future product.

How about for indoor and mixed light?

Indoor or mixed lighting area would be limited by the impact that they would have on the environment, just like outdoor. If mixed lighting is used (using lights at night), will this light pollution impact any neighbors? If so, then that should be the limiting factor.

How will this impact your business model?

We will challenge any limitations that are artificially set. If they are based upon established and consistently applied limits that impact others in the community, then that is reasonable. Consider cannabis growing on a similar platform to growing grapes for wine production.

When does a cultivator also need a manufacturing license?

If a cultivator simply dries their product, then that is NOT processing nor manufacturing, so no, they should not need a manufacturing license. If they convert their dried product into joints or any form of concentrating (creating "dabs"), then they are NOT just cultivating, they are processing to a manufactured product and should have a manufacturing license.

Are joints, dry sieving, and water concentrating a form of manufacturing or within the scope of cultivation?

At what point does testing the dried product become manufacturing? If one ounce of dried product is concentrated (into dab form), that is used for sending to a lab for testing, this should NOT be considered manufacturing. BUT if a cultivator turns their entire crop into joints, dry powder, or concentrated form, then YES, they should have a manufacturing license. So the limit should be the amount of processing and the quantity of processing that then leads to whether it is manufacturing or not.

The Program is required to fully cover its operational costs through licensing and application fees. The Program anticipates analyzing and updating the licensing fees frequently as the industry changes over the next several years. What size cultivation site(s) do you anticipate applying for initially?

We anticipate cultivating only outdoors and starting our plants indoors. The outdoors canopy area will start at a few thousand square feet but progress in the following year to cover 8 acres. Starting plants indoors is typically required during our winter season, but since the plants are very small, they can be started in an area of a few hundred square feet. This indoor starter area should not change in size in the following years. Our desire is to eventually be fully organic and seek certification.

How many separately licensed cultivation sites would you like to apply for?

The outdoor acreage is on 2 separate APN’s Zoned A-2, Use is irrigated farmland. The indoor plant starter location has yet to be determined. Both outdoor and indoor will not be noticeable to neighbors in any shape or form.

The Program is responsible for establishing the amount of artificial light units considered reasonable for a mixed light/light deprivation cultivation sites. What do you think is a reasonable amount of lighting to be used and still be considered a mixed light cultivation site?

Power usage in a safe manner should be limiting factor. Does the electricity used pose a safety hazard? Does the heat generated from the lights pose a safety hazard?

The Program is required to limit the number of Type 3 (largest license type) licenses issued. What method do you consider fair for establishing these limits?

We will challenge any limitations that are artificially set. If they are based upon established and consistently applied limits because there are impacts to others in the community, then that is reasonable. Cannabis growing should be considered very similar to growing grapes for wine production.

**Regulatory Goal #4**

*Specify requirements to mitigate environmental health and public safety issues*

The Program will require licensees to enter into a compliance agreement to reduce environmental impacts. How do you currently address potential environmental impacts at a cultivation site?
Environmental impacts should be considered EXACTLY like any other farming product. This is why I have suggested a similar model of regulation for growing grapes for wine production.

Do you conduct targeted pesticide use?

Yes, but only when absolutely necessary. In fact, natural biologic and organic methods are just a little more expensive but produce a much better product without damaging the environment. Currently there are multiple lawsuits against state agencies who used weed killer along the sides of roads that are blamed for killing 10's of acres of grapes via air movement. We plan on sustainable dry farming and organic methods to produce our product.

Do you use optimal watering times?

Not just times but method of watering. This is why I keep using grapes as a reference point. Subterranean drip irrigation puts the water deeper (1-3 feet below the surface) to where the roots are. This eliminates any water on the ground surface which in turn eliminates competition from weeds or pests. This also allows for liquid fertilizer to be applied directly into the soil around the roots. This eliminates any fertilizer evaporating into the air as air pollution.

Do you recycle water and/or cultivation materials?

Any plant material that is not acceptable as product, is composted and used to enhance the soil. No water is allowed to runoff when Subterranean drip irrigation is used.

The compliance agreement will also require the licensee to have specific security measures in place. How do you currently secure your cultivation site? Alarm system? Fencing? Security guard?

We have greenhouse fabric covering the plants from direct viewing. There is fencing, and personal who live on the farm. How can a security guard protect the cultivation if they are unarmed? We have yet to learn how 8 acres of farmland can be protected by video surveillance. If no one knows about the location nor can view the plants, this is the first 2 steps in security. So please don’t publish the address of the cultivation sites.

The Program will also have specific requirements for cannabis nurseries. Do you sell plants to a dispensary for sale to patients? Or do you sell plants to cultivators for flower production?

We only plan on selling our fully grown plant product to distributors. We will do our own internal cultivation and will not sell to retail.

How much research and development goes on at a nursery site? Do you regularly propagate from seed?

As part of our continuing goal of improved plant quality, we do our own genetic cross breeding. This is for our own internal production and not for other cultivators, distributors, or retail.

**Regulatory Goal #5**

**OUTLINE CULTIVATOR RESPONSIBILITIES FOR COMPLIANCE INSPECTION**

The Program will specify when licensees must make their site available for inspection and require that the cultivation site be safe for inspection. What measures do you currently take to make your site safe for inspection?

It would be a great pleasure to have professional inspection. As soon as we have a license, we would welcome an inspection. Professionals make appointments. A surprise inspection could be considered a potential security threat as our site is NOT open to the public. Professional farming keeps the site safe for everyone. If your inspectors feel safer with concealed carry of a firearm, then so much the better as I feel safer when people are trained in concealed carry of a firearm.

The Program will require retention of specific records and that they be made available upon request. What type of records do you currently retain?

Why retain any records when those records can be almost instantly transmitted to the Program when the data is acquired? There has been a lot written about how to track medical marijuana at each and every step along the way; from nursery to patient. People will avoid doing this paperwork UNLESS it is so easy that it is more work to avoid the paperwork than just doing it. The easiest and fastest is to have EVERY plant identified by a QR code. At each step along the path, this QR code gets scanned and the date, time, purpose of scan, location of scan, person/company scanning, and any notes get entered into the Program QR System in almost real time. The scans can be done by a cellphone application. See [http://www.mobileqr-codes.org/how-do-i-use-qr-codes.html](http://www.mobileqr-codes.org/how-do-i-use-qr-codes.html) or visit a phone’s app store (examples include the Android Market, Apple App Store, BlackBerry App World, etc.) and download a QR code reader/scanner app. [http://cnrmtl.columbia.edu/enhanced/noted/qr_codes_explained.html](http://cnrmtl.columbia.edu/enhanced/noted/qr_codes_explained.html)

The website [www.scan.me/qr_code_generator](http://www.scan.me/qr_code_generator) can make the QR code from the QR Code Content. In the following example, the QR code identifies a plant number, the date, and action (Planted). This QR Code will be attached to the plant.
All of the actions to this plant and eventually all the material from this plant will be tracked by this QR code. Additional QR Codes or QR Code information can be added into the Program Database to follow this plant material with the final QR Code entered when some plant material is sold to a patient. Tracking from cultivator to patient by simply scanning a QR Code by a cell phone application. The Program Application would do the scanning and report the information within the QR Code. This information would be automatically entered into the Program Tracking Database. The Database would do some error checking and compliance checking, and report any needed information to a human overseeing the Program. Simple to follow and difficult to avoid.

**Regulatory Goal #6**

**SPECIFY TRACK AND TRACE REQUIREMENTS**

Licensees will be required to provide the Program with information about the movement of cannabis. This information will be used to protect the public if there is a safety or health concern, to ensure legally grown product does not get diverted, to ensure illegal product does not end up in the regulated marketplace, and to prioritize inspections by Program inspectors and law enforcement. What is the current flow of cultivation at your site? At what points in the cultivation process do you think movement tracking would be valuable (planting, moving from veg area to flowering area, harvest, etc.)?

All of the actions to any plant and eventually all the material from any plant will be tracked by each plant's individual QR code. Additional QR Code information can be added into the Program's Database for following individual plant material from nursery, cultivator planting, cultivator trimming, cultivator destruction of plant due to plant disease, cultivator harvesting, cultivator drying, plant samples sent to testing laboratory, transferring plant material to a licensed transporter, sold to a distributor, transporter moves plant material to a dispensary and finally when the dispensary sells the plant material to a licensed patient. These QR Codes are entered at each step in the movement of medical marijuana. This provides detailed
information of plant material from planting, growing, harvesting, transporting, testing, distributing, dispensary, and finally when sold to a patient. Tracking from cultivator to patient by simply scanning a QR Code by a cell phone application. The Program Application would do the scanning and report the information within the QR Code. This information would be automatically entered into the Program Tracking Database. Database would do some error checking and compliance checking, and report any needed information to a human overseeing the Program. Simple to follow and difficult to avoid.

If the Program provides the applications for the cellphone to scan each step in the process, every bit of information that the Program wants will be easily captured along the way. Don't make it difficult - make it easy to follow the rules and tracking. When the plant material is divided into smaller quantities, the old QR Code is entered and a new QR Code is made for the new smaller package.

The Program anticipates this will be different for indoor vs outdoor cultivation.

Possibly, but that can be worked out as the Program identifies exactly what information is ACTUALLY needed for protecting the environment, public health, and patient health - not just to justify some paper pusher's union job.

When we clone a plant to make more plants, a new QR Code should be attached to this new plant and tracked.

**Regulatory Goal #7**

*STATE LICENSE VIOLATIONS AND APPROPRIATE PENALTIES*

The Program will inspect licensed cultivation sites to ensure compliance with license requirements. If an inspection reveals non-compliance or a local authority informs the Program of a non-compliance issue, the Program will proceed with an investigation. If the investigation determines that a violation occurred, the Program can revoke a license and/or may assess fines. What would a reasonable time-frame for conducting a hearing regarding a violation?

WTF!? What about fixing the problem right on the spot by the inspector teaching the licensee how to fix the non-compliance problem and the licensee fixing the non-compliance problem, and the inspector checking again to make sure everything is back in compliance? Compliance is the GOAL, not punishment. Carrot vs. stick?? Which gets better and faster results?

The Program will also be defining minor, moderate and serious violations and corresponding penalties. What type of license violation would you consider minor?

Anything to do with paperwork is minor and should be fixed at the periodic inspections or even before with the use of the QR Code tracking. If something isn't tracking properly, then that needs to be looked at and fixed. No hearing needed - fix it and it's done. This would be like a slap on the hand and a hand hold to fix it immediately.

Moderate?

5-10 minor violations of repeated failure to provided needed paperwork. Violation of other Food & Agriculture laws.

Serious?

Diversion
The Department of Food and Agriculture's Medical Cannabis Cultivation Program (Program) is preparing to undertake rule making to implement the requirements of the Medical Cannabis Regulation and Safety Act (MCRSA). The purpose of this document is to outline the Program's immediate regulatory goals and to solicit specific input on how best to accomplish these goals. The Program will be accepting comments on this outline until September 30, 2016. Please see the end of this document for information regarding comment submission.

**Regulatory Goal #1**

**DEFINE TERMS USED IN CANNABIS CULTIVATION**

The Program will need to define terms not defined by the MCRSA such as canopy, flowering, immature, mixed light Cultivation, premises and propagate to ensure regulations are implemented uniformly across the state. What do these terms mean to you? Along with a few more *

- **Canopy** – Perimeter of a mature plant like the drip line of a tree. It is worth noting that the canopy of an outdoor High THC plant may be 50% larger than a CBD dominant plant but the yield of 1 failed high THC plant is typically equivalent to 4 failed CBD dominant plants.

- **Flowering** – Stage of a plant’s development when it begins to produce flowers whether male or female.

- **Immature** – Stage of a plants development before it begins to flower.

- **Mixed Light Cultivation** – Some farmers prefer to use this method of cultivation. It is a way of optimizing the yield with shorter growing cycles (year round) by using Light Deprivation techniques. Due to the length of days, seasons will dictate when lights need to be used in order to achieve a 12 hour light regimen.
*Light Deprivation* — Taking immature plants into a regimented 12 hours of light per day cycle in order to induce a shorter growing cycle to maturity. In summertime (when the days are longer) a light blocking “tarp” is used to cover the plants to ensure that the plants only get 12 hours of light per day. Some farmers use this method only in the summer and do not use mixed light.

**Premises** — Any area where Commercial Cannabis activity is performed. This definition is not intended to be set in stone as (especially with a Cottage license) some areas serve a dual definition such as home or vegetable garden etc.

**Propagate** — Methodology to perpetuate, further develop, or preserve a particular set of genetics. This can be done by breeding, cross breeding, cutting clones, etc.

*Natural Pathogens* — Biologically occurring pathogens such as Mold or mildew.

*Remediate* — Natural pathogens such as mold or mildew can be remediated by some of the manufacturing processes.

It is important to remember that we are talking about medicine! If the mold or mildew is excessive it should be destroyed.

Further, the American Herbal Pharmacopeia in their section regarding Cannabis (page 48) suggests that the criterion for evaluating molds and mildew should be re-addressed due to it’s propensity to these natural pathogens because it has trichomes like mints. It is also worth noting that the American Herbal Pharmacopeia is referenced as a/the standard in MCRSA.

*Pesticide* — Commonly referred to as a chemical used to eradicate garden/crop pests. These are often toxic to humans and other animals. There are organic alternatives and these are also known as pesticides.

*Destroy* — To remove from circulation using the safest means possible.

*Batch* — Any quantity of any product that has the same characteristics that were produced at the same time and under the same conditions.

*Cottage Industry* — Very small commercial farmer that produces cannabis and cannabis based medicine.

Growing medium / Amendments — Substrate in which the cannabis is grown as well as what it consists of.
Regulatory Goal #2
DEFINE THE APPLICATION PROCESS AND REQUIREMENTS FOR LICENSING

The Program is considering using an online application process, as well as a traditional paper method. Which application method would you prefer?

Both would be necessary. It would be best served if the application information from the local jurisdiction would be shared with the state to streamline the process and eliminate unnecessary bureaucracy.

The Program is considering a weapons and firearm ban at cultivation sites to protect State enforcement staff. How will that affect you?

