

kightlaw

February 14, 2024

Cleen Technology, Inc.
Dba clēēn:tech
Attn. Marcus Charles, Executive Director
1201 Monster Road SW
Suite #250
Renton WA 98057

Sent via email: marcus@cleentech.com

Re: Legal Status of Hemp-Derived THCa

Dear Mr. Charles:

This letter is written for Cleen Technology, Inc. dba clēēn:tech (clēēn:tech), a biotechnology company that specializes in creating cannabinoids from environmentally sustainable hemp. The letter discusses the legal status of tetrahydrocannabinolic acid (THCa) derived from hemp through a proprietary process that starts with hemp-derived cannabidiol (CBD). The specific question addressed in this letter is: **“Is THCa a controlled substance under federal law when it is derived from hemp and does not contain a delta-9 tetrahydrocannabinol (delta-9 THC) concentration that exceeds 0.3% by dry weight?”** As discussed in this letter, the answer to this question is **“No”**. With respect to harvested cannabis material and its downstream products, including derivatives such as THCa, the sole factor that distinguishes between lawful hemp and unlawful marijuana is the concentration of delta-9 THC. Additionally, for the reasons discussed below, using a “post-decarboxylation” testing method to determine compliance for hemp-derived THCa is contrary to law.

The analysis and conclusions contained in this letter are based on the Agricultural Act of 2014 (2014 Farm Act)¹, the Agricultural Improvement Act of 2018 (Farm Bill)², the federal Controlled Substances Act (CSA)³, the Drug Enforcement Administration’s (DEA) Interim Final Rule (IFR)⁴, the DEA’s letter to the Alabama Board of Pharmacy (Letter)⁵, a DEA letter regarding cannabis seeds and other cannabis materials⁶, a letter to a currently undisclosed recipient in response to a request for the control status of several compounds, including delta-9 THCA⁷, and an opinion by the Ninth Circuit Court of Appeals and

¹ <https://www.govinfo.gov/content/pkg/BILLS-113hr2642enr/pdf/BILLS-113hr2642enr.pdf>

² <https://www.congress.gov/115/bills/hr2/BILLS-115hr2enr.pdf>

³ 21 U.S. Code § 801 *et seq.*

⁴ https://www.deadiversion.usdoj.gov/fed_regs/rules/2020/fr0821.htm

⁵ <https://docs.google.com/viewerng/viewer?url=https://cannabusiness.law/wp-content/uploads/DEA-letter-re-D8-to-Alabama.pdf&hl>

⁶ <https://s3.documentcloud.org/documents/21580238/21-7692-shane-pennington-cannabis-seeds-tissue-genetic-material-11-18-21-signed-1.pdf>

⁷ <file:///Users/rodkight/Downloads/DEA-THCA-and-HHC-letter.pdf>

the district court for the Eastern District of Arkansas⁸. This letter does not address any requirements under the federal Food, Drug & Cosmetic Act and associated regulations by the Food and Drug Administration (FDA).

This letter is solely for Clēēn:tech, but I have been informed it may be shared with select parties who have licensed clēēn:tech's patented technology and/or who sell products manufactured with clēēn:tech's patented technology. All third parties are specifically advised that this letter is not intended to be legal advice for any party other than Clēēn:tech and should not be construed or relied upon as such. It is accurate as of the date above.

EXECUTIVE SUMMARY

The word "cannabis" is a botanical term referring to the plant *Cannabis Sativa* L. It is not a legal term of art under federal law. Under federal law, the legal terms of art related to cannabis are "hemp", which is lawful cannabis, and "marijuana", which is unlawful cannabis. The sole legal difference between legal harvested hemp and its downstream products and derivatives, and illegal marijuana and its downstream products and derivatives, is the concentration of delta-9 THC. Cannabis containing no more than 0.3% delta-9 THC is lawful "hemp". Cannabis containing more than 0.3% delta-9 THC is unlawful "marijuana". This distinction flows through to hemp products and derivatives, which themselves are not controlled substances if their concentrations of delta-9 THC do not exceed 0.3%.

