

Date: 6/3/19

To: California Senate Health Committee
Senator Richard Pan (Chair)
Senator Jeff Stone (Vice Chair)
Senator Maria Elena Durango
Senator Shannon Grove
Senator Melissa Hurtado
Senator Connie M. Leyva
Senator Holly J. Mitchell
Senator Bill Monning
Senator Susan Rubio

From: Central San Pedro Neighborhood Council

Re: AB 228 - (Aguilar-Curry) Food, beverage, and cosmetic adulterants: industrial hemp products. (As Amended on 6/3/19)
Notice of Opposition

Central San Pedro Neighborhood Council respectfully opposes AB 228 (Aguilar-Curry). Under this bill Hemp sourced CBD would not be considered and adulterant by inclusion into food, beverages, or cosmetics that include industrial hemp, or cannabinoids, extracts, or derivatives from industrial hemp.

We oppose this bill for the following reasons:

- 1) It presents a public health threat
- 2) It will negatively impact both local and state tax revenue collected from the legal cannabis industry, ultimately limiting funding towards illicit youth access prevention providers.

1) PUBLIC HEALTH THREAT

Non-cannabis sourced CBD products (including hemp sourced CBD products) are currently not required to undergo extensive testing to ensure public health and are prohibited by both Federal and State regulations from being introduced into consumable products such as food, beverages, and pills. AB 228 is seeking to allow hemp sourced CBD into the California food supply without clearly defined safety testing requirements, and is reckless threat to public health.

AB 228 inadequately asks for the Health and Safety Code to require the following testing of hemp sourced CBD products.

“**11920.1.** A raw hemp product shall not be distributed or sold in this state without a certificate of analysis from an independent testing laboratory that confirms all of the following:

- (a) *The raw hemp product is the product of a batch of industrial hemp that was tested by the independent testing laboratory.*
- (b) *A tested random sample of the batch of industrial hemp contained a total delta-9-tetrahydrocannabinol concentration that did not exceed 0.3 percent on a dry-weight basis.*
- (c) *The tested sample of the batch did not contain contaminants that are unsafe for human consumption.*

Defining testing simply as “did not contain contaminants that are unsafe for human consumption” allows for too large of a window for interpretation of standards. Hemp sourced CBD products should at minimum be required to be tested at the levels as cannabis based CBD products which clearly define both compounds that are tested for as well as at which levels.

CANNABIS SOURCED CBD VS NON CANNABIS SOURCED CBD, TESTING REQUIREMENTS

THC and CBD are two of the most notable cannabinoids found in both cannabis and hemp plants. To protect public health, California requires all legal cannabis sourced products (including cannabis sourced CBD) to undergo extensive testing procedures prior to being released for sale. Below are some of the testing requirements of cannabis products. By comparison, AB 228 as amended does not clearly define testing requirements of hemp based CBD products.

STATE REQUIRED TESTING	Cannabis Sourced CBD	Non-Cannabis Sourced CBD (Hemp CBD)
<u>Cannabinion Testing:</u> Verifying the amount of cananbinoids such as THC, CBD, and others.	Yes	No, not defined
<u>Foreign Materials Testing:</u> Inspection for Sand, Soil, Insect Fragments, Hair, Mammalian Excreta	Yes	No, not defined
<u>Heavy Metals Testing:</u>	Yes	No, not

