Origins Council Comments on Incorporation of Hemp Into the Cannabis Supply Chain

Date: June 1, 2022

Dear DCC Staff,

On behalf of Origins Council, representing nearly 900 licensed small and independent cannabis businesses in six counties throughout California, we are writing today regarding prospective DCC regulations for the incorporation of hemp into the cannabis supply chain.

In 2021, AB 45 was signed into law in California, which requires the DCC to issue a report on the incorporation of hemp into the cannabis supply chain by July 1, 2022.

We believe the outcome of the DCC's report, and subsequent regulatory promulgation, will have substantial effects on the cannabis industry as a whole, and small and independent cannabis producers in particular. We would like to offer the following comments ahead of July's report, and look forward to working with the DCC to establish a thoughtful and equitable system that acknowledges the complex relationship between hemp and cannabis.

DCC Should Prohibit the Inversion of Synthetic Hemp-Derived THC in the Cannabis Supply Chain

In recent years, the sale of intoxicating cannabinoid products as “hemp” in an attempt to evade state-level cannabis regulatory schemes has been well-documented.[1][2] Substantial oversupply within the hemp-derived CBD market has led a significant number of hemp producers to pursue the synthetic conversion of CBD into cannabinoids such as delta-8, delta-9, and delta-10 THC, which can be produced for an intoxicating effect, resulting in sales which are not subject to the rules governing, nor the taxes associated with, the adult-use or medical cannabis markets.

More recently, there have been further attempts to incorporate synthetic hemp-derived delta-9 THC into the regulated cannabis market. In Washington state, for example, there has been significant controversy on the inversion of synthetic hemp-derived delta-9 THC into regulated cannabis products at the manufacturing level.[3][4]

Origins Council strongly opposes the inversion of synthetic hemp-derived THC, including delta-9 THC, into the cannabis supply chain at any point, including manufacturing or retail, for the following reasons.

Consumer Safety

Although there is limited published literature on the chemistry and pharmacology of synthetically-derived delta-9 THC, our understanding is that synthetic and naturally-derived delta-9 THC are not equivalent substances due to the inherent presence of impurities and by-products in synthetically-derived products.

In the case of synthetic delta-8 THC, it has been well-documented that the process of chemical synthesis typically results in impurities and unknown chromatographic peaks.[5]

In a 2021 statement, the US Pharmacopeia (USP) indicated that these impurities may have unknown effects on human health:[6]

> *“ A common way that ∆8-THC is being obtained is through synthetic or semi-synthetic conversion from hemp-derived cannabidiol (CBD). This process normally involves use of strong acids and catalysts, which tend to be harsh reaction conditions conducive to the formation of other reaction by-products and impurities6. Depending on the reaction conditions and purification processes, synthetic ∆8-THC may be associated with unknown impurities, different degradants, and synthetic cannabinoid analogs that are not*

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[1] https://www.forbes.com/sites/chrisroberts/2022/04/28/study-legal-hemp-derived-delta-9-thc-edibles-are-mislabeled-way-too-strong/?sh=7b841cfd3f89

[2] https://www.nytimes.com/2021/02/27/health/marijuana-hemp-delta-8-thc.html

[3] https://www.usnews.com/news/best-states/washington/articles/2022-02-25/washington-lawmakers-urge-halt-to-hemp-derived-thc-in-state

[4] https://www.nytimes.com/2021/02/27/health/marijuana-hemp-delta-8-thc.html

[5] https://cen.acs.org/biological-chemistry/natural-products/Delta-8-THC-craze-concerns/99/i31

[6] https://www.usp.org/sites/default/files/usp/document/our-science/usp-delta-8-final-12-2-21.pdf

naturally produced in cannabis/hemp plant material, and for which there may be little or no safety or toxicity data. This raises safety and product quality concerns for consumers – given the unknown and untested nature of ∆8-THC, other synthetic analogs, and any other impurities present."

Our understanding is that these concerns apply similarly to other synthetic processes, including the process for the synthetic creation of delta-9 THC.

While naturally-derived cannabis benefits from a long history of human use that demonstrates general safety, synthetically-derived delta-8 and delta-9 THC have no substantial history of human use, and the effects of synthetic impurities on human health are not yet clear.

