Industrial Hemp Advisory Board (IHAB) Meeting
California Department of Food and Agriculture (CDFA)

1220 N Street, Auditorium
Sacramento, CA 95814

Wednesday, August 22, 2018
10:00 AM – 1:00 PM

Board Members	CDFA & Guests	
Van Butsic (Absent)	G.V. Ayers	Hayden Oilar
Joshua Chase	Anthony Biagi	D. Phillips
Rick Gurrola	Chris Boucher	Michelle Phillips
Allison Justice	Tony DeVeyra	Wayne Richman
Matt McClain	Justin Eve	Robin Sanchez
Valerie Mellano (Absent)	Janice Jurado	Jennie Tedlos
Tom Pires	Joshua Kress	Tiffany Tu
David Robinson (Absent)	Peter Koulouris	Cathy Vue
John Roulac	Mateo Munoz	Marie Ziegel
Lawrence Serbin		
Richard Soria		

1. **Roll Call and Opening Remarks**
   Meeting called to order at 10:05 AM by Lawrence Serbin, Board Chair. Board members and Program staff provided self-introductions.

   Serbin briefly reviewed the meeting's agenda. Michelle Phillips, Senior Environmental Scientist of the CDFA Nursery, Seed, and Cotton Program, reviewed general housekeeping information.

2. **Approved Seed Cultivars Task Force Report**
   Joshua Chase and Matt McClain summarized planting material requirements from Colorado, Kentucky, North Carolina, and Oregon.

   Chase and McClain presented a proposal to expand the current list of approved seed cultivars for industrial hemp to allow the following planting material:
   - Seeds or transplants that met the criteria of breeder, foundation, registered, or certified categories defined by CCIA or a certifying agency recognized by CCIA
   - Seeds or transplants produced lawfully under a state agricultural pilot program
   - Seeds or in-vitro plants of international origin
   - Seeds or transplants produced in California

   Chase and McClain proposed that planting material meeting the criteria for breeder, foundation, registered, or certified categories will be required to have a certifying tag of varietal purity issued by CCIA or a certifying agency recognized by CCIA.

   Chase and McClain proposed that planting material from another state must be accompanied by documentation showing that the material was produced by a licensed grower and the crop in which the material was harvested from had no more than 0.3% THC content. They proposed that

no more than 10 vegetative propagules could be imported into the state, and would be required to undergo a 30-day screenhouse quarantine and deep sequencing for potential pathogens.

Chase and McClain explained that international seeds and in-vitro plants were required to be imported under a DEA permit or phytosanitary certificate and recommended they be accompanied by documentation to showing the crop in which the material was harvested from had no more than 1.0% THC content. They proposed that the planting material be required to undergo a 30-day screenhouse quarantine and deep sequencing for potential pathogens.

Chase and McClain proposed that California seeds or transplants be permitted for cultivation if the crop in which the material was harvested from had no more than 0.3% THC content. McClain noted that the presentation should have included language to specify that seed breeders and established agricultural research institutions could produce seeds.

Serbin asked about the proposed requirement for a 30-day greenhouse screening period requirement. Chase explained that the planting material would be quarantined to allow the county to inspect the material for insects and pathogens. Chase noted that deep sequencing costs ranged from $500 to $1,000.

Serbin contended that shipments with phytosanitary certificates would be already certified to be free from pests. Chase explained that a phytosanitary certificate did not necessarily certify the material is free from all pests. He noted that there were some oversight including observational or testing periods with other crops, but also that there were other crops that could be imported without further testing. Chase stated that he did not believe that a 30-day quarantine was too restrictive.

Serbin asked Joshua Kress if he was aware of any crops that required an additional screening. Kress replied that there were a number of crops that require some form of quarantine. Kress noted that grapevines must be imported under a controlled import permit from the USDA and the quarantine period could be up to 3 years for index testing. He stated that he not aware of any quarantine requirements specifically for California, but explained that it did not mean that there were not any.

Serbin asked if the importation of material was normally federally regulated. Kress confirmed and explained post-entry quarantines were generally a collaborative effort between USDA, CDFA, and the counties.

Serbin asked Pires if he had to quarantine any material from out of state. Pires stated that he had no experience.

Pires asked the task force which state's framework they preferred. Chase explained that the task force complied what they liked into the proposal. Pires asked if those were the only states with industrial hemp cultivation programs. Chase stated they reviewed only four of the 29 states that have industrial hemp cultivation programs

Pires asked how many acres were grown in other states. McClain responded that Kentucky and Colorado harvested 7,000 and 10,000-12,000 acres last year, respectively. Pires believed Kentucky acreages was higher that what McClain reported. McClain explained that the acreage was lower than anticipated due to flooding. Roulac noted that the VoteHemp report listed the acreages grown in other states for 2017. He commented that Montana had a lot of acres planted this year.