With respect to compliance testing for harvested hemp and its derivatives, using a "post-decarboxylation" method is contrary to law. This is because federal law mandates use of a post-decarboxylation testing method solely in the context of determining whether or not a hemp crop is compliant and may be harvested. Once that test is passed the post-decarboxylation testing requirement has been satisfied. At that point, the hemp has been deemed lawful and the producer is authorized to harvest it. Additionally, the definition of "hemp" includes its "acids". Use of a post-decarboxylation method to test harvested hemp degrades the pertinent acids in the hemp plant, rendering the term "acid" superfluous in the legal definition. A statute should be construed so that effect is given to all its provisions, so that no part will be superfluous. Accordingly, the concentration of THCa in harvested hemp and its derivatives is irrelevant with respect to their legal status. A "post-decarboxylation" testing method converts THCa into delta-9 THC, thus creating the molecule it is measuring. It is unable to distinguish between lawful hemp and unlawful marijuana. As such, it is an inappropriate method for determining compliance in harvested hemp and its derivatives.

Finally, the THCa produced by clēēn:tech is not a controlled substance. This is because (a) THCa occurs naturally in the cannabis plant, and (b) the THCa produced by clēēn:tech through its proprietary and patented process is from cannabis materials.

PART 1- DISCUSSION OF THE ISSUE: THE CONCENTRATION OF DELTA-9, NOT THCA, IS THE SOLE FACTOR IN DETERMINING A CANNABIS PRODUCT'S CONTROLLED STATUS

There are dozens of forms of the tetrahydrocannabinol (THC) molecule. Some of these forms are called isomers. An isomer is one of two or more compounds that contain the same number of atoms of the

⁸ *AK Futures LLC v. Boyd St. Distro, LLC*, 8:21-cv-01027-JVS-ADS (C.D. Cal. Jun. 15, 2022), *Bio Gen LLC et al v. Sanders et al*, 4:23 CV 718 BRW (September 7, 2023) [Document 65]

same elements but differ in structural arrangement and properties.⁹ There are at least thirty THC isomers¹⁰, of which delta-9 THC is the most well-known. As discussed below, the only THC isomer that is used to determine whether harvested hemp and hemp products are lawful under federal law is delta-9 THC. The quantity and concentration of other THC isomers, and other cannabinoids and forms of THC, including THCa, are totally irrelevant with respect to the legal status of harvested hemp and hemp derivatives.¹¹

PART 2- HEMP IS NOT A CONTROLLED SUBSTANCE

Hemp initially became exempt from the CSA, and thus removed from the list of controlled substances, by virtue of the 2014 Farm Act when produced pursuant to a state's industrial hemp pilot program. The current Farm Bill, enacted at the end of 2018, removed both "hemp" and "THC in hemp" from the CSA.¹² Hemp is lawful throughout the United States (US).

The Farm Bill defines "hemp" expansively. The definition includes the hemp plant and "any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 THC concentration of not more than 0.3 percent on a dry weight basis."¹³ (*emphasis added*)

The word "cannabis" is botanical term. It is not a term of art and has no legal meaning. Under federal law the terms of art related to cannabis are "hemp" and "marijuana". The sole distinction between lawful cannabis (hemp) and unlawful cannabis (marijuana) is the concentrations of delta-9 THC in the harvested material and its "cannabinoids", "derivatives", and/or "acids". Harvested cannabis and its cannabinoids, derivatives, and/or acids with delta-9 THC concentrations that do not exceed 0.3% all constitute legal hemp. On the other hand, harvested cannabis and its cannabinoids, derivatives, and/or acids with delta-9 THC concentrations that exceed 0.3% is illegal marijuana. The concentrations of the other cannabinoids in harvested cannabis, including THCa, are irrelevant with respect to its legal

⁹ <https://www.merriam-webster.com/dictionary/isomer>

¹⁰ See, eg, this website: <https://cannabislifeneetwork.com/amount-of-isomers-in-thc/>. See also, this website: <https://cannabusiness.law/thc-analogs-a-family-divided/>

¹¹ Note that, while the concentration of THCa is not relevant in determining the legal status of harvested hemp or hemp products, it is relevant in determining the legal status of hemp that has not been harvested. This is because USDA regulations require hemp to be tested for delta-9 THC using a "post-decarboxylation method" before it can be harvested. Because THCa converts to delta-9 THC when decarboxylated the THCa concentration of a pre-harvest hemp sample matters. However, and as discussed in this letter, this only applies to hemp that has not been harvested. It does not apply to harvested hemp and products made from it. Further reading on this issue, including testing standards, can be found at the following websites: <https://cannabusiness.law/total-thc-and-harvested-hemp/>, <https://cannabusiness.law/thca-and-the-dea-rod-breaks-down-the-latest-news/>

¹² 21 U.S.C. § 802(16)(B): "The term "marihuana" does not include— (i) hemp, as defined in section 1639o of title 7."