Weapon is a pretty broad term. Firearms (while I, personally, do not own one) are a necessary item for self defense in some areas. Bear, Mountain Lion, Boar, etc. are a real threat. I feel that anyone that applies for and receives a license would be disinclined to use any type of weapon that would threaten State enforcement staff. The unlicensed grower would be more of a threat.

The Program is planning to charge a non-refundable application processing fee to cover resources required to review the application components. In order to determine the application fee, the Program will need good estimates on how many cultivation applications are expected. How many applications do you anticipate submitting?

Let me begin by saying that if the aggregated fees are onerous you will be promoting the black market. Driving adoption rather than trying to “cash in” would best serve the farmers AND the program. Out of the gate, forgoing the application fee would be far and away less expensive to the State and Local jurisdictions than the enforcement problem it will, undoubtedly, create. Getting things off the ground in this “New Industry” are not going to be easy. Eventually enough money will be there. Adoption is the key.
Licensees are prohibited from obtaining licenses from more than two license categories. For example, a licensed manufacturer of cannabis products may also hold a cultivator license, but would not be allowed to then obtain a dispensary license. Additionally, the Program is considering issuing the same applicant several cultivator licenses as long as the total canopy does not exceed four acres. What is the acreage you feel is reasonable for the cap?

4 acres is a lot of Type 1 licenses. Perhaps limiting it to 4 licenses per jurisdiction regardless of the type.

How about for indoor and mixed light?

We would recommend the same. 4 licenses per jurisdiction regardless of the type.

How will this impact your business model?

Not at all. It would, however, allow us to expand if that became necessary.

When does a cultivator also need a manufacturing license?

We believe that a cottage industry should not be required to pay for and obtain a separate manufacturing license. The record keeping and reporting would be the same but no additional fees as long as they only used the plants that they grew.

Are joints, dry sieving, and water concentrating a form of manufacturing or within the scope of cultivation?

These things that you specifically called out are processing.

Harvesting, drying, curing, trimming; these are processes in that manufacturing?

The Program is required to fully cover its operational costs through licensing and application fees. The Program anticipates analyzing and updating the licensing fees frequently as the industry changes over the next several years. What size cultivation site(s) do you anticipate applying for initially?

One site. Cottage Industry.

How many separately licensed cultivation sites would you like to apply for?

One.

The Program is responsible for establishing the amount of artificial light units considered reasonable for a mixed light/light deprivation cultivation sites. What do you think is a reasonable amount of lighting to be used and still be considered a mixed light cultivation site?

One light 1,000 watts (or equivalent lumens) every 4 square yards.

The Program is required to limit the number of Type 3 (largest license type) licenses issued. What method do you consider fair for establishing these limits?

4 licenses per jurisdiction regardless of the type.
Regulatory Goal #4
SPECIFY REQUIREMENTS TO MITIGATE ENVIRONMENTAL HEALTH AND PUBLIC SAFETY ISSUES

The Program will require licensees to enter into a compliance agreement to reduce environmental impacts. How do you currently address potential environmental impacts at a cultivation site?

By utilizing Sun Grown organic methods and best practices. Environmental impacts do not stop at water and soil pollution. The amount of energy required to cultivate indoors is staggering. One study estimated that 6% of all electricity used in California is for cultivating cannabis indoors.

Do you conduct targeted pesticide use?
If you consider dish soap, garlic / pepper application, beneficial nematodes, ladybugs, etc. pesticides...yes.

Do you use optimal watering times?
Yes

Do you recycle water and/or cultivation materials?
Yes

have specific security measures in place. How do you currently secure your cultivation site?

We have a fenced garden with locked gates. Motion detector lighting and cameras.

Alarm system?
Yes, in the home.

Fencing?
Yes, with locked gates.

Security guard?
No. Just the cats checking the credentials of the rodents.

The Program will also have specific requirements for cannabis nurseries. Do you sell plants to a dispensary for sale to patients? No

Or do you sell plants to cultivators for flower production? No

How much research and development goes on at a nursery site? An enormous amount. Ongoing fine tuning of Integrated Pest Management, Companion Planting, Staying current with curative, preventative, allopithic, and adjuvant uses of cannabis based medicine. Propagating plants that suit the need. That's what it is all about.

Do you regularly propagate from seed? Yes
Pre-Regulation Workshop Survey

Regulatory Goal #5
OUTLINE CULTIVATOR RESPONSIBILITIES FOR COMPLIANCE INSPECTION

The Program will specify when licensees must make their site available for inspection and require that the cultivation site be safe for inspection. What measures do you currently take to make your site safe for inspection? The site is kept clean and free from any hazardous tools or equipment at all times. The site is fenced with lockable gates. The site has motion activated lighting.

Regulatory Goal #6
SPECIFY TRACK AND TRACE REQUIREMENTS

The Program will require retention of specific records and that they be made available upon request. What type of records do you currently retain?
1) All receipts for supplies and expenses.
2) Dates seeds started and their strains.
3) Dates Planted.
4) Strains Planted (with qty.).
5) Feeding Schedule.
6) Yields (by strain).
7) Test results.
8) Receipts from/to dispensaries.
9) Research documents.
10) Feedback from patients / dispensaries.

Licensees will be required to provide the Program with information about the movement of cannabis. This information will be used to protect the public if there is a safety or health concern, to ensure legally grown product does not get diverted, to ensure illegal product does not end up in the regulated marketplace, and to prioritize inspections by Program inspectors and law enforcement. What is the current flow of cultivation at your site? At what points in the cultivation process do you think movement tracking would be valuable (planting, moving from veg area to flowering area, harvest, etc.)?

"The Program" only needs to know how many plants were planted, what did they yield and where did it go. Anything more than that is unnecessary bureaucracy. Common sense would dictate that some plants do not live up to the standards required to be called Medical Cannabis. This can be determined, in most cases, before they reach maturity or are ready to be planted. Micromanagement is not only counterproductive but unenforceable. The yields should be calculated by using the amount of flowers that are harvested that are of Medical quality.

The Program anticipates this will be different for indoor vs. outdoor cultivation.
Indoor cultivation is VERY different from outdoor cultivation on a number of levels.
The methods will vary also.
Natural pathogens (Mold, mildew, etc.) can be remediated through a number of manufacturing processes.
Pesticides can be enhanced and become EXTREMELY toxic by the same processes.
The Program will inspect licensed cultivation sites to ensure compliance with license requirements. If an inspection reveals non-compliance or a local authority informs the Program of a non-compliance issue, the Program will proceed with an investigation. If the investigation determines that a violation occurred, the Program can revoke a license and/or may assess fines. What would a reasonable time-frame for conducting a hearing regarding a violation?

This depends on the violation. We believe that the inspector that discovered the violation should use their discretion and inform the licensee and report to their superior. After that, there should be time given to rectify the situation.

The Program will also be defining minor, moderate and serious violations and corresponding penalties. What type of license violation would you consider minor?

There will always be minor violations. The regulations will not be perfect. If someone with a type 1 license has a crop that turns out to be 5500 sq. ft. of canopy by harvest time what is to be done? If your required 6 foot fence is only 5 feet 10 inches, what’s to be done? If your required lockable gate is not lockable you get a lock. If you haven’t paid your sales tax for the quarter you pay the tax.

Moderate?

The very fact that these people are applying for a license demonstrates their willingness to cooperate. Any violation by a licensee, minor or moderate, should be given a reasonable amount of time to rectify the problem. After the time allowed has passed, if there is no good reason for the problem not being resolved in the allotted time, fines should be commensurate with the offense.

Serious?

Intentional black market diversion, falsifying test results, violent crimes,
Comment Submission

Mail: Department of Food and Agriculture, MCCP
1220 N Street, Suite 400
Sacramento, CA 95814

Email: cdfa.mccp@cdfa.ca.gov

The Program strongly encourages comments be submitted by September 30, 2016. Comments submitted at a later date for developing draft regulations will be considered as time permits.

Cannabis is a Schedule I drug pursuant to the Controlled Substance Act 21 U.S.C. § 812 Activity related to cannabis use is subject to federal prosecution, regardless of the protections provided by state law.
QUESTION 1: WHAT TYPES OF EXTRACTION METHODS ARE CURRENTLY IN USE AND HOW CAN THE METHODS BE CATEGORIZED BY LICENSE TYPE?

We use certified organic, 190 proof, cane alcohol with a closed distilling system.
We do not consider this a volatile solvent.
The alcohol is heated to just boiling (180 degrees) and the evaporating alcohol is cooled by a fan inside the cover and retrieved in the beaker.

We also make a topical spray that does not use heat but the cannabis simply macerates in alcohol, in glass jars for 3 months.

What are the risks associated with each extraction method?
I cannot speak to other methods except to say that butane seems to be extremely dangerous.
The risks for our methods would be accidental spillage or steam burns from carelessness.

What can be done to mitigate the risks?
We operate our equipment in a clean uncluttered space.
Care, Cleanliness, and Safety are paramount.
We also (as a precaution) store the alcohol in a fireproof cabinet.

How do you see non solvent extractions or infusion-only manufacturing fitting into the licensing scheme?
Water is technically a solvent. It's the volatile solvents that need to be addressed.
We believe that for cottage licensees non-volatile extractions and infusions should not require an additional license fee.

QUESTION 2: WHAT PRACTICES ARE UTILIZED TO MINIMIZE INCIDENTAL EXPOSURE? WHAT ADDITIONAL STANDARDS COULD BE IMPLEMENTED TO PREVENT INCIDENTAL EXPOSURE?

I assume that you are only talking about edibles here.
Limit the amount of cannabinoids per serving and/or per package?
This might get tricky. There are many cannabinoids. I assume that when you say "incidental exposure" you are talking about Delta 9 THC and someone getting high when they thought it was a regular cookie. Each patient has a different metabolism.

Require opaque packages?
This is a requirement in San Francisco.

Require a universal symbol on the label and on each serving of cannabis product?
Please understand that this is dosage not a serving. Labeling with the amount of cannabinoids should be sufficient.

Are there other options to consider?
Education. Medicine should be treated as medicine.
QUESTION 3: WHAT VARIABLES COULD BE CONSIDERED WHEN ESTABLISHING LICENSE FEES IN ORDER TO ACCOUNT FOR SIZE VARIATION IN THE INDUSTRY?

Cannabis farmers often cultivate a very different kind of cannabis to be used for medicine. Some of the CBD dominant strains are squat little bushes. Regarding yield, if one high THC plant failed it would be the equivalent of 3-4 CBD dominant plants failing. A cottage license with a 25 plant count limit for outdoor?

These pictures were taken on the same day. All of the plants are in the same size container.

What are some options for determining the scale upon which licensing fees will be based?
Let me begin by saying that if the aggregated fees are onerous you will be promoting the black market. Driving adoption rather than trying to “cash in” would best serve the farmers AND the program. Out of the gate, forgoing the application fee would be far and away less expensive to the State and Local jurisdictions than the enforcement problem it will, undoubtedly, create. Getting things off the ground in this “New Industry” are not going to be easy. Eventually enough money will be there. Adoption is the key.

Number of products? Absolutely not.

Number of employees? Perhaps, but that might lead to labor issues.

Gross annual revenue? How about Gross Annual Profit?

How many tiers would be needed to equitably reflect size variation in the industry?
The Cottage Industry cultivation license should not be bridled with application or license fees for manufacturing provided they only use the cannabis that they grow. They would (of course) be required to do the same reporting as other manufacturers and comply with the “home kitchen” regulations already in place. These are the people who started this industry and most do not want to grow to be industry giants.

What are good cut-off points for each tier?
The first year would be an estimate but subsequent years would be based on Gross Annual Profit. The cut off points should be determined by someone more experienced in this than us. As the business grows, so do the fees.
QUESTION 4: WHAT STANDARDS OR PRACTICES COULD BE CONSIDERED TO ENSURE THE QUALITY AND SAFETY OF THE FINAL PRODUCT?

How is homogeneity of cannabinoids achieved for edible products?

What is the general variance within a single product or batch?

What sources did you look to for your current operating procedures, including quality control procedures?
We did an enormous amount of research regarding folk/herbal remedies.
We contacted researchers from around the word as well as in the US regarding studies on cannabis treating various illnesses.
We met with several long time cannabis medicine producers.
We did exhaustive research on the Endocannabinoid System and continue to do so.

What testing, if any, occurs in conjunction with the manufacturing process?
We test the flowers for cannabinoid profile and potency. This gives us an idea of what to expect. After the concentrate is made we have it tested again so that we know exactly what the cannabinoid profile and potency are for that batch. This enables us to use the concentrate in a responsible manner if we use it for other products like suppositories or dilutions so that dosage can be as precise as possible.

It is important to note that we do not have our flowers tested for pesticides because we do not use pesticides. Pesticides can be found at an "acceptable" level in flowers but if those flowers are used to make concentrates the pesticides become concentrated as well making the concentrate highly toxic.

Natural pathogens such as mold or mildew can be remediated by the manufacturing process.
It is important to remember that we are talking about medicine! If the mold or mildew is excessive it should be destroyed.
Further, the American Herbal Pharmacopeia in their section regarding Cannabis (page 48) suggests that the criterion for evaluating molds and mildew should be re-addressed due to it’s propensity to these natural pathogens because it has trichomes like mints. It is also worth noting that the American Herbal Pharmacopeia is referenced as a standard in MCRSA.
How can California best mitigate against foodborne illness outbreaks in medical cannabis products?
The testing requirement should take care of most of the concerns.
Pesticides are the biggest problem. As we stated earlier, pesticides can be found at an "acceptable" level in flowers but if those flowers are used to make concentrates the pesticides become concentrated as well making the concentrate highly toxic. Many edible manufacturers use concentrates to infuse their products whether they produce the concentrate themselves or not.
A common antifungal pesticide used is a product called Eagle 20. It is "acceptable" (when applied properly) for flowers and fruits like apples. It is NOT approved for tobacco. Even if it were applied "properly" when ignited it becomes cyanide.
Eagle 20 also gets into the genetics. If it is used on plants that are for seed stock, even if those seeds are grown using organic methods, those plants will test positive for Eagle 20.

There are State regulations in place concerning different foodstuffs regarding labeling, storage of perishables, ingredients, expiration dates, etc.