Parity Between Cannabis and Hemp Agriculture

From an agricultural and environmental perspective, cannabinoid hemp and cannabis cultivation are functionally identical. As a consequence of federal cannabis prohibition, however, as well as continued stigma against cannabis, there are vast differences between the local, state, and federal regulation on hemp and cannabis cultivation. These include:

- **Regulatory requirements -** none of the hundreds of pages of DCC regulation addressing cannabis cultivation are applicable to hemp cultivation, including restrictions on licensing, operations, reporting, and track-and-trace. Cannabis farmers are also subject to additional rules through CDFW and state and regional Water Boards, such as the annual forbearance period, which are not applicable to hemp cultivators.
- **Classification as agriculture -** unlike hemp, cannabis cultivation is not treated as agriculture, resulting in an immensely heavier regulatory burden and lack of access to many resources that benefit traditional agricultural producers. Perhaps most significantly, cannabis farmers cannot achieve CEQA compliance through conformance with agriculture zoning pursuant to a local jurisdiction's general plan, and must achieve CEQA compliance through a laborious and complex process for site-specific CEQA review.
- **Federal status -** As a federally legal crop under the Farm Bill, hemp farmers have access to federal programs such as federally-subsidized crop insurance and access to the COVID Paycheck Protection Program. By contrast, cannabis farmers continue to lack access to all federal programs and support, must navigate a discriminatory tax system under IRS Section 280E, and face additional discrimination from banks, insurance companies, and other ancillary service providers due to cannabis' federal status.
- **Licensing fees and taxes -** most hemp cultivators are subject to a $900 annual registration fee regardless of size. By contrast, a 10,000 square foot mixed-light 1 cannabis cultivator pays an annual state licensing fee of $11,800. Cannabis cultivators are also currently required to pay a $161.28 per pound state cultivation tax which is not applicable to hemp farmers, and lack the ability to fallow or switch crops in response to market forces.

- **Local control -** While both cannabis and hemp farmers are formally subject to local control, practically speaking, cannabis cultivators face exponentially more significant regulatory scrutiny at the local level. Additionally, many cannabis farmers are subject to additional local cannabis cultivation taxes which are not applicable to hemp farmers.

Until such time as cannabis and hemp agriculture are regulated at parity, it is critical that a clear firewall is maintained between the cultivation of cannabis for intoxicating products, and the cultivation of hemp for non-intoxicating products.

If hemp-derived synthetic THC is permitted to enter the regulated cannabis supply chain, it will not be possible for permitted cannabis farmers to compete with hemp farmers operating under exponentially less onerous regulatory burden. In turn, all of the expected benefits of environmental and operational regulation on cannabis farmers will disappear if it becomes possible to participate in the market for intoxicating cannabis products without following the rules and regulations applicable to that market.

The premise of a firewall between intoxicating and non-intoxicating products is also clearly consistent with the intent of AB 45. Specifically, Health and Safety Code Section 111921.7 enables the Department of Public Health to regulate cannabinoids based on their capacity to cause intoxication.

DCC Should Address Enforcement on Inversion of Naturally-Occuring High-THC Hemp Into the Cannabis Supply Chain

In addition to synthetically-derived delta-9 THC, recent reporting has made it clear that many hemp farmers are in fact cultivating cannabis strains which are high in delta-9 THC. In Southern Oregon, for example, inspections have found that more than 50% of farmers registered for "hemp" cultivation are in fact cultivating high-THC cannabis.[7]

Any DCC regulations that allow hemp to be incorporated into cannabis products at the manufacturing level should consider measures for the adequate enforcement of restrictions against high-THC hemp. Approaches could include:

- Restrictions on the incorporation of out-of-state hemp into the cannabis supply chain.
- Documentation requirements that include traceability for hemp entering the cannabis supply chain.
- Testing hemp in the inventory of cannabis manufacturers for THC content during inspections.

If restrictions on high-THC hemp cannot be adequately enforced, hemp should not be permitted to enter the cannabis supply chain at the manufacturing level until a stronger enforcement mechanism can be established.