Cadmium, Lead, Arsenic, Mercury		defined
Microbial Impurities Testing: Shiga toxin-producing Escherichia coli, Salmonella, Pathogenic Aspergillus species A. fumigatus, A. flavus, A. niger, and A.terreus	Yes	No, not defined
Mycotoxin Testing: _aflatoxin B1, B2, G1, G2, Ochratoxin A	Yes	No, not defined
Residual Pesticides Testing - Category 1 Residual Pesticide Alicarb, Carbofuran, Chlordane, Chlorfenapyr, Chlorpyrifos, Coumaphos, Daminozide, DDVP (Dichlorvos), Dimethoate, Ethoprop(hos), Etofenprox, Fenoxycarb, Fipronil, Imazalil, Methiocarb, Methyl parathion, Mevinphos, Paclobutrazol, Propoxur, Spiroxamine, Thiocloproprate Category II Residual Pesticide Malathion, Metalaxyl, Methomyl, Myclobutanil, Naled, Oxamyl, Pentachloronitrobenzene, Permethrin, Phosmet, Piperonylbutoxide, Prallethrin, Propiconazole, Pyrethrins, Pyridaben, Spinetoram, Spinosad, Spiromesifen, Spirotetramat, Tebuconazole, Thiamethoxam, Trifloxystrobin	Yes	No, not defined
Residual Solvents and Processing Chemicals Testing Category I Residual Solvent or Processing Chemical 1,2-Dichloroethane, Benzene, Chloroform, Ethylene oxide, Methylene chloride, Trichloroethylene Category II Residual Solvent or Processing Chemical Acetone, Acetonitrile, Butane, Ethanol, Ethyl acetate Ethyl ether, Heptane, Hexane, Isopropyl alcohol Methanol, Pentane, Propane, Toluene Total xylenes (ortho-, meta-, para-)	Yes	No, not defined

Hemp, by definition, must have less than 0.3% THC to qualify as hemp. As soon as it passes the 0.3% THC threshold, it is defined as cannabis and falls under the jurisdiction of the State's Bureau of Cannabis Control, therefore requiring a series of cannabis licenses as well as product safety testing.

Cannabis has been legalized in the State and with it comes a strict and stringent set of testing regulations. Hemp, however, is considered an agricultural product that remains unregulated and therefore, maintains no required testing prior to sale to the public, leaving the door open to a possible public health risk.

On Dec. 20, 2018 President Trump signed into law The Agricultural Improvement Act of 2018, otherwise known as The Farm Bill, which also integrated the Hemp Farming Act of 2018. This bill legalized the industrial production of hemp allowing states to develop new regulatory plans along with their own set of testing regulations. With the passing of this bill businesses may be trying to take advantage of the potential loop hole that seemingly allows them to circumvent California's state regulations regarding cannabis by selling non-cannabis sourced CBD products. None of which have safety regulations nor tax revenue benefits that are required by the State of legal cannabis businesses.

FDA PROHIBITS CBD IN ANY FOOD PRODUCTS

The FDA has prohibited CBD from being introduced into any consumable products such as food (including any animal food or feed). The FDA only permits for CBD to be introduced into non-consumable products such as topical creams, beauty products, etc.

You can read the full statement from the FDA here: [Statement from FDA Commissioner Scott Gottlieb, M.D., on siding of the Agriculture Improvement Act and the agency's regulation of production containing cannabis and cannabis derived compounds.](#)

On May 31st, 2019 the FDA held it's first public hearing on regulating CBD. It remains to be seen if and how the FDA intends to regulate CBD. CNN reported on this in a recent article titled [Concerns over exaggerated health claims prompt FDA hearing on effects of CBD products.](#) If California were to take a lead in allowing the sale of hemp sourced CBD products it should do so only in tandem with requiring safety testing of such products at minimum equal to cannabis sourced CBD products.

CDPH PROHIBITS NON-CANNABIS SOURCED CBD IN CONSUMABLE PRODUCTS

In California, legal commercial cannabis production allows for cannabis sourced CBD to be produced and introduced into consumable products such as food, pills/capsules, etc. However, Non-Cannabis Sourced CBD is prohibited from consumable products.

The California Department of Public Health issued the following statement to further clarify the matter.

"California incorporates federal law regarding food additives, dietary use products, food labeling, and good manufacturing practices for food. The Controlled Substances Act of 1970 classified all forms of cannabis as a Schedule I drug, making it illegal to grow it in the United States. Currently, the United States Food and Drug Administration (FDA) has concluded that it is a prohibited act to introduce or deliver for introduction into interstate commerce any

food (including any animal food or feed) to which tetrahydrocannabinol (THC) or CBD has been added. This is regardless of the source of the CBD – derived from industrial hemp or cannabis.

Therefore, although California currently allows the manufacturing and sales of cannabis products (including edibles), the use of industrial hemp as the source of CBD to be added to food products is prohibited. Until the FDA rules that industrial hemp-derived CBD oil and CBD products can be used as a food or California makes a determination that they are safe to use for human and animal consumption, CBD products are not an approved food, food ingredient, food additive, or dietary supplement.”