How do you minimize residual solvents in the final products?
At the end of the process there is a visual bubbling to the oil.
By adding a few drops of water the size of the bubbles can be seen more clearly. The larger bubbles are the water and the small ones are the alcohol. The product is watched until the smaller bubbles are almost completely gone.
License Survey

The Office of Medical Cannabis Safety in the Center for Environmental Health of the California Department of Public Health (CDPH) would like to get a sense of how many applicants the State can expect to apply for licensure beginning in 2018 so that we can plan to have sufficient resources available. We recognize the industry is still planning and as such understand this information is preliminary. CDPH is not capturing any information that would indicate who is submitting this information.

Do you intend to apply for a manufacturer license in January 2018?
(x ) Yes, If required.
( ) No

Please check which of the following additional licenses you intend to apply for in January 2018:
(x ) Cultivation
( ) Producing Dispensary
( ) Transporter

What county(ies) and/or city(ies) do you plan to conduct business in?
Primarily San Francisco and Mendocino but others as needed.

Which of the following extraction methods describes your manufacturing practices?
( ) Hydrocarbons (e.g. N-butane, heptane, propane)
( ) Carbon dioxide
(x ) Butter/Cooking Oils
( ) Isopropyl alcohol
(x ) Ethanol
( ) Vegetable glycerin
( ) Water
( ) Dry extraction (e.g. heat, screens, presses, steam distillation)
( ) Other (please specify)
Which of the following product types do you plan to manufacturer?

( ) Edibles (includes infused drinks)
( ) Topicals
(x) Concentrates
( ) Extracts
( ) Tinctures
( ) Capsules
(x) Suppositories
( ) Transdermal patches
( ) Marijuana cigarette
(x) Other (please specify)

Concentrate - diluted in organic cooking oil for ease of administering an accurate dose.
TO:  Mr. President's Office

2020 9/30

Resubmitted

H.C. 886

Brenda A. Christie

TO:  Mr. President's Office

2020 9/30

Resubmitted

H.C. 886

Brenda A. Christie
Look for the PFC Seal

Choose Your Medicine with Confidence
What does the PFC Seal tell you?

When you see the PFC seal at a distribution center or on a product label, it tells you that the quality of products and services has been verified through the rigorous Patient Focused Certification Program.

Patient Focused Certification means:

- Company staff are well trained
- Products and services have been tested for contaminants
- Products and services meet legal requirements as well as AHPA and AHP standards
- Companies have recall protocols in place

How does PFC provide Certification?

PFC works with companies who voluntarily participate in the program and agree to adhere to local laws, AHPA and AHP standards. We verify their companies through a comprehensive evaluation process.

Our auditors:

- Perform thorough audits of the facilities.
- Test products in PFC certified laboratories.
- Conduct at least one surprise audit a year to ensure PFC standards are upheld.
- Maintain a consumer complaint database and follow up with the company for any needed corrective action.
- Only allow the PFC seal to be used on products that meet the PFC criteria.

Safety & Quality Assurance

More than one-third of the US population lives in states with medical cannabis laws, & over one million Americans are legally using medical cannabis under the care of a physician.

While many states and localities have created regulations to govern the location, size, & taxation of these businesses, they do not, for the most part, address the quality and safety of the products being sold.

Patients have the right to know how their medicine has been produced, that is free of contaminants & should be confident that the medicine they are receiving has been handled with the highest quality standards. They can now look for the PFC seal to help them determine which products to purchase.

PFC is available to all companies cultivating, manufacturing or distributing medical cannabis products, as well as to laboratories providing analytic services to these companies. PFC includes employee training, compliance inspections, product testing, ongoing monitoring, and an independent complaint process for customers.

Companies certified by PFC are demonstrating a commitment to safety and quality.
Choose Your Certification
Look for the PFC Seal

Why PFC?
Patient Focused Certification (PFC) is a non-profit, third-party certification for the medical marijuana industry. It is an independent certification that helps patients find quality medical marijuana products. PFC providers are required to adhere to strict guidelines for patient care, product quality, and access.

Where do I find PFC Certified Products?
If you have any questions or need further assistance, please contact us at:

AmericanForSafeAccess
Don Duncan, California Director
EMAIL: don@safeaccessnow.org
PHONE: 323.378.6347

Advancing Legal Medical Marijuana, Inequality, and Research
September 27, 2016

Ms. Amber Morris
Medical Cannabis Cultivation Comments
1220 N. Street Suite 400
Sacramento, CA 95814

Re: Medical Cannabis Cultivation Comments

Dear Ms. Morris:

Enclosed please find the American Herbal Products Association document “Cannabis Cultivation and Processing Operations”. This document was produced by convening a group of experienced cultivators, all committed to best practices, who worked with the American Herbal Products Association to produce a cultivation blueprint for regulators. For ease of usage, the document is set up as a model ordinance.

The document was produced in close association with Americans for Safe Access (ASA), which through its Patient Focused Certification Program, trains state regulators on best practices. Recently, this program was selected by the State of Maryland as the mechanism used to train its regulators. We’ve enclosed a flyer on the program.

Founded in 2002, Americans for Safe Access (ASA) is the largest national member-based organization of patients, medical professionals, scientists, and concerned citizens promoting safe and legal access to marijuana for therapeutic use and research. ASA works in partnership with state, local and national legislators to overcome barriers and create policies that improve access to marijuana for patients and researchers. ASA has more than 100,000 active members with chapters and affiliates in all 50 states. Our website is: www.safeaccessnow.org

We are confident that the enclosed document will be of great help to the Department of Food and Agriculture as it begins generating its Programic Environmental Impact Report (PEIR) and we urge you to consider it closely.

If you have any questions, our California Director, Don Duncan, is in Sacramento and available to meet with you at any time. Mr. Duncan can be reached at don@safeaccessnow.org or (323) 326-6347.

Sincerely,

[Signature]

Director of Industry Affairs
Americans for Safe Access

Cc: [Redacted]
The legal status of products derived from Cannabis spp. is in a transitional phase in many states in the United States. Where products that contain marijuana and its derivatives were formally illegal throughout the U.S., many state laws now allow adult use of these either for medical purposes only or for any social adult use.

The American Herbal Products Association (AHPA) chartered a Cannabis Committee in 2010 with an express purpose to address issues related to the safe use and responsible commerce of legally-marketed products derived from Cannabis species.

To meet its purpose, the AHPA Cannabis Committee is in the process of developing recommendations to regulators for best practice rules to address four operational stages of Cannabis production and distribution: cultivation and processing; manufacturing and related operations; laboratory practice; and dispensing.

The present document provides recommendations to regulators in the specific area of Cannabis Cultivation and Processing Operations, and is presented in the form of a draft regulation. These recommendations are intended to establish a basis for oversight of entities that cultivate cannabis in either outdoor or indoor facilities. The document address such topics as cultivation practices, facility requirements, management of water resources, recordkeeping and information disclosure. It also establishes best practices for operations that provide post-harvest processing of cannabis, for either distribution to dispensing operations, or to manufacturing operations for the production of cannabis-derived products.

The AHPA Cannabis Committee offers this document to states and local municipalities where use of marijuana is allowed under local law such that regulatory authorities can consider the adoption of these recommendations, in whole or in part, as the basis for development of jurisdiction-specific regulations.

Please contact AHPA for further information or to discuss this document further.

Point of contact: Michael McGuffin
P: 301-588-1171 x201 / E: mmcguffin@ahpa.org
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**FOR DISCUSSION. Prepared for consideration for submission to state or local regulatory agencies in states within the United States.**
PART [X] – Cannabis cultivation and processing operations

SUBPART A – GENERAL PROVISIONS

Section 1.1 Subject operations
(a) Except as provided by paragraph (b) of this section, any person, group of persons, or business entity that cultivates cannabis for retail or wholesale transactions in the jurisdiction in which this part applies is engaged in a cultivation operation, and is subject to this part.
(b) A compliant individual who cultivates cannabis in accordance with local and state law for personal use is not subject to this part.
(c) Except as provided by paragraph (d) of this section, any person, group of persons, or business entity that processes cannabis for retail or wholesale transactions in the jurisdiction in which this part applies is engaged in a processing operation, and is subject to this part.
(d) A compliant individual who processes cannabis in accordance with local and state law for personal use is not subject to this part.
(e) Operations subject to this part are subject only to those sections of this part that directly apply to the operations conducted, such that:
   (1) A cultivation operation is not subject to the processing sections of this part unless processing operations are also conducted by the cultivation operation; and
   (2) A processing operation is not subject to the cultivation sections of this part unless cultivation operations are also conducted by the processing operation.

Section 1.2 Other statutory provisions and regulations
In addition to this part, cultivation operations and processing operations must comply with all other applicable statutory provisions and regulations related to cannabis cultivation and processing in the jurisdiction in which this part applies, and related to all other business activities undertaken in conducting the cultivation operation or processing operation.

Section 1.3 Definitions
The following definitions apply to this part:
Batch means a specific quantity of cannabis harvested during a specified time period from a specified cultivation area.
Cannabis means any of the aerial parts of a plant in the genus Cannabis, and does not mean hemp.

1 This term “in the jurisdiction where this part applies” may be replaced throughout with the name of the specific jurisdiction.

FOR DISCUSSION. Prepared for consideration for submission to state or local regulatory agencies in states within the United States.
Cannabis planting material means cannabis seeds, seedlings, cuttings, clones, etc. used by a cultivation operation to grow cannabis.

Cannabis waste means cannabis discarded by the cultivation operation or processing operation.

Compliant individual means a person who has met all legal requirements to obtain and use cannabis or cannabis-derived products in the jurisdiction where this part applies.

Cultivate means to grow, harvest, dry, and cure cannabis. A person, group of persons, or business entity that cultivates is a cultivator, and a facility where cannabis plants are cultivated is a cultivation operation.

Cultivation area means the physical location of a structure or property at which cannabis is cultivated.

Curing means the process by which cannabis is prepared, preserved, or finished.

Direct-from-garden or caregiver operation means a dispensing operation whereby compliant individuals obtain cannabis or cannabis-derived product directly from a cannabis cultivator.

Dispensing operation means a person, group of persons, or business entity that provides cannabis or cannabis-derived product to compliant individuals and includes delivery services, direct-from-garden operations, growing co-ops, and storefront operations.

Drying means the dehydration of harvested cannabis.

Firewall assembly means a fireproof barrier used to prevent the spread of fire between or through buildings or structures.

Greenhouse means a permanent structure located outdoors that is completely covered by a material that allows a controlled level of light transmission.

Greenhouse cultivation means the cultivation of cannabis inside of a greenhouse utilizing natural sun and possible supplemental artificial lighting.

Harvest means to gather cannabis plants from cultivation medium or to gather specific aerial parts of cannabis plants.

Hemp means any part of a plant in the genus Cannabis, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 (three-tenths) percent on a dry weight basis.

High intensity discharge lamps (HID lamps) means a type of electrical gas-discharge lamp which produces light by means of an electric arc between tungsten electrodes housed inside a translucent or transparent fused quartz or fused alumina arc tube.

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2 Different jurisdictions may have other terminology for the type of operation that is defined as a dispensing operation in this document.

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Identity means the set of characteristics by which an ingredient or product is definitively recognizable or known. In the case of cannabis and other botanical ingredients, identity means the plant part and the botanical genus, species, variety, strain, and/or cultivar, as well as other characteristics as applicable.

Indoor cultivation means cultivation of cannabis grown in a fully enclosed location in which the only light source is artificial.

Manufacture means to make or otherwise produce cannabis-derived product. A person, group of persons, or business entity that manufactures is a manufacturer, and a facility where manufacture occurs is a manufacturing operation.

May is used to indicate an action or activity that is permitted.

Medium means the nutritive substrate that the cultivator is using to establish a root system.

Must is used to state a requirement.

Nursery facility means an indoor, greenhouse, or outdoor cultivation operation that produces cannabis plants for the purpose of providing planting material to other cultivation operations.

Outdoor cultivation means cultivation of cannabis out of doors utilizing natural sunlight and possibly supplemental artificial lighting.

Personal use means cannabis that is produced for a compliant individual's personal medical needs and is not sold or distributed in any manner.

Planting means to place cannabis seeds or young plants in soil or medium.

Process means to trim, inspect, or grade cannabis, or to place cannabis in bulk storage or retail containers. A person, group of persons, or business entity that processes cannabis is a processor, and a facility where cannabis is processed is a processing operation.

Processing loss means cannabis that, for any reason, during processing is deemed unfit for human consumption.

Propagation materials means all substances used in the cultivation of cannabis.

Pruning means cutting away dead or overgrown cannabis leaves, branches or stems.

Should is used to state recommended or advisory procedures.

Supplemental lighting means artificial lighting used to help or extend the vegetative life cycle of a cannabis plant.

Trimming means the removal of leaves and stems from harvested cannabis.

Variety means a specific stock, line, or breed of cannabis, also commonly referred to as strain.

Vendor means a person, group of persons, or business entity that supplies cannabis or cannabis-derived product to storefront or delivery service dispensing

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operations, and may be either the direct representative of a cultivation or manufacturing operation, or may function independently of such operations by purchasing cannabis or cannabis-derived product from such operations and reselling it to other operations.

SUBPART B – CULTIVATION AND PROCESSING OPERATIONS

Section 2.1 Types of cultivation operations
(a) Cannabis may be cultivated by any of the following types of cultivation operations, as defined in section 1.3 in this part:
   (1) Indoor cultivation operations;
   (2) Greenhouse cultivation operations;
   (3) Outdoor cultivation operations; and
   (4) Nursery operations.
(b) Cultivation operations may do the following, as allowed by applicable legislation and regulation:
   (1) Produce their own cannabis planting material; and
   (2) Obtain cannabis planting material from any of the following:
      (i) Other cultivation operations;
      (ii) Nursery operations; and
      (iii) Compliant individuals.
(c) Processing operations may obtain cannabis from any of the following, as allowed by applicable legislation and regulation:
   (1) Cultivation operations;
   (2) Compliant individuals, and
   (3) Vendors.
(d) Cultivation operations and processing operations may distribute cannabis to any of the following, as allowed by applicable legislation and regulation:
   (1) Other cultivation operations;
   (2) Other processing operations;
   (3) Dispensing operations;
   (4) Manufacturing operations;
   (5) Vendors; and
   (6) Compliant individuals.