¹³ 7 U.S.C. § 1639o(1)

status.¹⁴ If the delta-9 THC concentration in harvested hemp or a hemp product does not exceed 0.3% by dry weight, then it is not a controlled substance under federal law. The THCa that Clēēn:tech derives from hemp is lawful under federal law because its delta-9 THC concentrations do not exceed 0.3% by dry weight.

IT IS LAWFUL TO TRANSPORT HEMP AND HEMP-DERIVED PRODUCTS IN INTERSTATE COMMERCE

The interstate transfer of hemp is authorized by 7 USC § 1621 subsection 10114(b), which states in relevant part: “No State or Indian Tribe shall prohibit the transportation or shipment of hemp or hemp products produced in accordance with subtitle G of the Agricultural Marketing Act of 1946 (AMA) (as added by section 10113) through the State or the territory of the Indian Tribe, as applicable.”¹⁵ Although state laws vary with respect to hemp and hemp products, it is absolutely clear that states and Indian tribes may not prohibit the transport of them through their borders. Some of Clēēn:tech’s hemp product inputs, such as cannabidiol (CBD), come from other states. Additionally, it ships some of its hemp-derived THCa to other states. The fact that these hemp cannabinoids and derivatives are shipped across state lines does not change their lawful status.

HEMP AND HEMP PRODCUTS ARE LAWFUL ACCORDING TO THE DEA

I. The Interim Final Rule

The DEA has expressly stated that hemp and hemp products are not controlled substances. On August 21, 2020, the DEA published its Interim Final Rule (IFR) in the federal register¹⁶. In its IFR, the DEA stated:

“In order to meet the definition of “hemp”, and thus qualify for the exemption from [S]chedule I, the derivative must not exceed the 0.3% delta-9 THC limit. The definition of “marihuana” continues to state that “all parts of the plant Cannabis sativa L.” and “every compound manufacture, salt, derivative, mixture, or preparation of such plant,” are [S]chedule I controlled substances unless they meet the definition of “hemp” (by falling below the 0.3% delta-9 THC limit on a dry weight basis)...” (Emphasis added).¹⁷

The DEA’s IFR continues by stating that the listing for “tetrahydrocannabinols” (ie, “THC”) under 21 U.S.C. 812(c) “does not include tetrahydrocannabinols in hemp.”

The DEA’s IFR confirms that hemp products, which by definition must contain no more than 0.3% delta-9 THC on a dry weight basis, are not controlled substances in the US.

¹⁴ See, eg, <https://cannabusiness.law/thca-and-the-dea-rod-breaks-down-the-latest-news/>

¹⁵ <https://uscode.house.gov/statviewer.htm?volume=132&page=4914#>

¹⁶ “Implementation of the Agriculture Improvement Act of 2018”, Federal Register Volume 85, Number 163 (Friday, August 21, 2020).

¹⁷ <https://www.govinfo.gov/content/pkg/FR-2020-08-21/html/2020-17356.htm>

II. DEA Public Statements

In addition to the IFR, the DEA has indicated in four public statements that cannabinoids and other cannabis materials are not controlled substances when their delta-9 THC concentrations do not exceed 0.3% on a dry weight basis.

1. DEA's First Public Statement- Town Hall Meeting

The DEA's first public statement is in the form of a video webinar called a "Town Hall with USDA and DEA" conducted by the Florida Department of Agriculture and Consumer Services (FLDACS) on June 24, 2021. In the Town Hall webinar, the DEA representative stated the following:

"[W]hat I want to say, and I'll be very, very deliberate and clear. At this time, I repeat again, at this time, per the Farm Bill, the only thing that is a controlled substance is delta-9 THC greater than 0.3% on a dry-weight basis." (emphasis added)¹⁸

2. DEA's Second Public Statement- Letter to the Alabama Board of Pharmacy

The DEA publicly addressed the legal status of the various forms of THC in hemp again in the form of a response letter to the Alabama Board of Pharmacy (ABOP) dated September 15, 2021.¹⁹ In this letter, Terrence L. Boos, Ph.D., Chief of the DEA's Drug and Chemical Evaluation Section of the Diversion Control Division, responds to the ABOP's request for the controlled status of delta-8 THC. After differentiating between the legal status of marijuana and hemp, both of which are botanically "cannabis sativa L", the DEA states:

"[C]annabinoids extracted from the cannabis plant that have a delta-9 THC concentration of not more than 0.3 percent on a dry weight basis meet the definition of "hemp" and thus are not controlled under the CSA."