Download full report by clicking here: [CDPH FAQ - Industrial Hemp and Cannabidiol \(CBD\) in Food Products July , 2018](#)

LACDPH PROHIBITS NON-CANNABIS SOURCED CBD IN CONSUMABLE(FOOD) PRODUCTS

Additionally, in LA County you may have seen recent news reports of the LA County Department of Public Health warning/educating restaurants and other food outlets from serving non-cannabis sourced CBD. The LA County Department of Public Health is beginning with an educational outreach with eventual punitive measures. Chief Environmental Specialist for LACDPH David Chun was recently quoted saying,

“ For us, we decided to start educating retailers. When we do inspections at retail food facilities, we try to educate and explain that (CBD) is not an approved product. We ask them to comply. But in terms of point deductions, we'll do this education campaign until July 2019. After that, we'll have to start deducting points (from the overall inspection grade).”

LACDPH has issued a full state regarding the sales prohibition of non-cannabis sourced CBD (aka Hemp CBD) which you can read here: [Industrial Hemp Derived Products](#)

“RAW HEMP” AS A TERM REQUIRES CLARIFICATION.

The proposed language specifies testing is required for the raw material to be added to the final product. This is problematic for several reasons. (1) The flowering head of the hemp plant can easily be diluted with the stems and the leaves to dilute field testing potency. (2) Hemp plants become far more concentrated once extracted for product formulation. The language also requires testing on a “dry weight” basis. Again, “dry weight” implies that the raw plant material is being extracted, NOT The final extracted form. The final extract is also where contamination often occurs. Given that the vast VAST majority of hemp production is for CBD (rather than fiber), testing should also only include the heads and leaves for extracts intended for human consumption to properly measure cannabinoid content.

TESTING LIMITED TO DELTA-9 THC ONLY

The language specifies testing for delta-9 THC only. However, flowering hemp plants also produce delta-8 THC and other cannabinoids like THCA. Delta-8 is a psychoactive compound and THCA can be easily converted to THC in a warm car for example. These loopholes make it easy for producing to circumvent the .3% threshold and sell products in the unregulated market that are psychoactive and undermine the legal cannabis industry.

LACK OF RANDOM SAMPLING

The language must require independent, random sampling for testing. The bill's amendments should require that lab personnel must visit the site of the manufacturer and perform random sampling of a product batch to avoid manufacturer testing diversion. This is done in cannabis testing through a series of very strict protocols and have proven to be an effective way to control product quality and safety.

FINAL PRODUCT TESTING

Hemp sourced CBD products should also be required to be tested in final form similar to cannabis based CBD products. If testing is only required in the initial extraction form, there will be no guarantee that additional additives or product packaging does not leech into these products making them safe for consumption.

The final product must be tested. As we are seeing in the cannabis industry, there is a vast amount of contamination that occurs during the extraction process. Flower and plants may have low levels of pesticides, heavy metals and contaminants. Once oils and resins are extracted and concentrated, these levels are magnified by as much as ten fold. Additionally, volatile solvents are often used in extraction processes. These include known carcinogens include butane, propane, hexane, and solvents that are used but not permitted including 1,2 dichloro-ethane, benzene, chloroform, ethylene oxide, methylene chloride, trichloroethylene). Common heavy metals in cannabis and certainly high CBD strains (which have a chemo typical structure for bio-remediation) include arsenic, lead, cadmium and mercury. The only way to determine if these compounds have made it into final products is to test products in their final state. Additionally, final product testing is the only way to assure that manufactured products meet potency limitations as set forth under law.

INADEQUATE HEAVY METAL TESTING

Currently, there are no federal guidelines with set limits for metal contamination in dietary supplements. Several agencies at the state, federal, and international levels have issued recommendations on estimated safe maximum daily exposures for arsenic (As), cadmium (Cd) and lead (Pb) for adults. However, in general, the regulatory environment for defining toxic doses of metals is fragmented (Skibola et al. Journal of Environmental Health, 2017). In consideration of the variability of perceived safe limits, and that CBD containing foods and supplements may be consumed by the general public, including susceptible populations such as children, young adults, pregnant women, and the sick and elderly, standards should be set within range of the lowest limit—in this case, California Proposition 65 standards. Based on the maximum acceptable levels set by California Proposition 65, hemp sourced CBD products should not exceed: 10 ug arsenic/daily serving, 4.1 ug cadmium/daily serving, and .5 ug lead/daily serving. The same can be said for setting guidelines for maximum acceptable levels of pesticides and solvents.