Section 2.2 Ancillary operations
(a) Cultivation operations and processing operations may also engage in other operations, including:
   (1) Manufacturing, packaging, labeling, and holding of cannabis-derived product;
   (2) Laboratory operations;
   (3) Dispensing of cannabis and cannabis-derived product; and
   (4) Cultivation and marketing of products other than cannabis.
(b) The ancillary operations identified in section 2.2(a) may be conducted:

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(1) At the same location as cultivation or processing, so long as such operations are permitted at this location in the jurisdiction in which this part applies; or
(2) At another location at which such operations are permitted in the jurisdiction in which this part applies.
(c) The ancillary operations identified in section 2.2(a) must be conducted in compliance with all regulations relevant to such operations in the jurisdiction in which this part applies.

Section 2.3 Cultivation practices
(a) Propagation materials
(1) Propagation materials used in cultivation operations must be appropriate for use in food production.
(2) Cultivation operations must follow the manufacturer’s usage, storage, and disposal recommendations for the propagation material.
(b) Pesticides
(1) Pesticides used in cultivation operations must be one of the following:
   (i) Subject to a tolerance established for application to cannabis by the US Environmental Protection Agency (EPA);
   (ii) Identified by EPA regulation as exempted from tolerance;
   (iii) Subject to a Section 18 emergency exemption under FIFRA; or
   (iv) Permitted for application to cannabis in other countries as long as the pesticide is also permitted for application to one or more food crops in the United States.
(2) Cultivation operations must follow the manufacturer’s application and storage recommendations, and disposal recommendations for the pesticide product.
(3) Cultivation operations must follow the EPA Worker Protection Standard when preparing and applying pesticides.
(4) Indoor cultivation operations must comply with the pesticide manufacturer’s published re-entry interval time periods when applying pesticides.
(c) Nutrients
(1) Nutrients used in cultivation operations must be appropriate for use in food production.
(2) Cultivation operations must follow the manufacturer’s application, storage, and disposal recommendations for the nutrient product.
(3) Cultivation operations must not return unused rooting hormone to the source container.
(4) Nitrate-based and other oxidizing fertilizers must be stored away from solvents, fuels and pesticides.

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3 Section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizes EPA to allow an unregistered use of a pesticide for a limited time if EPA determines that an emergency condition exists.
4 The EPA Worker Protection Standard can be accessed at the following website - http://www.epa.gov/agriculture/twor.html (accessed September 9, 2013)

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(d) Carbon dioxide
   (1) Indoor cultivation facilities utilizing carbon dioxide must maintain levels under 2000 ppm in cultivation areas when facility personnel may be present.
   (2) Indoor cultivation facilities utilizing carbon dioxide at levels above 2000 ppm in a sealed room must prohibit personnel from entering the cultivation area unless personal protective equipment is provided.
   (3) All regulators and environmental control systems that regulate carbon dioxide emissions must be maintained in good working order and be serviced in accordance with the manufacturer's recommendations.

(e) Equipment and tools
   (1) Equipment used for measuring, regulating, or recoring temperatures, pH, humidity, or other conditions related to the cultivation and processing of cannabis must be accurate and adequately maintained.
   (2) Cultivation and processing tools that come in direct contact with cannabis plants should be disinfected as needed to protect plant health.
   (3) Scales used for the weighing of cannabis must be calibrated at regular intervals.

Section 2.4 Processing practices
(a) Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
(b) Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
(c) Employees handling cannabis in processing operations must utilize facemasks and gloves in good operable condition as applicable to their job function.
(d) Employees must wash hands sufficiently when handling cannabis or use gloves.

Section 2.5 Distribution practices
Cannabis distributed by cultivation operations and processing operations must be accompanied by the following information:
   (1) Cultivation or processing operation's name;
   (2) Identity of contents;
   (3) Net weight of contents; and
   (4) Sufficient information to trace the cannabis to its batch.

SUBPART C – PERSONNEL

Section 3.1 Personnel training
(a) Cultivation and processing operations must:

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(1) Ensure that each person engaged in the operation has the education, training, and experience, or any combination thereof, to enable that person to perform all assigned functions.

(2) Maintain records of any training provided to employees for the performance of all assigned functions.

(b) Cultivation and processing operations should provide all employees with training that includes:

(1) Instructions regarding regulatory inspection preparedness and law-enforcement interactions; and

(2) Information on U.S. federal laws, regulations, and policies relating to individuals employed in these operations, and the implications of these for such employees.

(c) Cultivation and processing operations must implement employee hygiene protocols and training, which at a minimum address:

(1) Policies which prohibit employees who are showing signs of illness, open wounds, sores or skin infections from handling cannabis.

(2) Hygiene training for employees who handle cannabis with specific attention to preventing microbial contamination.

(3) Hand washing requirements including washing hands with soap and hot water before beginning work, after using the bathroom and after meal breaks.

(4) Instructive hand washing signage must be in appropriate areas such as bathrooms, kitchens, and lunch areas, and in multiple languages as needed.

**Section 3.2 Employee safety**

(a) Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:

(1) Emergency action response planning as necessary;

(2) Employee accident reporting and investigation policies;

(3) Fire prevention;

(4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);

(5) Materials handling, spill, and disposal policies;

(6) Job hazard analyses; and

(7) Personal protective equipment policies, including respirator protection.

(b) Cultivation operations must provide and maintain at least one emergency eye flushing station readily accessible to all employees and access to adequate eye flushing water for each employee working in field operations.

(c) Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:

(1) Operation manager contacts;

(2) Emergency responder contacts;

(3) Poison control contacts;

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(4) Fire department contacts; and
(5) Spill response team contacts.

SUBPART D – FACILITIES

Section 4.1 General compliance
(a) Cultivation operations must comply with all legal requirements pertaining to
the following as applicable:
(1) Restrictions on the size of the cultivation area;
(2) Restrictions on the number of cannabis plants allowed or other
quantitative limits; and
(3) Light pollution restrictions.
(b) Location of cultivation operations:
(1) Indoor cultivation operations may be located on any property that is
zoned for such use and must be located in a fully permitted, non-
residential structure that:
(i) Was constructed in compliance with local building code;
(ii) Has a complete roof enclosure supported by connecting walls
extending from the ground to the roof;
(iii) Is secure against unauthorized entry; and
(iv) Minimizes unnecessary visual, auditory or olfactory evidence of
indoor cannabis cultivation.
(2) Outdoor cultivation operations and greenhouse cultivation operations
may be located on any property that is zoned for such use.
(3) Outdoor cultivation operations and greenhouse operations must be
located within any setbacks that pertain to the property where the
cultivation is taking place.
(4) Greenhouse cultivation structures must be fully permitted and built to
code at the time of construction.
(c) Location of processing operations
(1) Processing operations may be located on any property that is zoned
for such use.
(2) Processing operations must be located within any setbacks that pertain
to the property where the processing is taking place.
(3) Processing operation structures must be fully permitted and
constructed in compliance with local building code.
(d) Outdoor cultivation or greenhouse cultivation operations must shield or
downcast supplemental lighting.
(e) Cultivation operations and processing operations that transport cannabis
must do so in a secured enclosed container or secured trunk of the delivery
vehicle.

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or local regulatory agencies in states within the United States.
Section 4.2 Fire prevention
(a) Any room in an indoor cultivation operation in which operational supplemental lighting, ballasts, or electrical control panels are located must be constructed with a minimum of a one-hour firewall assembly.
(b) Indoor cultivation operations must:
   (1) Provide at least one operating fire extinguisher, and
   (2) Provide additional fire extinguishers in a number proportional to the watts of supplemental lighting used in the facility (one fire extinguisher per every 10,000 watts of lighting), or in accordance with local fire code.
(c) Fire extinguishers must be:
   (1) Easily accessible to employees from every room and in each hallway of the facility;
   (2) Maintained annually or as otherwise specified by the manufacturer; and
   (3) Of the appropriate class rating for the type of fire associated with the functions being performed in the facility (i.e., electrical, chemical).
(d) Flammable products must be stored in a properly marked fire containment cabinet or area.
(e) Signage that complies with National Fire Protection Association (NFPA) standard 704 must be placed at entrances to exposure areas.

Section 4.3 Sanitation practices
(a) Cultivation operations and processing operations must provide employees with adequate and readily-accessible toilet facilities.
   (1) Toilet facilities must be maintained in a sanitary condition;
   (2) Toilet facilities must be adequately stocked with toilet paper, soap, and single use paper towels or other drying devices; and
   (3) Toilet facilities must be kept in good repair at all times.
(b) Cultivation operations and processing operations must provide adequate and convenient hand-washing stations.
   (1) Hand washing stations must be provided with running water of suitable temperature;
   (2) Hand washing stations must be provided with effective hand cleaning or sanitizing preparations and single use paper towels or other drying devices;
   (3) Hand washing stations must be located at points in the facility where good sanitary practices require employees to wash or sanitize their hands; and
   (4) Outdoor and greenhouse cultivation operations must provide hand-washing stations at field locations as appropriate.
(c) Cultivation operations and processing operations must implement sanitation practices, which at a minimum address:
   (1) Removal of debris, and control of the growth of mold, mildew and algae in the cultivation area or processing area;
   (2) Pest control practices, including maintenance and repair of caulk cracks and drain areas;

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(3) Identification of hoses dedicated for use in cultivation; and
(4) Maintenance and cleaning of irrigation systems.
(d) Processing operations must protect cannabis from contact with birds, rodents, insects, and other animals and from exposure to the elements.

Section 4.4 Electrical system
(a) The cultivation operation’s electrical system must be of sufficient capacity to handle the actual electrical load and be installed in accordance with an approved electrical permit.
(b) All electrical work and upgrades at cultivation operations must be performed with proper permitting.
(c) All electrical equipment used by a cannabis cultivation operation should be connected to the electrical system in accordance with the equipment manufacturer’s recommendations.

Section 4.5 Ventilation system
(a) Enclosed cultivation operations and processing operations must be equipped with adequate ventilation to maintain proper humidity and temperature.
(b) For indoor cultivation operations:
   (1) If a mechanically propelled air intake system is used, a filter capable of removing 99.97% of particles with a diameter of 0.3 micrometers (μm) must also be utilized, as necessary to control potential contamination with pathogenic organisms.
   (2) If a non-mechanically propelled or passive intake system is being utilized, a grate and filter sufficient to reduce the intrusion of rodents and insects must be installed.

Section 4.6 Disposal and waste practices
(a) Cannabis waste must be disposed of in a manner which prevents unauthorized use and such disposal must be documented.
(b) Bulbs and ballasts utilized during the cultivation of cannabis must be disposed of in accordance with manufacturer’s recommendations.

Section 4.7 Security provisions
(a) Outdoor and greenhouse cultivation operations should be enclosed by a secure perimeter fence at least six (6) feet in height. The fence should include a lockable gate that is locked when a qualified employee is not in the immediate area. The fence must not violate any other ordinance, code section or provision of law regarding height and location restrictions.
(b) Indoor cultivation facilities and processing facilities must have locking doors and windows which allow emergency ingress and egress in accordance with applicable regulations.
(c) Cultivation operations and processing operations must implement and communicate security protocols to all personnel.
(d) Visitors must be accompanied by an employee at all times.

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SUBPART E – WATER RESOURCE MANAGEMENT

Section 5.1 Cultivation water management
(a) In the absence of local or state water district regulations for cannabis production, cultivation operations must create and implement a cultivation water management plan to address the following:
   (1) Erosion prevention; and
   (2) Effluent and agricultural discharges.
(b) Chemical solutions must be disposed of in accordance with applicable laws and regulations.
(c) Application of nutrients or pesticides through an irrigation system (chemigation), must be performed in accordance with state or local agricultural regulations.

Section 5.2 Potable water for employee use
(a) Cultivation operations not utilizing a municipal source of potable water must test the potable water supply at least two times per year to ensure compliance with state primary drinking water standards.
(b) Chemicals, fertilizers, pesticides, media and other products must be stored away from the potable water supply.

SUBPART F – RECORDKEEPING

Section 6 Recordkeeping practices
(a) Cultivation operations must record the identity and source of all cannabis propagation material with sufficient specificity to ensure that the material can be traced to its source. Such records must be created whether the propagation material is obtained off-site or produced on-site.
(b) For each batch of cannabis, cultivation operations must maintain cultivation records that include at a minimum:
   (1) Planting records:
      (i) Form of cannabis planted (e.g., seed, clone, seedlings, etc.);
      (ii) Date(s) that planting took place;
      (iii) Variety(ies) planted;
      (iv) Size of the cultivation area; and
      (v) Location of the cultivation area.
   (2) Propagation records:
      (i) Media used, and whether the media was reused or new product;
      (ii) Description of all actions taken to prevent or treat the cannabis for disease or pest issues;
      (iii) Soil amendments added, and strength of the application;
      (iv) Nutrients added, and strength of the application;
      (v) All substances applied to the plant(s) surface or used as a fumigant in the cultivation and/or nursery area, and
      (vi) Pruning or other physical technique(s).

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(3) Pesticide use records:
   (i) Pesticide chemical name;
   (ii) Brand name and manufacturer name;
   (iii) Amount of pesticide applied;
   (iv) Date pesticide applied;
   (v) Identification or location of plants to which pesticide was applied; and
   (vi) Name of applicator if required.

(4) Harvest records:
   (i) Identity of each variety harvested;
   (ii) Date of harvest;
   (iii) Gross weight of the cannabis harvested for processing (generally recorded after drying);
   (iv) Total weight of cannabis waste resulting from the harvest, and
   (v) Net weight of harvested cannabis (gross weight less waste).

(c) Processing operations must maintain records for processed cannabis that include at a minimum:
   (1) Identity of the variety processed;
   (2) Sufficient information to trace the processed cannabis to its cultivation source;
   (3) Date of processing;
   (4) Initial weight; and
   (5) Total weight of any processing loss (based on wet or dry weight).