Additionally, the DEA states the following in a footnote:

"The Agricultural Improvement Act of 2018 (AIA), Pub. L. 115-334, § 12619, amended the CSA to remove "tetrahydrocannabinols in hemp" from control. See 21 U.S.C. § 812, Schedule I(c)(17). As noted, however, "hemp" is defined to "mean the plant Cannabis sativa L. and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9-tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis." 7 U.S.C. 1639o. Thus, only tetrahydrocannabinol in or derived from the cannabis plant—not synthetic tetrahydrocannabinol—is subject to being excluded from control as a "tetrahydrocannabinol[] in hemp." (emphasis added)²⁰

3. DEA's Third Public Statement- Response Letter Regarding Seeds and Cannabis Materials

¹⁸ The pertinent portions of the webinar can be viewed at this website: <https://cannabusiness.law/is-d8-from-hemp-a-controlled-substance-dea-says-no/>

¹⁹ <https://albop.com/odoardu/2021/10/ALBOP-synthetic-delta8-THC-21-7520-signed.pdf>

²⁰ Ibid.

In response to an inquiry regarding the DEA's interpretation of its implementing regulations regarding cannabis the DEA stated in a letter dated January 6, 2022: “[M]aterial 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.” (*emphasis added*)²¹

4. DEA's Fourth Public Statement- Response Letter Regarding the Control Status of Several Compounds

On June 9, 2023, the DEA issued a letter to a currently undisclosed recipient in response to a request for the control status of several compounds, including delta-9 THCA.²² In that letter, the DEA states: “[C]annabinoids that are extracted from the cannabis plant and that have a delta-9 THC concentration of not more than 0.3% on a dry weight basis meet the definition of ‘hemp’.” Notably, the DEA also addresses the control status of delta-9 THCA, stating:

*“In regards to delta-9-THCA, Congress has directed that, when determining whether a substance constitutes hemp, delta-9 THC concentration is to be tested “using post-decarboxylation or other similarly reliable methods.” 7 USC § 1639p(a)(2)(A)(ii); 7 USC § 1639q(a)(2)(B). The “decarboxylation” process converts delta-9 THCA to delta-9 THC. Thus, for the purposes of enforcing the hemp definition, the delta-9 THC level must account for any delta-9-THCA in a substance.... Accordingly, cannabis derived delta-9 THCA does not meet the definition of hemp under the CSA because upon conversion for identification purposes as required by Congress, it is equivalent to delta-9 THC.”²³ (*emphasis added*)*

In this portion of the letter, the DEA is clearly referring to hemp that has not been harvested. This is because, while federal law requires the use of a post-decarboxylation testing method prior to harvesting hemp, a post-decarboxylation test does not apply to post-production hemp for the purposes of determining its control status. In fact, a post-decarboxylation testing method is inappropriate for determining the control status of harvested hemp and its derivatives, cannabinoids, and acids for the reason that it creates the molecule that it is measuring.

The two statutes cited by the DEA in its letter are the only two places in the Agriculture Improvement Act of 2018, commonly known as the “2018 Farm Bill”, that the term “post decarboxylation” appears. They both apply solely to hemp production.

In the first statutory provision, 7 USC § 1639p(a)(2)(A)(ii), Congress sets forth the criteria that states and Indian tribes must comply with in order to “*have primary regulatory authority over the production of hemp*” within their jurisdictions. The second statutory provision, 7 USC § 1639q(a)(2)(B), is similar in that it sets forth the criteria that the USDA shall use to “*monitor and regulate [hemp] production*” in

²¹ <https://s3.documentcloud.org/documents/21580238/21-7692-shane-pennington-cannabis-seeds-tissue-genetic-material-11-18-21-signed-1.pdf>

²² <file:///Users/rodkight/Downloads/DEA-THCA-and-HHC-letter.pdf>

²³ *Ibid.*

states that do not have an approved hemp plan and thus do not have primary authority over hemp production within their jurisdictions.