Hemp sourced CBD should be held to the same laboratory testing standards as is required for high resin cannabis sourced CBD produced in California. For example, testing should include screens for Category 1 and 2 Pesticides; mycotoxins; microbes; residual solvents Category 1 (solvents that should not be used in CBD extraction such as 1,2 dichloro-ethane, benzene, chloroform, ethylene oxide, methylene chloride, trichloroethylene); Category 2 residual solvents; heavy metals (As, Pb, Cd, Hg); and foreign materials.

DOES NOT ADDRESS RECALL AND DIVERSION OF FAILED PRODUCT

AB 228 does not outline a process for regulating products that fail lab testing to prevent diversion into another state or market. Even if the state were to adopt Prop 65 thresholds, it should be noted that Prop 65 standards are in fact VASTLY lower than the threshold required for legal cannabis. This is inherently unjust and penalizes the legal industry in terms of monetary costs, compliance and lost product due to failed batches. The current legislation sets no guidelines for product that has failed lab testing and has no regulatory body to even monitor that any testing at all is occurring. Without the ability to monitor or enforce many of these provisions, the state should not green light all hemp production to be consumed by the general public. It is dangerous and poses a serious public health threat.

TESTING RESULTS

CannaSafe, a California licensed cannabis testing laboratory, recently shared the testing results of multiple hemp-sourced cannabis products found in various consumable products currently on shelves. BusinessInsider reported the testing results in a recent article [A California company tested 20 popular CBD products and found 'insanely high levels' of dangerous chemicals and misleading labels](#). Not only were the products testing at high levels of dangerous chemicals they also overwhelmingly would mislead the public by listing incorrect measurements of CBD within the product, typically lower if any at all. The results suggest these hemp sourced CBD products to be nothing more than toxic and expensive snake oil products.

Similarly the The Dr.'s recently showcased similar results with this massive public health threat in an episode titled [Inside the CBD Boom](#).

The same type of products prohibited by FDA, CDPH, LACDPH are now seeking to be allowed with no safety testing requirements in AB 228.

For all these reasons and evidence that pointing to the public health threat it presents, we ask you to vote **No** on AB 228.

2) NEGATIVELY IMPACTS LOCAL AND STATE TAX REVENUES

Prop 64 provided for both local and state to tax cannabis sourced CBD. Local jurisdictions that allow for legal commercial cannabis in large part did so with intention to benefit from the tax revenues it can bring in. 60% of taxes collected by the state from legal commercial cannabis operations are intended to fund prevention providers towards illicit youth access. Cannabis sourced CBD products provide for these tax revenue benefits. Hemp sourced CBD products do not.

Should AB 228 pass, hemp sourced CBD products will be able to be sold almost anywhere and compete unfairly with legal cannabis sourced CBD products. In addition to not having the financial barrier of safety testing, hemp sourced CBD products also do not insure additional taxes that cannabis sourced CBD products do - allowing them to have an inequitable advantage that not only threatens public health, but the viability of a new and growing legal cannabis industry and in turn negatively impacts expected tax revenue benefits both locally and at the state.

With the state already reporting lower tax revenues than expected, AB 228 would further impact tax revenues which could impact efforts of illicit youth access programs.

AB 228 would eliminate California farmers.

AB 228 allows for non-cannabis sourced CBD to be imported from other states as well as internationally. California farmers of cannabis based CBD are not permitted to export their product outside of California nor are they allowed to sell their products outside of legal cannabis retailers unlike the hemp based CBD that AB 228 is seeking to allow. This gives an inequitable advantage to others over California farmers. California cannabis CBD farmers are required to pay state local taxes while farmers from other states or internationally are not required to pay those same taxes, further negatively impacting CA tax revenues.