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[7] https://www.kgw.com/article/news/local/marijuana/oregon-illegal-marijuana-hemp-license-moratorium-jackson-josephine/283-59706595-7525-4f47-896c-2e3fdc0f29f4

Immature Plants, Seeds, and Tissue Cultures Should be Eligible for Incorporation Into the Cannabis Cultivation Supply Chain

In a January 6, 2022 letter, the federal Drug Enforcement Administration (DEA) suggested that that cannabis seeds, tissue cultures, and other genetic material with THC concentrations under 0.3% are considered "hemp" and are not subject to the federal Controlled Substances Act[8].

According to the DEA letter:

> *"...marihuana seed that has a delta-9-tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis meets the definition of "hemp" and thus is not controlled under the CSA. Conversely, marihuana seed having a delta-9-tetrahydrocannabinol concentration more than 0.3 percent on a dry weight basis is controlled in schedule I under the CSA as marihuana. Likewise, other material that is derived or extracted from the cannabis plant such as tissue culture and any other genetic material that has a delta-9-tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis meets the definition of "hemp" and thus is not controlled under the CSA."*

If the DCC chooses to enable the incorporation of hemp into the cannabis supply chain at the manufacturing and/or retail levels, similar privileges should be available to cannabis farmers to incorporate seeds, immature plants, and tissue cultures - now classified federally as "hemp" - into their cultivation operations. This should include the ability to enter seeds, immature plants, and tissue cultures into METRC via no-source entry, as well as the ability to freely transfer these genetics among cannabis farmers.

Hemp Products Sold At Cannabis Retail Should Be Tested Identically to Cannabis Products

AB 45 establishes a system for the testing of hemp products which is similar, but not identical, to the process for the testing of cannabis products. For example, while cannabis regulations require the testing of products in their final form, hemp regulations require testing to be performed on the hemp extract.

Pesticides, heavy metals, and other contaminants pose identical risks to consumers regardless of whether they are consumed in hemp-derived or cannabis-derived products. For this reason, hemp products sold in the cannabis supply chain should be tested to identical standards and follow an identical process (e.g. sampling procedures) to cannabis products which are sold in the cannabis supply chain.

Additionally, it is critical that hemp products are tested in their final form for potency, inclusive of intoxicating synthetic derivatives such as delta-8 and delta-10 THC, to ensure that these

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[8] https://www.marijuanamoment.net/dea-says-marijuana-seeds-are-considered-legal-hemp-as-long-as-they-dont-exceed-thc-limit/

products do not exceed allowances for THC or other intoxicating compounds derived from hemp.

THC In Consumable Hemp Products Should be Limited to 0.1mg per Container

We have previously submitted comments to the Department of Public Health regarding the need to cap consumable hemp products by weight, rather than by percentage. These same limitations should be incorporated into DCC regulations for the sale of consumable hemp products in the cannabis supply chain.

Federal law defines “industrial hemp” as a product containing less than 0.3% delta-9 THC. While this definition is sensible for hemp plant material, it leaves open a substantial loophole for edible, beverage, or dietary supplement hemp products to contain large, highly intoxicating doses of THC. For example, a typical energy bar weighing 60 grams (60,000 milligrams) would be allowed to contain up to 180mg THC if limited to 0.3% THC concentration by weight, an extremely high dose which exceeds the allowable THC dose for any single product under state cannabis regulation. Similarly, for beverages which weigh more and are more easily consumed, this loophole creates even more egregious skirting of the Farm Bill’s intent. Some hemp manufacturers are already selling products high in THC under this legal theory.[9]

Our comments previously submitted to DPH and DCC recommend a limit of 0.1mg THC per container of hemp products in order to clearly ensure that a consumer purchasing one or multiple hemp products would not receive an intoxicating effect. More liberal allowances - such as 1 mg per container - would easily allow individuals to purchase multiple edible “hemp” products to achieve an intoxicating effect.

DCC Hemp Regulations Should be Implemented Via Regular Rulemaking

We strongly encourage the DCC to adopt any rulemaking changes regarding hemp through a full 45-day regulatory process, rather than through emergency regulation. The incorporation of hemp into the cannabis supply has the potential to have significant consequences for the cannabis and hemp industries as well as consumers, and should be developed with significant opportunity for stakeholder input. The incorporation of hemp into the cannabis supply chain is not an emergency and should be pursued through the normal rulemaking process.

[9] https://liftedmade.com/shop/hemp-derived-products/delta-9-thc/urb-rocks/

Thank you for your consideration,

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