(d) Cultivation operations and processing operations must maintain records of the commercial sale of cannabis to other cultivation and processing operations, to manufacturing operations, and to dispensing operations that include at a minimum:
   (1) Identity of the variety distributed;
   (2) Total weight of each variety distributed;
   (3) Date of distribution; and
   (4) Identity of the receiving operation.

(e) Cultivation operations and processing operations are not required to retain records of cannabis distributed for the following purposes:
   (1) Samples provided for testing;
   (2) Samples provided to other operations at no charge; and
   (3) Samples provided to compliant individuals at no charge.

SUBPART G – INFORMATION DISCLOSURE

Section 7 Information disclosure
(a) Cultivation operations must provide the following records to other cultivation operations, processing operations, manufacturing operations, and dispensing operations receiving cannabis from the cultivation operation, upon the receiving operation's request:
   (1) Nutrients used during cultivation;

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(2) All substances applied to the plant(s) surface or used as a fumigant in the cultivation area;
(3) Pesticides applied during cultivation; and
(4) Other substances used during cultivation that may result in a residue on cannabis.
(b) Information provided by a cultivation operation, whether written or verbal, about the identity, quality, and cultivation conditions of cannabis it provides must be accurate.
(c) Cultivation operations and processing operations must disclose the extent and type of testing and analysis conducted on the cannabis it provides, including:
   (1) The type of test, analysis or examination used, if any, to determine the particular strain or cultivar of each batch of cannabis provided;
   (2) Any tests to determine the quantitative levels of contained constituents, and if so, the type of testing used;
   (3) Any tests to determine the absence or presence of specific classes of potential contaminants, and if so, the type of testing used. The information required by this paragraph must be disclosed for each of the following:
      (i) Pesticides;
      (ii) Yeasts and molds; and
      (iii) Other microbiological contaminants.
   (4) Whether the testing was conducted by the cultivation or processing operation, or by an external laboratory.

**SUBPART H — RECALLS**

**Section 8 Recall plan**
(a) Each cultivation operation and processing operation must develop and implement a recall plan addressing at a minimum:
   (1) Factors which necessitate a recall procedure;
   (2) Personnel responsible for a recall; and
   (3) Notification protocols.
(b) Each cultivation operation and processing operation must establish a policy for communicating a recall of cannabis that has been shown to present a reasonable or a remote probability that the use of or exposure to the product will cause serious adverse health consequences, or could cause temporary or medically reversible adverse health consequences. This policy should include:
   (1) A mechanism to contact all customers who have, or could have, obtained the cannabis from the cultivation operation or processing operation;
   (2) Information on the return or destruction of any recalled product;
   (3) A mechanism to contact the cultivation operation; and

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(4) Communication and outreach via media, as necessary and appropriate.

(c) Any recalled cannabis that is returned to a cultivation operation or processing operation must be disposed of in a manner that ensures that it cannot be salvaged and will not be used by a compliant individual or by any other person.
Take Back America Campaign

21 DRUG FREE CHALLENGE

Protect the Kids
"If a child reaches age 21 prior to smoking, abusing alcohol or using drugs, they virtually never will."
- Joseph Califano, Jr., Chairman/Founder of CASA
MARIJUANA HAS CHANGED
Potency has gone from 1/2 to 2% THC to 20 to 30% in smoked form, and up to 96% as Butane Hash Oil (BHO) extracts and oils which are used in edibles and vaping. Edibles are sold in quantities and potency that have proven lethal. Vaping, with no smoke or odor, is the new threat for inflicting mental and physical harms including addiction, particularly to adolescents. No longer a "soft" drug, the adverse impacts have risen in relation to the potency. The greatest harm is BRAIN DAMAGE.

MARIJUANA EDIBLES AND VAPING
Marijuana edibles are now sold under the guise of medicine, packaged to be of interest to children, in quantities and potencies that are potentially lethal. E-Cigarettes and vaping have now eclipsed conventional cigarettes, with no smoke or odor. They are widely used for cannabis with potency as high as 96% with the potential to adversely affect the brains of anyone under 25 years old, but particularly adolescents.

“If a child reaches age 21 prior to smoking, abusing alcohol or using drugs, they virtually never will.” (Califano, CASA)

Drugs And Addiction Have No Religious Or Party Preference.
(Bishop Ron Allen, International Faith Based Coalition)

Addiction to alcohol, drugs and tobacco is the root cause of more pain and suffering, social destruction, economic cost and death than all events in recent history. If America is to have a future, we must take action to protect the brains of our youth, and stop the devastation of our environment. We cannot succumb to the 8% of people who use marijuana to get high, or profit from those who do, at the expense of the 92% of people who don’t. If we allow them to destroy our youth, and inflict irreparable harm on our natural resources, they have no future, nor do we as a nation.

Marijuana is a very dangerous drug that has the potential to destroy this nation. If you can help by making a small donation, it will help us sustain and grow our effort to achieve a safer, healthier, drug-free state and nation. We thank you in advance for doing so.

Donations can be mailed to:
TBAC, P.O. Box 459, Lincoln, Ca 95648; or on-line at www.tbac.us or for a tax-free donation visit our Prevention Partner at Parents Opposed to Pot www.poppot.us, a 501(c)3

Heavenly Father, thank you for the gift of our children and planet. We pray for your love and protection for both, so that they may grow and flourish.

We Encourage You To Learn More About Marijuana
www.drugabuse.com / stoppot2016.com
POPPOT.org / #stoppot / CALMca.org / IFBC.us

THIS IS NOT A WAR ON DRUGS, BUT A BATTLE TO PROTECT THE BRAINS OF OUR YOUTH.

The human brain holds our humanity—how we think, feel, and act. With our minds we learn, create, compose, connect and remember. We love, feel empathy, sorrow and loss. We care for others and give unconditionally. Our reward is the essence of our humanity. We are united in the defense of our most vulnerable. The brightness of our shared future depends on our promise and commitment to protect and defend the mental health of our youth.
BRAIN DAMAGE RUINS LIVES:

BRAIN DAMAGE from fat soluble marijuana results in permanent structural and chemical changes causing impaired memory, motivation, maturation and cognition. Heavy adolescence use has resulted in loss of IQ by an average of 8 points by mid-adulthood. Quitting use as an adult is unlikely to reverse the damage. The brain isn’t fully developed under age 25. The adolescent brain is much more vulnerable to harm. Brain damage during adolescence can have life-long consequences.

PSYCHOTIC EPISODES – Roughly 500,000 people are admitted to Emergency Rooms annually due to psychotic breaks. Voices tell them to do heinous acts of murder, and/or commit suicide. Marijuana has been a factor in most mass murders, including Tucson, Aurora, Boston Bombers, Chattanooga and more. Eddie Routh killed American Sniper Chris Kyle and friend after a morning smoking pot. A 23 year old mother in Ohio decapitated her 3 month old baby. Numerous people have committed suicide.

MENTAL AND PHYSICAL ILLNESS. Marijuana is associated with psychosis, schizophrenia, bipolar disorder and major mental illness. It can induce psychosis in vulnerable people. Because marijuana stays in the body longer than any other drug, it can cause testicular cancer, strokes, heart attacks and bronchitis in vulnerable individuals. Roughly 30% of people are considered vulnerable. Jails nationwide are full of mentally ill people who can’t work, waiting for non-existent beds in mental institutions. Marijuana use is associated with lower graduation rates, higher unemployment and greater reliance on public assistance.

ADDITION - Recent information (JAMA Psychiatry Oct 21,2015) indicates addiction to marijuana has risen from 9% to 30.5% in current (past year) users. Addiction is a life-long condition that enslaves people, escalates crime, diminishes academic achievement and productivity and ruins entire families. Most of the 122 Americans who die every day of overdose of other drugs, started their drug journey with marijuana.

BIRTH DEFECTS – Children prenatally exposed to THC are more likely to show gaps in problem-solving skills, memory, and ability to remain attentive. (NIDA) Even low concentrations of THC can have profound and long-lasting consequences for brain and behavior of offspring. Marijuana use during pregnancy or breast feeding is associated with adverse consequences for the child which can persist well into adulthood.

TRAFFIC FATALITIES DOUBLE – One in eight (12.6%) of drivers in America are impaired by marijuana to varying degrees. Traffic deaths owing to drugged driving now rival alcohol (40%), with marijuana being the predominant drug. Traffic fatalities owing to marijuana impairment have doubled in states that allow marijuana for any reason. Marijuana mixed with alcohol escalates the problem by eight times.

BATTLE FOR THE PLANET

One marijuana plant consumes 6 gallons of water per day, averaging 1 to 5 lbs of produce at 1200 joints per lb. Pot plantations in California, all producing marijuana under the guise of medicine, are diverting water from streams causing irreparable damage to ecosystems that are categorized as “globally outstanding.” In rural and residential communities, the stench from marijuana is ruining the quality of life and diminishing property values. To serve the insatiable appetite of 8% of Americans who want to get high, and provide an easy buck for people who don’t care about the social and economic impact they impose on the other 92%, America is suffering enormous damage to the brains of our youth, and to our precious natural resources. It has to stop, or we have no future as a nation.
MARIJUANA HAS CHANGED. Potency has gone from 1/2 to 2% THC to 20 to 30% in smoked form, and up to 96% as Butane Hash Oil (BHO) extracts and oils which are used in edibles and vaping. Edibles are sold in quantities and potency that have proven lethal. Vaping, with no smoke or odor, is the new threat for inflicting mental and physical harms including addiction, particularly to adolescents. No longer a "soft" drug, the adverse impacts have risen in relation to the potency. The greatest harm is BRAIN DAMAGE.

BRAIN DAMAGE RUINS LIVES:

BRAIN DAMAGE from fat soluble marijuana results in permanent structural and chemical changes causing impaired memory, motivation, maturation and cognition. Heavy adolescence use has resulted in loss of IQ by an average of 8 points by mid-adulthood. Quitting use as an adult is unlikely to reverse the damage. The brain isn't fully developed under age 25. The adolescent brain is much more vulnerable to harm. Brain damage during adolescence can have life-long consequences.

MENTAL AND PHYSICAL ILLNESS. Marijuana is associated with psychosis, schizophrenia, bipolar disorder and major mental illness. It can induce psychosis in vulnerable people. Because marijuana stays in the body longer than any other drug, it can cause testicular cancer, strokes, heart attacks and bronchitis in vulnerable individuals. Roughly 30% of people are considered vulnerable. Jails nationwide are full of mentally ill people who can't work, waiting for non-existent beds in mental institutions. Marijuana use is associated with lower graduation rates, higher unemployment and greater reliance on public assistance.

THIS IS NOT A WAR ON DRUGS, BUT A BATTLE TO PROTECT THE BRAINS OF OUR YOUTH.

The human brain holds our humanity—how we think, feel, and act. With our minds we learn, create, compose, connect and remember. We love, feel empathy, sorrow and loss. We care for others and give unconditionally. Our reward is the essence of our humanity. We are united in the defense of our most vulnerable. The brightness of our shared future depends on our promise and commitment to protect and defend the mental health of our youth.
PSYCHOTIC EPISODES – Roughly 500,000 people are admitted to Emergency Rooms annually due to psychotic breaks. Voices tell them to do heinous acts of murder, and/or commit suicide. Marijuana has been a factor in most mass murders, including Tucson, Aurora, Boston Bombing, Chattanooga, and more. Eddie Routh killed American Sniper Chris Kyle and friend after a morning smoking pot. A 23 year old mother in Ohio decapitated her 3 month old baby. Numerous people have committed suicide.

ADDITION – Recent information (JAMA Psychiatry Oct 21, 2015) indicates addiction to marijuana has risen from 9% to 30.5% in current (past year) users. Addiction is a life-long condition that enslaves people, escalates crime, diminishes academic achievement and productivity and ruins entire families. Most of the 122 Americans who die every day of overdose of other drugs, started their drug journey with marijuana.

BIRTH DEFECTS – Children prenatally exposed to THC are more likely to show gaps in problem-solving skills, memory, and ability to remain attentive. (NIDA) Even low concentrations of THC can have profound and long-lasting consequences for brain and behavior of offspring. Marijuana use during pregnancy or breast feeding is associated with adverse consequences for the child which can persist well into adulthood.

TRAFFIC FATALITIES DOUBLE – One in eight (12.6%) of drivers in America are impaired by marijuana to varying degrees. Traffic deaths owing to druged driving now rival alcohol (40%), with marijuana being the predominant drug. Traffic fatalities owing to marijuana impairment have doubled in states that allow marijuana for any reason. Marijuana mixed with alcohol escalates the problem by eight times.

BATTLE FOR THE PLANET

One marijuana plant consumes 6 gallons of water per day, averaging 1 to 5 lbs of produce at 1200 joints per lb. Pot plantations in California, all producing marijuana under the guise of medicine, are diverting water from streams causing irreparable damage to ecosystems that are categorized as “globally outstanding.” In rural and residential communities, the stench from marijuana is ruining the quality of life and diminishing property values.

To serve the insatiable appetite of 8% of Americans who want to get high, and provide an easy buck for people who don’t care about the social and economic impact they impose of the other 92%, America is suffering enormous damage to the brains of our youth, and to our precious natural resources. It has to stop, or we have no future as a nation.

We Encourage You To Learn More About Marijuana
www.drugabuse.com / stoppot2016.com / POPPOT.org
tbac.us / #stoppot / CALMca.org / IFBC.us

Donations can be made to TBAC,
PO Box 459, Lincoln, CA 95648 or on-line at tbac.us.

"If a child reaches age 21 prior to smoking, abusing alcohol or using drugs, they virtually never will.”
(Califano, CASA)

www.tbac.us
rogermorgan339@gmail.com

Heavenly Father, thank you for the gift of our children and planet. We pray for your love and protection for both so they may grow and flourish.
SKUNK ALERT!
(aka Potent Pot)

BRAIN DAMAGE. PSYCHOSIS. ADDICTION.
What every teacher, parent and student should know about marijuana.