The key word in the above provisions is “production”. In the context of hemp, “production” is a legal term of art. Under 7 CFR § 990.1, to “produce” means: *“To grow hemp plants for market, or for cultivation for market, in the United States.”* Additionally, 7 CFR § 718.2 defines a “producer” as *“an owner, operator, landlord, tenant, or sharecropper, who shares in the risk of producing a crop and who is entitled to share in the crop available for marketing from the farm, or would have shared had the crop been produced. A producer includes a grower of hybrid seed.”* To produce hemp means to grow it.

Since the post-decarboxylation test clearly applies to producers, the DEA is correct with respect to hemp that has not been harvested when it states that *“for the purposes of enforcing the hemp definition, the delta-9 THC level must account for any delta-9-THCA.”* However, once the pre-harvested hemp has accounted for delta-9 THCA and passed the required post-decarboxylation test, it may be harvested and no further tests are required. Further, as discussed above, the DEA has confirmed that, *“the only thing that is a controlled substance is delta-9 THC greater than 0.3% on a dry-weight basis.”*²⁴

²⁵

Additionally, the legal definition of “hemp” includes its “acids”. All cannabinoids in their acidic forms contain a carboxylic acid group that degrades (ie, converts) to a different compound when subjected to a “post decarboxylation” testing method.²⁶ In other words, using a post-decarboxylation method to test harvested hemp degrades the pertinent acids in the hemp plant, rendering the term “acid” superfluous. A statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant.²⁷ For this reason any interpretation of the 2018 Farm Bill that would require a post-decarboxylation test for harvested hemp renders the term “acid” superfluous and is thus contrary to the plain language of the statute.

In conclusion, the DEA’s public statements, above, all clearly indicate that harvested hemp and hemp products containing no more than 0.3% delta-9 THC on a dry weight basis are lawful. This includes hemp-derived THCa.

FEDERAL COURTS CONFIRM THAT HEMP PRODUCTS ARE NOT CONTROLLED SUBSTANCES

²⁴ See footnote 18, above.

²⁵ The following website discusses this issue: <https://cannabusiness.law/thca-and-the-dea-rod-breaks-down-the-latest-news/>

²⁶ The undersigned confidentially asked two well-known and respected cannabis laboratory scientists about acidic cannabinoids and decarboxylation. One scientist’s response was: *“I would be comfortable saying I do not suspect that any cannabinoid in an acid form that would be standardly tested for survives the conditions required for GCMS [gas chromatography mass spectrometry].”* GCMS is a “post-decarboxylation” testing method. The other scientist had a similar response.

²⁷ *Hibbs v. Winn*, 542 U.S. 88, 101 (2004) (quoted in *Corley v. United States*, 556 U.S. 303, 314 (2009)); *Astoria Federal Savings & Loan Ass’n v. Solimino*, 501 U.S. 104, 112 (1991). See also, *Bailey v. United States*, 516 U.S. 137, 146 (1995) (“We assume that Congress used two terms because it intended each term to have a particular, nonsuperfluous meaning.”) (rejecting interpretation that would have made “uses” and “carries” redundant in statute penalizing using or carrying a firearm in commission of offense).

The federal Court of Appeals for the Ninth Circuit issued an opinion regarding hemp products, specifically products containing delta-8 THC, in the context of a trademark dispute. In its opinion, the Ninth Circuit noted that *“the only statutory metric for distinguishing controlled marijuana from legal hemp is the delta-9 THC concentration level.”* (emphasis added)²⁸ Additionally, in a separate case involving hemp, the federal district court for the Eastern District of Arkansas ruled: *“Under the 2018 Farm Bill’s standard, the only way to distinguish controlled marijuana from legal hemp is the delta-9 THC concentration level. Additionally, the definition extends beyond just the plant to “all derivatives, extracts, [and] cannabinoids. The definition covers downstream products and substances, if their delta-9 THC concentration does not exceed the statutory threshold.””*²⁹ (emphasis added)

Clēn:tech’s hemp-derived THCa, which contain no more than 0.3% delta-9 THC on a dry-weight basis, is not a controlled substance under US federal law. It is lawful “hemp” and conforms to the Farm Bill, the CSA, and the IFR. It also complies with the legal metric set forth by the Ninth Circuit Court of Appeals and the district court for the Eastern District of Arkansas.