The amount of hemp grown in Kentucky alone is enough to negatively impact California farmers and the marketplace. Including hemp CBD into the regulated supply chain would not only make it more difficult to regulate

STATE TAXES	CANNABIS SOURCED CBD	NON-CANNABIS SOURCED CBD (HEMP CBD)
Cultivation	\$9.25/ounce	0%
Retail	15% Excise	0%
Local Taxes		
Cultivation	1-15%+	0%
Manufacturing	1-15%+	0%
Distribution	1-15%+	0%
Testing	1-15%+	0%
STATE TAX REVENUE ALLOCATION	CANNABIS SOURCED CBD	NON-CANNABIS SOURCED CBD (HEMP CBD)
Youth Substance Abuse Prevention Programs	60%	0%
Environmental Restoration	20%	0%
DUI and Enforcement Fund	20%	0%

CBD Gummies	75	1.1	1.5%	<div style="width: 1.5%;"></div>
CBD+ Vape Additive	60	3.7	6.2%	<div style="width: 6.2%;"></div>
Premium CBD E-liquid	50	7.4	14.8%	<div style="width: 14.8%;"></div>
Daily Dose syringe	33	29.7	90%	<div style="width: 90%;"></div>
Raw Honey Hemp	20	8.4	42%	<div style="width: 42%;"></div>
CBD Cold Brew Coffee	20	3.9	19.5%	<div style="width: 19.5%;"></div>
Peach Ginger	15	15	100%	<div style="width: 100%;"></div>
CBD Softgels	15	13.1	87.3%	<div style="width: 87.3%;"></div>
CBD Alkaline Water	15	0	0%	<div style="width: 0%;"></div>

Notes: The tests were conducted blindly. The identity of the manufacturers weren't reported.

Source: CannaSafe Laboratories

BUSINESS INSIDER

product quality and consumer safety, it would drive down the market price of all CBD flower, concentrate and manufactured goods in the licensed cannabis market. A vast number and growing number of products in the legal cannabis market contain CBD. Allowing hemp sourced CBD into the supply chain could completely eliminate cannabis CBD cultivars grown under the state's track and trace system in the regulated market.

We believe in supporting California farmers who have been growing high CBD cannabis strains as part of the regulated cannabis market. California farms pay taxes, contribute to the economy and are active participants of the California cannabis industry. Allowing hemp into the supply chain would render them unable to compete in the CBD supply chain. This would have a particular impact on small farms. Cultivation tax generating state licensed farms would lose out on a considerable, exploding market share.

California cannabis based CBD framers account for a huge percentage of California cannabis -- both in manufactured products and trimmed flower. Data analytics company BDS Analytics reported that dispensaries accounted for 65 percent of all CBD dollar sales in 2018 and that the share of high-CBD (as opposed to high-THC) product sales within dispensaries has also experienced a sharp uptick; CBD sales accounted for 11 percent of 2018 total dispensary sales—a considerable increase from just 5 percent in 2017.

Because the current regulatory structure requires all CBD to be cannabis sourced, the state and local governments have collected and will continue to collect considerable cultivation tax revenue from CBD cultivars. HOWEVER, allowing hemp into the legal supply chain would have several repercussions including

- (1) the state would no longer collect cultivation tax on cannabis sourced CBD
- (2) the market price of CBD products inside of legal dispensaries would crash, impacting state and local tax revenues

If non-tax revenue generating hemp sourced CBD hemp is allowed to be imported, the native and tax generating cannabis sourced CBD cannabis market would likely be eliminated. Farmers could not compete with the bottom of the barrel hemp prices and manufacturers would not be able to remain competitive who wish to continue to use a California cannabis supply chain. The state would lose ALL of the cultivation tax associated with cannabis sourced CBD cultivated in California that are part of the regulated cannabis industry.

For these reasons we ask you to vote **No on AB 228**.

VOTE NO ON AB 228

AB 228 is tantamount to being a loophole in legal cannabis regulations by being able sell hemp sourced CBD products that are virtually the same to legal cannabis sourced CBD products only without the safety regulations and taxing.

To protect public health and promote local and state tax revenues we ask you to vote no on AB 228.

Thank you for your consideration,

[Signature]

Central San Pedro Neighborhood Council

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