MARIJUANA IS NOT SAFER THAN ALCOHOL. Unlike alcohol which consists of one chemical that is excreted from the body in a matter of hours, marijuana is fat-soluble, one half of which stays in the body and brain for a month, compounding with each additional joint; longer than any other drug. It consists of 483 chemicals that turn into over 2,000 when smoked, and 61 cannabinoids all of which are bioactive and some are psychoactive. The main psychoactive drug is THC (delta 9-tetrahydrocannabinol). The THC content of marijuana has increased from ½ to 2% in the 60’s and 70’s to as high as 40% in smoked form, and 95% as wax or BHO (Butane Hash Oil). While alcohol in moderation can even be beneficial, as with a glass or two of wine, today’s high potency pot, called Skunk, is primarily consumed just to get high, and with it are many serious harms to adolescent brains.

MARIJUANA CAN CAUSE PERMANENT BRAIN DAMAGE by physically altering the brain before it reaches full maturity at or about age 25. Marijuana reduces the amount of white and gray matter by as much as 80% (Seal, Melbourne U) and shrinks the hippocampus, the learning, cognition and memory center of the brain causing a loss of 6 to 8 points of IQ by age 38 (teens.drugabuse.org). The damage is age and dose related. The younger one starts and the more they use the greater the toxic effect on the brain. Quitting later doesn’t reverse the damage. Adolescent marijuana use diminishes academic achievement, leads to more dropouts, less life satisfaction and fewer opportunities for higher paying jobs. (John Walters, former Drug Czar) Parents should be aware that there is a huge difference between an adolescent and a mature brain. Brain damage during adolescence can have life-long adverse consequences.

MARIJUANA IS NOT MEDICINE While isolated components of the plant, like CBD, appear to have therapeutic value for certain illnesses, and marijuana has some value in suppressing vomiting and nausea and stimulating appetite in AIDS patients, the whole plant is classified by the FDA as a Schedule I drug because it has no accepted medicinal use, has the potential for harm, and cannot be administered properly under supervision. Real medicines must have known compounds, potency and dosage and be reproducible in a uniform manner (like pills). That isn't possible with smoke, and the consistency of marijuana plants varies widely, often with fungus, mold and insecticides that are very harmful. The term “medical marijuana” was coined by people who want to legalize drugs to give it a good name as a first step toward full legalization. Cannabidiol (CBD), the component that can help offset the psychoactive effects of THC, has been largely bred out of today's marijuana being sold as medicine, as “patients” just want to get high. Synthetic THC has been produced in pill form called Marinol, and is legally available through pharmacies.

MARIJUANA CAN CAUSE MENTAL ILLNESS In vulnerable individuals (about 30%) it has and is causing psychotic breaks leading to violent acts, mass murders and suicides, as well as other mental health disorders including schizophrenia, paranoia, anxiety, depression and bi-polar disease. The problem is people don't know they are vulnerable until they experience the problem, then it may be too late for some and a question of long term recovery for others. Psychotic episodes have led to a dramatic increase in emergency room visits. Daily users are 5 times more likely to develop mental health disorders; weekend users 3 times more than non-users. Research by psychiatrists in inner-city areas speak of cannabis being a factor in up to 80 percent of schizophrenia cases. (Schizophrenia.com – Campbell)
MARIJUANA IS ADDICTIVE One is six (17%) of adolescents who use marijuana will become addicted; one in eleven (9%) of those who start after age 18 (National Institute of Drug Abuse). Recovery from marijuana addiction is particularly difficult because it remains in the body for so long. Marijuana is a gateway to other drugs that kill by overdose, such as heroin, cocaine and meth. Of 120 Americans who die every day of drug overdose, roughly 90% started their drug journey with pot. Addiction will ruin the addict’s life, and all those in the circle of family and friends.

MARIJUANA CAN KILL OR PERMANENTLY HARM A FETUS Today’s high potency pot can cause fatal brain damage to a fetus only two weeks after conception, before the mother even knows she is pregnant. (Psychosys, U of Texas). Research from 40 years ago (UC Davis Primate Center Sassenrath) when the potency of pot was a fraction of today’s pot, showed an increase in still births from 12% normal to 44%. Babies that survived child birth often had physical deformities and brain alterations that altered behavior and caused learning deficits well into the teens. Babies of mothers who smoked pot during pregnancy had a 11 fold increase in nonlumphoblastic leukemia. (Reece – U of Queensland) Young people approaching or in their child bearing years should be acutely aware that marijuana use at conception, during pregnancy and/or when breast feeding can directly affect a baby when they are most vulnerable.

MARIJUANA CAUSES HEALTH PROBLEMS INCLUDING CANCER Marijuana can cause cancer of the head, neck, bladder, brain and testis; cause chronic bronchitis and other respiratory problems and elevates the risk of heart attack by 4.8 times within 1 to 3 hours after smoking. (NIDA) Recent studies show that it is a major cause of strokes as well. (American Stroke Assoc Int’l – Feb 2013) It affects the pituitary gland, a pea size structure at the base of the brain that is the control center for sex and reproductive hormones and in turn, sexual dysfunction. (Dr. David Goodwin, Studies done long ago showed that marijuana caused more DNA damage than even heroin (Miroshima), resulting in mutations to sperm and chromosomal abnormalities that can affect future generations. Because marijuana attaches to the fatty exterior of all cells, it blocks healthy proteins and weakens one’s immune system. (Dr. Nicholas Pace, Founder Am Council on Marijuana).

MARIJUANA DOUBLES THE RISK OF TRAFFIC DEATHS Traffic deaths have doubled where marijuana has been legalized. In a Maryland Trauma Center, 27% of injured drivers tested positive for pot and 50% of drivers under 21 tested positive for pot compared to only 33% for alcohol. (DuPont, www.IBhinc.org) Intoxication from either alcohol or marijuana are a major cause of injury traffic accidents; mixing the two is particularly dangerous. Traffic accidents are the leading cause of death of teenagers. Don’t drive or ride with anyone who uses pot.

MARIJUANA IS WORSE THAN TOBACCO The long term effects of smoking tobacco lead to illnesses that claim 480,000 lives a year, so the harms of tobacco cannot be minimized. However, for all of the reasons cited above regarding brain damage and loss of IQ, impaired memory and motivation, mental illness, driver safety, depression, anxiety, suicidal tendencies, and myriad health problems, the short term harms are far worse, with lasting impacts. What is worse, more teens are smoking pot today than tobacco, and in many cases concealing it by vaping, which don’t emit smoke or an odor. Random or suspicion based drug testing can be used for early identification of a problem, and as a deterrent. Hair analysis in particular, with a 90 day window of detection, is highly recommended, albeit urine and saliva should be used as well. The intent is not to catch and punish, but to protect and keep kids in the system, safe and drug-free.

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ADDITIONAL RESOURCES


www.ibhinc.org www.CASAColumbia.org www.CALmca.org www.IFBC.us
DO YOU KNOW MARIJUANA...

...is a fat soluble, mind altering, highly toxic drug that remains in the body for up to one month, building up with each additional joint. The two organs most affected are the brain and sexual organs. The potency of the most active chemical, delta 9 tetrahydrocannabinol (THC), is 10-20 times stronger than 30 years ago.

MARIJUANA IS NOT MEDICINE. The FDA, which must approve all medicines, has reviewed scientific studies of marijuana for over 50 years and concludes it is not a safe or effective medicine, has the potential for harm and is addictive. It cannot be legally prescribed by any doctor. National medical associations for cancer, glaucoma, multiple sclerosis and others oppose using marijuana as a medicine, other than synthetic marijuana called Marinol, which is FDA approved and available in pill form.

CAN CAUSE PERMANENT BRAIN DAMAGE by disrupting development of the brain.
It reduces the amount of white matter by as much as 80%, and shrinks the hippocampus, the learning, cognition and memory center of the brain. This can create a loss of 8 points of IQ by age 38. Marijuana is a major factor in the one-third high school dropout rate in America, and why America is 26th in the world academically. The brain isn't fully developed until the mid-twenties, so adolescent use is particularly damaging.

CAUSES HEALTH PROBLEMS INCLUDING CANCER of the head, nose and throat, and is a major cause of testicular cancer in young males. It causes chronic bronchitis and respiratory problems, and elevates the risk of heart attack 4 times 1 hour after smoking.

CAUSES MENTAL ILLNESS, CRIME AND VIOLENCE. Marijuana use exacerbates mental illness. In addition to observed links between marijuana use and mental illness, marijuana affects brain systems that are still maturing through young adulthood, its use by teens has been associated with schizophrenia, paranoia and other psychosis leading to depression, anxiety and suicidal thoughts. Jared Loughner, the Tucson shooter, is one of many examples. ONDCP’s ADAM II report indicates 52-87% of male arrestees test positive for drugs. 33% of prisoners are mentally ill. Research in Canada showed 72.2% of all individuals who used cannabis and 81.8% of those with Cannabis Use Disorders (CUDs) had a mental illness. Young people are 6 times more likely to develop psychosis, 3 times more likely to have hallucinations, and 4 times more likely to have delusions.

72.2% of all individuals who used cannabis and 81.8% of those with Cannabis Use Disorders (CUDs) had a mental illness. Young people are 6 times more likely to develop psychosis, 3 times more likely to have hallucinations, and 4 times more likely to have delusions. Side effects can appear years after smokers quit.
Teens who smoke marijuana at least once a month are three times more likely to have suicidal thoughts than are non-users.9 Side effects can appear years after smokers quit.5 To prevent crime, one must prevent the onset of alcohol and drug use before it begins, on average at age 12 or 13.

**CAN KILL OR PERMANENTLY HARM A FETUS.** Today’s high potency pot (20% plus) can cause fatal brain damage to a fetus only 2 weeks after conception, before the mother even knows she is pregnant. She can quit using pot, but it’s too late for the baby. Research from forty years ago showed that marijuana with 1/2 to 2% THC caused a rise in still births from 12% normal to 44%. Many babies that survived birth had physical deformities and brain damage that altered their behavior well into the teens.10 Babies of mothers who smoked pot during pregnancy had an 11 fold increase in nonlumphoblastic leukemia. Behavioral problems exist in babies who were exposed to THC, including deficits in attention.11

**CAUSES DNA DAMAGE.** Marijuana causes more cellular damage than even heroin.12 It also causes mutations to sperm and chromosomal abnormalities that can carry forward and affect future generations. It affects the pituitary gland, a pea size structure at the base of the brain, that is the control center for sex and reproductive hormones and in turn, sexual dysfunction.13

**IS ADDICTIVE.** Research tells us that 1 in 6 people who start using it (marijuana) as adolescents become addicted.14 Currently about 24% of high school seniors smoke pot regularly, impervious to the harms. According to ONDCP, 17% of those under 18 will become addicted to it, 9% who start after 18 will become addicted, and many will move on to the hard drugs that kill 120 Americans daily by overdose (SAMHSA). 68-90% of those started their drug journey with marijuana. Teen “Heavy” marijuana use is up 80% since 2008.15

**DOUBLES THE RISK OF TRAFFIC DEATHS.** Of drivers in a Maryland Trauma Center, 27% of injured drivers tested positive for marijuana, second only to alcohol at 33%. 50% of drivers under 21 tested positive for pot, compared to 33% for alcohol.16 Fat soluble THC marijuana will “…accumulate and persist in the brain, at its receptors, at higher levels than can be predicted from blood levels.” In California, driving deaths from marijuana impairment have doubled since 2004.18

**SO WHY LEGALIZE MARIJUANA FOR ANY USE?**

ENDNOTES
1. Seal, Dr. Marc, Melbourne University, APP article Marijuana Causes Brain Damage August 2012
5. Madras, Bertha, M.D., Harvard Medical School
6. Behind Bars II research project. The National Center of Substance Abuse and Addiction. (www.cacs.columbia.org)
8. ONDCP, 2008 marijuana Sourcebook – July 2008 as reported by Dr. Robert DuPont
9. Pickert, Dr. Mary, Harvard Medical School. March 2010
16. MetLife Foundation
17. Madras, Dr. Bertha K. Professor of Psychobiology, Dept of Psychiatry, Harvard Medical School postulating.

FOR MORE INFORMATION OR TO SUPPORT THE MOVEMENT:

**CALM**
CARLA LOWE
(916) 965 4825

**SCOTT CHIPMAN**
(619) 990 7480

**TBAC**
ROGER MORGAN
(916) 434 5629

**CDFC**
DR. PAUL CHABOT
(909) 457 4229

**IFBC**
BISHOP RON ALLEN
(916) 807 1210

FOR BULK ORDERS AND/OR SUBSTITUTING YOUR GROUP NAME(S) AND CONTACTS: info@exit74designs.com

3/20/15
10/18/2015

FDA CITIZEN PETITION
DOCKET # FDA -2015-P-3991

Documents Management Branch
Food and Drug Administration
Department of Health and Human Services.
5600 Fishers Lane, Room 4-62
Rockville, Md 20852

Re: FDA Citizen’s Petition for Public Hearings to establish standards and oversight for packaging, labeling, dosage, contents and potency of marijuana produced and sold as medicine or for recreation.

The Take Back America Campaign and coalition partners submit this Petition under Section 21 CFR 10.20 and 21 CFR 10.30 and other pertinent sections of the Federal Food, Drug and Cosmetic Act or any other statutory provision which authority has been delegated to the Commissioner of Food and Drug to request the FDA Citizen’s Petition for Public Hearings to establish standards on “medical” and recreational marijuana’s to prevent the harms and adverse effects associated with its use.

Notification of Request Change
The following changes have been made to this Request: Changed Status to Closed from Open, Changed Request data or Contact data, Changed most recent Description, Appended a Additional Comments., Added Assignee : Helpdesk.
Request: Comments to FDA Citizen Petition
Request Number:31642
Priority: Working Status: Closed
Date: 11/16/2015 Time: 22:10:05
Creation Date:11/16/2015 Creation Time:17:31:17
Created By: RegsUser

Click here to view Request in Browser

Additional Comments:
Entered on 11/16/2015 at 22:10:05 EST (GMT-0500) by Pat M:

Mr Morgan,

For questions about submitting comments to the FDA docket entitled Petitioner requests the FDA Commissioner to issue a Federal Regulation to augment FDA Citizen Petition for Public Hearings to
establish standards for "medical" and recreational marijuana's harms to mental and physical health that might be caused by cannabis in any of the forms currently being marketed to the general public, please contact the FDA Docket Center directly at 202-240-7500 or by email at docksmanagement@fda.gov.

If you need any help using the Regulations.gov Web site to review or comment on proposed federal rules or regulations, please contact us again.