**THCA DERIVED FROM CBD DOES NOT MEET THE DEFINITION OF
“SYNTHETIC THC”, BUT EVEN IF IT DOES IT IS NOT A CONTROLLED SUBSTANCE**

There is significant confusion regarding the legal status of cannabinoid derivatives, such as THCa, produced from CBD extracted from hemp.³⁰ This confusion is primarily due to the chemical process used to derive cannabinoids from CBD. This process raises the question of whether the resulting cannabinoid is “synthetic” or not. It is not entirely clear whether cannabinoids produced from CBD qualifies as a “synthetic” form of THC under US law since no generally accepted legal definition of the term “synthetic” exists. It is reasonable to posit that are not synthetic. However, even if they are categorized as “synthetic”, this does not render hemp-derived THC cannabinoids with no more than 0.3% delta-9 THC controlled substances. This is because the 2018 Farm Bill clearly defined “hemp” to include its “derivatives”, which by definition are “synthetic” (specifically, “bio-synthetic”) compounds.

As a matter of statutory interpretation, when two federal laws appear to be in conflict on an issue and one of the laws is older and more general than the other, the more recent and specific law controls. Legally speaking, this is referred to as the doctrine of *“lex specialis”*, which means that *“the more specific controls over the general.”* In this case, the older and more general law is the CSA, which generally includes “THC”, including its synthetic forms, on the list of controlled substances. The more recent and specific law is the 2018 Farm Bill, which expressly removes “hemp” from the CSA. Under the 2018 Farm Bill, “hemp” includes its derivatives, among which is THCa. For this reason, hemp-derived THCa is lawful under federal law.

Additionally, in the June 9, 2023 letter from the DEA to an undisclosed recipient discussed above³¹, the

²⁸ *AK Futures LLC v. Boyd St. Distro, LLC*, 35 F.4th 682 (9th Cir. 2022)

²⁹ *Bio Gen LLC et al v. Sanders et al*, 4:23 CV 718 BRW (September 7, 2023) [Document 65]

³⁰ Unless otherwise stated, all references to CBD in this letter are to CBD that has been extracted from hemp.

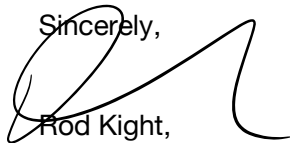
³¹ See FN 22, above.

DEA stated: “HHC does not occur naturally in the cannabis plant and can only be obtained synthetically, and therefore does not fall under the definition of hemp.”³² The letter goes on to state: “Whether a cannabinoid product synthetically produced from non-cannabis materials is controlled depends on whether that product contains “any quantity” of a synthetically produced tetrahydrocannabinol.” (*emphasis added*) Based on the above, Finally, the THCa produced by clēēn:tech is not a controlled substance. This is because (a) THCa occurs naturally in the cannabis plant, and (b) the THCa produced by clēēn:tech through its proprietary and patented process is from cannabis materials.

CONCLUSION

Harvested cannabis material and its derivatives containing delta-9 THC concentrations that do not exceed 0.3% by dry weight are lawful hemp under federal law, regardless of their concentrations of THCa or any other cannabinoid. As discussed in this letter, this conclusion is supported by all three branches of the federal government: by Congress in the hemp provisions of the Farm Bill, by the Executive in the DEA’s IFR and other public statements, and by the federal courts. Finally, use of a post-decarboxylation test on harvested hemp and its derivatives is not required since the statutory references to it solely apply to hemp that is in “production”, which means hemp that has not been harvested. Also, it renders a portion of the statutory definition of “hemp” superfluous. In fact, use of such a test is inappropriate since it creates the molecule that it is measuring, thus distorting the test result and creating illegal marijuana out of lawful hemp.

Sincerely,



Rod Kight,
Attorney

³² This is actually incorrect since HHC is produced naturally in the cannabis plant. See, Docampo-Palacios ML, Ramirez GA, Tesfatsion TT, Okhovat A, Pittiglio M, Ray KP, Cruces W. Saturated Cannabinoids: Update on Synthesis Strategies and Biological Studies of These Emerging Cannabinoid Analogs. *Molecules*. 2023 Sep 4;28(17):6434. doi: 10.3390/molecules28176434. PMID: 37687263; PMCID: PMC10490552.