Thank you,
Regulations.gov Help Desk

Entered on 11/16/2015 at 22:10:05 EST (GMT-0500) by Pat M:
We have filed a citizen petition FDA-2015-P-3991. People would like to email, fax or send a voice message with comments. Can that be done as an alternative to going through the process on line which is a little too laborious for some of our folks.

Thanks for your help.

Roger Morgan
(916) 434-5629

Current Assignees: Helpdesk

Request Information:

Question or Comment: Question

This Petition requests the FDA Commissioner to issue a Federal Regulation to augment FDA Citizen’s Petition for Public Hearings to establish standards for “medical” and recreational marijuana’s harms to mental and physical health that might be caused by cannabis in any of the forms currently being marketed to the general public.

Some of the scientific facts and actual events stemming from marijuana which require immediate action on this petition are:

1) Take Back America Campaign is a California non-profit, herewith representing the numerous other parties and community coalitions engaged in drug prevention activities nationwide. Collectively, the individual parties have as much as 4 decades of experience in drug prevention, and are very knowledgeable on the harmful impacts of marijuana. The harms have escalated dramatically in recent years due to the enormous increase in potency, and genetic alterations of the plant to largely eliminate beneficial components such as cannabidiol (CBD) in favor of the Delta-9-tetrahydrocannabinol (THC), the psychoactive ingredient. Currently 23 states have some form of “medical” marijuana laws and 4 states and the nation’s capital have legalized marijuana for recreational use, irrespective of federal illegality, and in spite of a preponderance of scientific evidence of the significant mental and physical health risks associated with marijuana (Cannabis Sativa).
7) **Marijuana Impairment Doubles Traffic Fatalities.** A study done by Al Crancer, former NHTS employee, revealed traffic deaths owing to marijuana impairment doubled in California from 2004 to 2009. Reports from Colorado and Washington indicate the same. Marijuana impairment adversely affects reaction time and motor skills, and causes people to fixate on an object. There are numerous cases where people have been killed on sidewalks (Vancouver, Wa; Vallejo; Santa Barbara; San Bernardino). In one case in Ohio, a woman was even killed sitting in her living room when a young lady impaired by marijuana drove through a grassy field into her house.

8) **Marijuana Is Addictive.** 9% of those who start using marijuana after 18, and 17% of adolescents (25 to 50% of heavy users) will become addicted. Marijuana causes acute anxiety, increases the risk for depression, leads to more pronounced suicidal ideation and suicide attempts. Today’s highly potent marijuana is a factor in roughly 500,000 ER visits for panic attacks, hallucinations, anxiety, confusion and other ailments. Heavy marijuana use was a factor in most of the mass murders of late. In Colorado, marijuana infused edibles led to the suicide of a 19 year old foreign exchange student (Pongo), a 23 year old vacationer from Oklahoma (Luke Goodman). Richard Kirk went berserk after eating marijuana candy and shot and killed his wife who was on the phone with 911. These are not isolated cases. Every day, according to SAMSCHA, 7,800 people start consuming marijuana for the first time, which will lead to the addition of over 350,000 new addicts per annum. Based on 13% of the U.S. population, 45,500 new addicts will be created in California. Addicts commit 100 crimes a year, according to Gen. Barry McCaffrey, former Drug Czar.

9) **Marijuana Is A Causal Factor In Schizophrenia,** paranoia and bi-polar disorder in vulnerable individuals, roughly 30% of people. Risk factors include early age of exposure, history of childhood abuse and family history of schizophrenia. Jails throughout the US have become warehouses for mentally ill people arrested for low level crimes, waiting for beds in non-existent mental institutions. 1/3rd of prisoners are mentally ill, 65% have a substance abuse problem.

10) **Brain Damage – Loss of IQ** - Heavy and early use of cannabis acutely impairs attention and concentration, inhibition impulsivity and working memory. A study of over 100 participants from birth to age 38 showed a decline in IQ of 8 points for those who smoked cannabis during adolescence. Stopping did not reverse the damage. Numerous studies have shown that marijuana shrinks the hippocampus, the learning, memory and cognition center of the brain, and reduces the volume of white and gray matter in the brain.

11) **Marijuana causes cellular damage.** "...In my twenty years of research on human cells, I have never found any other drug, including heroin, which came close to the DNA damage caused by marijuana." (Dr. Akira Miroshima, Columbia, U, 1973.) Miroshima pointed out that all animals and plants have their own specific number of chromosomes in the nucleus of each cell. Humans have 46, with the exception of sperm and eggs, which have 23 each. When the sperm and egg get together, the new starting cell has 46. Miroshima discovered that one-third of “weekend smokers” who average just two joints a week had only 20 to 30 chromosomes, about the same as a frog.

12) **Chromosomal Abnormalities** - Two cells most directly affected are sperm and ova ... in short, our future. Marijuana directly affects the sex organs, the eggs, the sperm and the placenta. It
also affects the pituitary, a pea-like structure at the base of the brain, which is a control center for sex and reproductive hormones and in turn, sexual dysfunction.\textsuperscript{xiii} The chief fatty organs of the body are the gonads (sex glands) and the three pound human brain, which in one-third fat.” Because of the long residence time, and toxic nature of the substance, marijuana use is a causal factor in testicular cancer.\textsuperscript{xiv}

13) Parental Use of Marijuana Endangers Children. Little 4 year old Peyton Bean was nearly killed on 9/25/14 when her marijuana impaired father hit a tree. Coltin Salsbury (2 yrs old) was killed on 3/6/2104 by her mother’s pot smoking boyfriend who bashed the boys head in to the toilet. Levi Welton (2) died on 1/13/2104 died in a house fire while his parents smoked pot. The Jenson boys, 2 and 4, died in a hot car while their mom left them and smoked pot. (www.Poppot.org – Child Endangerment. Violence) These are not isolated cases.

14) Child Endangerment – From 200 to 2013 there were 1969 marijuana exposures among children under 6 years old, and exposure rate of 5.9 per million children. The mean age was 1.81 years. The majority of children were exposed through ingestion (75%), 18.5% required admission to a health facility. (Clinical Pediatrics June 2015). The rate of exposure was 2.82 times higher in states where legalized prior to 2000. In 2014, there were 14 cases of marijuana poisoning in Colorado, and the same in Washington. Of 43 children in the nation who died, eight were caused by fires, six were children left in hot cars, 5 drowned and there were 18 violent deaths. Three babies didn’t survive infancy because of their mother’s pot use. Five of the deaths occurred in Colorado, and eight in California, the nation’s largest medical marijuana state.\textsuperscript{xv}

15) Marijuana Contributes To Diminished Academic Achievement. It is a causal factor in diminished memory, motivation, maturation and creation of an amotivational “dropout” syndrome. Collectively, they contribute heavily to the fact that America has now declined to 24\textsuperscript{th} (last) among industrialized nations, with a one-third school dropout problem. (1.2 million) According to UC Santa Barbara High School Dropout Research, the life time cost of one dropout is $392,000, which would put the annual cost to the nation at $470 billion. 80% of prisoners are high school dropouts.

16) Marijuana is a contributing factor to crime. According to the ADAMII report from the Office of National Drug Control, in Sacramento, 59% of arrestees tested positive for marijuana; 83% for any drug. In 2015, violent crime is up 24%, property crimes up 8%. Obviously, drug use is a causal factor in crime. Marijuana is where the drug journey almost always starts. Historically over 90% of those who use hard drugs started their drug journey with pot. Today it is 71% (SAMHSA) with 12.5% started with prescription meds. 129 America die every day of drug overdose.

17) Weakens The Immune System – The most important, and ominous factor about cannabinoids is that they are fat soluble, even fat loving according to Dr. Pace.\textsuperscript{xvi} “The fatty sections of cells and membranes and the fatty organs of the body act like magnets attracting the cannabinoids. The cells membranes, the coating around the cell, is at least 60% fat. When the fat soluble cannabinoids dissolve in the cell membrane, they make it difficult for the most important constituents of the cell, the proteins, to enter. And cannabinoids clogging of the cell, including the vital nucleus, has many additional deleterious effects.”

The Take Back America Campaign and coalition partners believe there is ample amount of scientific evidence and information available to request the FDA Commissioner hold Public Hearings and open up a Federal Registry to
establish standards and oversight for marijuana, currently being marketed as a drug and food, in spite of its designation as a Schedule I drug.

There is no environmental impact associated with this Citizen’s Petition and we wish to be excluded under 21 CFR Sec. 25.24.

Three is no economic impact involved with this Citizen’s Petition. We encourage the FDA to undertake this issue for public hearings immediately as the public is being harmed and have a right to know about the basic precautions that can be taken to reduce the side effects and harms of marijuana (Cannabis Sativa). We believe as well that they have a right to protection from proper packaging with warning labels in 12 point font (California SB204) to be affixed to all packages showing the potency, dosage, contents and potential side effects or harms. Contents must be limited to ensure maximum safety for consumers.

The Take Back America Campaign and coalition partners are asking the FDA to do the following:

1) Determine standards for packaging, labeling, dosage, contents and potency of marijuana produced as medicine and food.
2) Create and implement an educational awareness program for all members of the public about the side effects and harms of marijuana, especially parents, teachers and youth.
3) Shut down or bring into compliance marijuana dispensaries that are selling marijuana products for medicine or recreation that do not comply with safe standards described in paragraph 1.
4) Enforce federal CSA laws in all states to bring them into compliance with federal law.

To the best knowledge and belief of the undersigned the Petitioners incudes all information and view on which the Petition relies, and that it includes representative data and information known to the petitioner which are unfavorable to the Petition. (21 CFR Sec)

Name of Petitioner:
Roger Morgan
Founder/Chairman
The Take Back America Campaign
P.O. Box 459
Lincoln, Ca 95648
(916) 434 5629
(916) 434 5676 Fax
rogermorgan339@gmail.com

Frederick S. Mayer, R.Ph., M.P.H.
President, Pharmacists Planning Service, Inc. (PPSI)
101 Lucas Valley Road, Suite 386
San Rafael, Ca 94903
(415) 479 8628
(415) 479 8608 Fax
ppsi@aol.com

Bishop Dr. Ron Allen
President/Founder
International Faith Based Coalition (IFBC)
10702 Alicante Way
Rancho Cordova, Ca 95670

Scott Chipman
Co-Founder
Citizens Against Legalizing Marijuana (CALMca)
2247 Emerald St.
San Diego, Ca 92109
FDA CITIZEN PETITION (Oct 18, 2015)

END NOTES

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12 Morishima, Dr. Akira, PART II, Report on Research, Marijuana and Cellular Damage, Page 11, MARIJUANA: They Myth of Harmlessness Goes Up In Smoke by Peggy Mann (1987) Dr. Miroshima was with Columbia University College of Physicians and Surgeons in New York City and an authority on cytogenetics – the branch of genetics concerned with cellular heredity.
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15 POPPOT.org Child Endangerment Series. Parts 1 through 5.
16 Pace, Dr. Nicolas. Past President of the New York City Affiliate of the National Council on Alcoholism, and founding director of the American Council on Marijuana and Other Psychoactive Drugs.
THE HARMFUL EFFECTS OF MARIJUANA
A SERIOUS THREAT TO PUBLIC HEALTH
AND SAFETY

Taken from a compilation of scientific research
Roger Morgan, Founder of The Take Back America Campaign www.tbac.us

ABSTRACT

Over twenty two million (8%) Americans smoke pot or consume cannabis, impervious to the scientific
evidence that shows this fat-soluble toxin adversely affects every cell in the body, particularly the brain and
gonads (sexual organs). The age groups with the highest percentage of users are 25 and under, when their
underdeveloped brains are most vulnerable to harm and addiction.

During adolescence and prior to brain maturity at age 25, marijuana causes permanent structural damage to
the brain which can lead to a lifetime of addiction. It interrupts the development of white and gray matter
in the brain and shrinks the hippocampus, the memory, learning and cognition center, leading to a loss of
IQ by as much as 8 points by age 38. Researchers at Northwestern University found that young adults who used
cannabis just once or twice a week showed significant abnormalities in two important brain structures.

Marijuana is a causal factor in schizophrenia, paranoia, bi-polar disorder and suicidal depression in
vulnerable individuals. Young people who smoke pot are 6 times more likely than others to develop psychosis;
3 times more likely to have hallucinations; 4 times more likely to have delusions. Side effects can appear
years later. Marijuana, particularly in teen boys, leads to a measurable increase in the development of
schizophrenia later in life. Teens who smoke marijuana at least once a month are three times more likely to
have suicidal thoughts than are non-users. Prevalence of depression and anxiety increases with higher rates
of cannabis use.1

Marijuana’s impacts on a fetus include death, physical deformities and brain damage that results in
behavioral problems for those who survive child birth. Because it causes chromosomal abnormalities and
mutations to sperm, the damage can be caused by marijuana use by either parent and carry forward for
generations to come. Today’s high potency pot can kill a fetus even two weeks after conception, before the
mother even knows she is pregnant.

Education is simply wasted on kids who are stoned. America has already declined to 24th in the world
academically, last among industrialized nations, with 1.3 million kids dropping out of school yearly. 17% of
those who start smoking pot before 18 will become addicted, 9% of those over 18. Almost all of the 129
Americans who die every day of drug overdose, started their drug journey with marijuana. Addicts can’t work
effectively, if at all, so they turn to crime. Where measured, over 50% of arrestees test positive for marijuana and
up to 87% for all drugs. Marijuana impairment doubles the risk of traffic injuries or death.

Pro-marijuana advocates propagate the myth that marijuana is a benign plant, and it is medicine. The truth is
components of the plant may have medicinal value, but the whole plant has many more harms and health hazards
than virtues. The risk of heart attack is increased 4.8 times within 1 to 3 hours after smoking marijuana.

Marijuana is a serious threat to health, safety and the future of this great nation.
What Is Marijuana

Dr. Eric Voth

"Marijuana is a complex, unstable mixture of 483 chemicals, that when smoked, creates over 2,000 chemicals, many of which cause cancer. Over 60 of these chemicals are “cannabinoids,” some of which are psychoactive, all are bioactive, and all may remain the body’s fatty tissues for long periods of time with unknown consequences.

THC, the primary psychoactive substance, varies in potency. The unknown concentrations of chemicals and THC make it impossible to create medically precise and uniform dosage. For that reason, marijuana cigarettes, marijuana brownies and other concoctions remain ineligible to be classified as a medicine." (Dr. Eric Voth).

The potency of marijuana has increased from ½ of 1% THC content in the 1960’s to an average of 15%, a normal market range of 10 to 21%, and as high as 37% THC in smoked form, and up to 90% as wax (BHO). Anything over 15% is called Skunk, and has proven to cause psychotic episodes and lead to over 450,000 emergency room visits per annum.

Smoked Marijuana is NOT "Medicine"

Dr. Robert DuPont

While scientists have confirmed that the cannabis plant contains active ingredients with therapeutic potential for relieving pain, controlling nausea, stimulating appetite, the FDA has not approved it as a medicine for the following reasons:

- Smoking marijuana causes changes in the brain similar to those caused by long-term use of cocaine and heroin.
- Smoking is not a safe or sensible way to deliver a drug. Currently, there is no way to control dose, ingredients or potency. Some marijuana is laced with cocaine, heroin, PCP and dangerous chemicals including formaldehyde. Without a verifiable, controlled source of the product, dangerous pesticides can also be present.

Marijuana Damages the Lungs and Respiratory System

Smoking anything is harmful to the lungs and respiratory system, but marijuana has 50 to 70% more carcinogens than tobacco.

- Marijuana causes impaired respiratory conditions including reduced lung density, lung cysts, and chronic bronchitis. It elevates the risk of testicular cancer and causes an eightfold rise in lung cancer risk.
- Marijuana is more harmful to lungs than tobacco. One joint is the equivalent of five cigarettes. Marijuana smoke has ammonia levels 20 times greater than tobacco, and 3 to 5 times more hydrogen cyanide, nitric oxide and aromatic amines.
- Marijuana smoke causes deterioration of lungs 20 years ahead of tobacco smokers.
- Recent studies in North Wales show 30 year old subjects who had smoked 5 joints a day for 10 years had lungs comparable to people 80 years old, subjecting some to life time use of oxygen therapy.
Marijuana – Can Cause Permanent Brain Damage And Mental Illness

The human brain is not fully developed until approximately age 25, or even later. Until then, it is more susceptible to harm and addiction, particularly during adolescence. The two age groups with the highest consumption are 18 to 25 and 12 to 17 years old, both below the threshold of a mature brain, where smoking marijuana should be avoided. Scientific research has shown the following:

- Marijuana causes permanent brain damage in adolescents by disrupting development and reducing white matter by as much as 80%, and shrinking the hippocampus, the area of the brain involved in memory, cognition and learning. The earlier the use, the worse the damage. Lack of white matter is also a known causal factor in paranoia, schizophrenia, bi-polar disorder and suicidal depression.

- “There is now evidence that cannabis may affect the adolescent brain (permanently alerting) its development trajectory. While this may not occur in everyone, some people may be particularly vulnerable. …using cannabis during adolescence may be like playing Russian roulette.” (Dr. McGrath)

- A long term study in New Zealand tracking thousands of subjects showed that heavy use of marijuana during adolescence resulted in a loss of 8 points of IQ at age 38, twenty years later. Quitting after age 18 didn’t reverse the problem.

- Young people who smoke pot are 6 times more likely than others to develop psychosis; 3 times more likely to have hallucinations; 4 times more likely to have delusions. Side affects can appear years after you have quit.

- Heavy marijuana users are more likely to be diagnosed with schizophrenia later in life.

- Teens who smoke marijuana at least once a month are three times more likely to have suicidal thoughts than are non-users.

- Prevalence of depression and anxiety increases with higher rates of cannabis use.

- “Recent, high-quality, longer term, robust research involving thousands upon thousands of people over generations of time, in several populations and countries, has shown that marijuana, especially in teen boys, leads to measureable increase in the future development of schizophrenia.”

- From a website Schizophrenia.com, the following were reported:

  - A recent Dutch study showed teenagers who indulge in cannabis as few as five times in their life significantly increase their risk of psychotic symptoms.

  - In Melbourne, a study revealed that regular use of cannabis by adolescent girls could trigger long-term depression, and for those vulnerable to a psychotic disorder, even a small amount of cannabis could pose a threat.

  - The risk is higher when drugs are used by people under the age of 25, a time when the human brain is developing rapidly and is particularly vulnerable.

- White matter growth accelerates in the teen years and continues into adulthood. The “growth” is actually the result of myelin encasing the brain’s connecting wires ….. while the white matter is being wrapped in its
protective coating, the gray matter of the brain is undergoing its own changes. Inefficient or confusing connections between neurons, called synapses, are pruned and some cells die. From age 14 to 16, people lose about 20% of the synapses in the brain.\textsuperscript{iv}

- ".....persons with a diagnosable primary mental illness constitute almost 75% of all cannabis users, with a particularly high prevalence of more frequent cannabis use and CUDs in this population," \textsuperscript{v}say Shaul Lev-Ran (Centre for Addiction and Mental Health, Toronto, Ontario, Canada) and team. Overall, 72.2% of all individuals who used cannabis and 81.8% of those with CUDs (cannabis use disorders) had a mental illness.

**Marijuana - Cellular Damage**

*Marijuana is fat soluble, like DDT, and DDT was banned because it accumulates in body cells and organs. (Dr. Nicolas Pace)\textsuperscript{vii}*

The detrimental effect on body cells is the most alarming finds of the harms of marijuana because ".....*They are the underlying cause of all of the other deleterious effects that have been reported by researchers. .... Not only do fat soluble cannabinoids clog the cells, inhibiting their function, but many studies have shown that chronic pot smokers have large numbers of abnormal cells."\textsuperscript{vii} (Dr. Gabriel Nahas)

"...*In my twenty years of research on human cells, I have never found any other drug, including heroin, which came close to the DNA damage caused by marijuana.*\textsuperscript{viii} (Dr. Akira Miroshima) Study was done in 1973, when pot’s THC potency was only ½ of 1 percent.)

Miroshima pointed out that all animals and plants have their own specific number of chromosomes in the nucleus of each cell. Humans have 46, with the exception of sperm and eggs, which have 23 each. When the sperm and egg get together, the new starting cell has 46. Miroshima discovered that one-third of "weekend smokers" who average just two joints a week had only 20 to 30 chromosomes, about the same as a frog.

In over 300 studies, the results of cell damage from fat soluble marijuana include:

- Two cells most directly affected are sperm and ova ... \textit{in short, our future}. Marijuana directly affects the sex organs, the eggs, the sperm and the placenta. It also \textit{affects the pituitary}, a pea-like structure at the base of the brain, which is a control center for sex and reproductive hormones and in turn, sexual dysfunction.\textsuperscript{xx}

- \textbf{Lack of sexual desire and lower frequency of organism.}\textsuperscript{xx}

- Cannabinoids are \textbf{mutagenic – meaning they can transmit abnormalities across generations}. In one experiment with mice, they discovered a fetus with no skull, just the brain covered by skin, and the backbone was outside the body. Neither the parents or grandmother received THC, \textit{just the grandfather}, which indicated that cannabinoids can transmit abnormalities across generations.\textsuperscript{xii}

- Decreased quantity and increased abnormalities in sperm \textit{can lead to impotency, lack of interest in sex, and retarded development of sex organs during adolescence.}

- Pot smoking during pregnancy \textbf{adversely affects the fetus} and results in smaller birth weight babies with smaller head size, cardiac murmurs, small eye openings, broad low nasal bridge and low set ears. Overall, the course of labor is hazardous and 41% of pot smokers’ babies required oxygen resuscitation at birth, and 57% exhibited fetal feces (meconium) compared to 25% of normal babies. Meconium is hazardous to the newborn as it can get into the lungs when the baby takes its first breath.\textsuperscript{xiii}
• **Higher birth loss.** In long term studies by Dr. Ethel Sassenrath at the Primate Research Center at UC Davis, in an experiment with Rhesus monkeys who had received THC human equivalency dose of 1 to 2 joints a day, **44% of the pregnancies of THC- treated mothers did not result in living off-spring, compared to 12% birth loss which was normal.** The losses occurred as natural abortions, reabsorptions, *in utero* death, stillbirth or death just after birth.\textsuperscript{xiii}

Most of the findings cited above were achieved when pot had THC levels of ½ to 2%. Today’s pot is 20 to 60 times stronger and according to a new study can cause fatal brain damage and physical deformities to a fetus two weeks after conception, before the woman even knows she is pregnant. She can quit using, but it’s too late for the baby.\textsuperscript{xxiv}

• **Behavioral problems in THC exposed offspring.** Lab tests showed subtle developmental abnormalities in various organ systems and tissues, and all showed deficits in attention and over-concentration on different stimuli in the environment, the kind of deficits in behavior which indicate that the central nervous system has been affected. \textsuperscript{xxv}

• There is more that should be of concern to young ladies, including disrupted menstrual cycles to less estrogen. **Decreased estrogen results in decreased blood flow to the placenta, which means decreased nutrition to the developing baby.** \textsuperscript{xxvi}

### Marijuana Is NOT Safer Than Alcohol

Not that it really matters, because alcohol isn’t going away, but marijuana is not safer than alcohol. It combines the harms of both alcohol and tobacco.

Dr. Nicolas Pace \textsuperscript{xxvii} states there are two important differences between alcohol and marijuana:

• Alcohol has a single chemical and is water soluble. One ounce is metabolized and is completely excreted from the body within 12 hours.

• Marijuana is a crude drug containing 421 known chemicals, that when combusted, turn into 2,000 chemicals. Of the 421 basic chemicals, 61 are known cannabinoids, four of which are psychoactive or mind-altering. But a few of the non-psychoactive cannabinoids appear to be more harmful to certain organ systems than the psychoactive ones.

The most important, and ominous factor about cannabinoids is that they are fat soluble, even *fat loving* according to Dr. Pace. "The fatty sections of cells and membranes and the fatty organs of the body act like magnets attracting the cannabinoids. The cells membranes, the coating around the cell, is at least 60% fat. When the fat soluble cannabinoids dissolve in the cell membrane, they make it difficult for the most important constituents of the cell, the proteins, to enter. And cannabinoids clogging of the cell, including the vital nucleus, has many additional deleterious effects."

"What about the organs? The chief fatty organs of the body are the gonads (sex glands) and the three pound human brain, which in one-third fat."

• **Marijuana is a causal factor in testicular cancer,**\textsuperscript{xxviii} which can result in castration and even death. Mutations to sperm can cause physical deformities in a fetus.
According to Pace, all studies showed that it took the body three days to get rid of one-half the THC and cannabinoids in a single joint, and up to 30 days for all of it. So if a person smokes even just one joint every Saturday night, the new cannabinoids stack on top of the first.

Dr. Robert C. Gilkeson**, who had spent 23 years in neurophysiologic research, stated: “No drug or chemical improves the normal cell. Marijuana is a known intoxicant. Toxic means poison. Anyone who smokes or ingests more than the equivalent of one marijuana cigarette every 30 days will accumulate an acute neurotoxic substance in his or her body.”

It is also commonly known that the risk of heart attack is increased 4.8 times within one to three hours after smoking marijuana.

**Marijuana – Impact On Health, Particularly Young People**

If a young person reaches age 21 without smoking, abusing alcohol or using drugs, it is virtually certain they never will. (Joseph Califano Jr.)*

- **Babies born to mothers who use marijuana during pregnancy have an eleven fold increase in non-lymphoblastic leukemia** and as mentioned earlier, can result in smaller babies at birth, with lower IQ’s whom later develop Acute Deficit Hyperactivity Disorder (ADHD) and other behavioral issues.

- Aside from damage that could already have occurred before birth, the quality, longevity and productivity of one’s adult life is largely determined by what happens during this period of brain development, and within in a few years thereafter.

- Marijuana, smoked even a few times can interrupt the development of white matter in the brain and cause psychotic episodes years later like depression, anxiety, suicide and it can lead to psychosis. (Hall and Degenhardt 2009)

- According to NIDA publication Research Report Series called Marijuana Abuse (Page 5), the consequences of marijuana abuse are impaired short term memory, impaired attention, judgment and other cognitive functions, impaired coordination and balance, increased heart rate and psychotic episodes.

- Persistent impacts that last after intoxication include impaired memory and learning skills and sleep impairment.

- People under the influence of marijuana are normally hyper-excited and tend to overreact, which in turn affects their ability to drive. Marijuana impaired drivers are two times as likely as other driers to be involved in car crashes.

- Long term cumulative effects include addiction (17% of those under 18), increased risk of chronic bronchitis, increased risk of schizophrenia in vulnerable individuals, and increased risk of anxiety, depression and amotivational syndrome.

All of the above adversely affect academic achievement, undoubtedly a factor as to why America is now 24th in the world academically (last among industrialized nations), with 1.2 million (33%) young people dropping out of high school. Marijuana can cap a young person’s potential in life at age 12 or 13 years old, before they even get to the threshold of adulthood. America cannot retain its position of leadership in the world unless the marijuana problem is brought under control. To protect the nation, we must protect the kids.
IMPACT ON THE NATION

UNICEF ranked the U.S. at the bottom of the best places to raise a child—below the likes of Slovenia, Greece, Hungary and Slovakia. Only Lithuania, Latvia and Romania lagged behind. Lack of education, cost of healthcare, childhood obesity and teenage pregnancies put the life chances of American children at the bottom of a table of overall wellbeing—far behind those from poorer countries, a damning report has found. Allowing the continued dumbing down and destruction of our youth owing to lack of meaningful prevention of marijuana and use of other drugs, as well as alcohol and tobacco, has positioned America at the doorstep of a new dark age. We have 5% of the world’s population and yet consume 66% of the world’s illicit drugs. Of the 129 Americans who die every day of drug overdose, an estimated 90% started their drug journey with marijuana. The combined economic cost of all impacts on society is estimated at $1.6 trillion per annum if one includes the failed cost of education and public health care for physical and mental conditions. Nothing inflicts more death, destruction and economic harm on society. The travesty is it is largely preventable..... if America has the will, wisdom and courage to do what works.

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