Justice asked if the proposed limit of 10 vegetative propagules was per variety, farmer, or year. Chase explained that the limit was per shipment of a given variety. However, he noted that this would need further discussion.

Justice asked who would be operating the screenhouses. Rick Gurrola stated that the counties could oversee any post-entry quarantine, just as they are contracted by CDFA to conduct a variety of activities. However, Gurrola stressed that the scope of work must be detailed for clarity. Kress explained that any post-entry quarantine would be the grower's responsibility including establishing the greenhouse and maintaining the plants. Kress stated that CDFA or the county could conduct inspections based on a hourly rate.

Pires asked about deep sequencing. Chase explained that the process would replicate genetic material in the plant sample to help identify pathogens.

Serbin noted that the Vote Hemp report stated that 25,713 acres were grown and 1,456 licenses/registrations were issued in the United States for 2017. He also noted the top producing states were Colorado and Oregon and the lowest producing state was Nebraska with one acre grown. He explained that it was too early to know how many acres were planted in 2018. Roulac commented that there was an expected 30-40% increase in Colorado, Montana, and Oregon for 2018.

Serbin stated that he was hesitant to further restrict farmers, especially if it involved more governmental agencies and costs. McClain explained that the intent of this proposal was to widen the breadth of seed and plant material available to be grown in California.

Gurrola asked if the proposed number of 10 vegetative propagules could be increased.

Gurrola asked about the THC allowance of 1.0% for material from international sources. McClain explained that this would allow the use of some international varieties found to be borderline compliant. He commented that it would require additional work with Alex Mkandawire from CCIA. Roulac provided Finola as an example of a variety with good yield that was bred to reduce the THC levels. McClain also noted that varieties may interact differently with the various microclimates in California. He emphasized that the restriction was for growers, not seed breeders and established agricultural research institutions.

Serbin asked if seed breeders in California could sell their seeds for cultivation. McClain replied that the task force's proposal would allow the sale of seed produced in California.

Pires asked about the quality assurance program. McClain stated that a quality assurance program would fall under the first category within the proposal. Kress noted that the proposal referenced certified material and other levels of certification but it did not reference a quality assurance program. Chase confirmed that the proposal should include language for planting material produced in quality assurance program.

Kress reiterated that the list of approved seed cultivars was only applicable to commercial growers. He noted that seed breeders and established agricultural research institutions were exempt from the requirement.

Kress listed three items in the proposal that needed consensus from the Board: the 10 vegetative propagules limit, the 30-day quarantine and deep sequencing provision, and the 1.0% THC allowance for planting material of international origin.

Serbin raised concerns regarding the proposed 30-day quarantine. He stated that it did not make sense to include that requirement when a phytosanitary certificate would satisfy federal requirements. Serbin stated that he was worried that the quarantine requirement would further delay planting and result in more time, money, and effort for CDFA to be involved. He recommended that the requirement be stricken from the proposal. Chase clarified that the 30-day quarantine requirement was only for propagative material, not seed.

Justice commented that states may not be willing to get involved with the export process and provide phytosanitary certificates for interstate shipments.

Chase explained that most states required material to be inspected at origin and destination. He stressed that there should be a visual inspection at minimum. McClain stated that the visual inspection could be done in conjunction with the site visit to verify GPS coordinates.

Chase asked if there were any plants that could be imported without inspection. Justice noted that some requirements included treatment of plants. Kress responded that there were various quarantines based on the origin of plants. He explained that plants coming into California generally come in through one of the border protection stations and are permitted to enter the state under a Warning Hold Notice (008). The counties then have the option to inspect and approve of the shipment upon arrival at destination. Kress noted that any plants coming into the state must meet all quarantine requirements and general nursery stock cleanliness requirements, and are subject to inspection by the county.

Pires asked about the requirements for other agricultural plants and seeds. Serbin replied that there were preexisting plant quarantines in place that may apply to industrial hemp. Kress clarified that any pest that an industrial hemp plant or seed could be a host for would apply. Kress noted that it was not generally known what pests industrial hemp could be a host for. He explained that testing for chemical content was not common for other plants. He also noted that the importation of nursery stock required that the material came from a licensed nursery in the state of origin, but certification wasnot required for most plants. Kress provided cotton and rice as examples of crops that required the use of certified seed and explained that requirements for planting material were based on the risks and needs of the industry and environment.

Serbin asked Gurrola if counties handle any post-entry quarantine activities. Gurrola confirmed that counties conduct inspections of plant material shipped into California under contracts with CDFA to conduct such activities. Gurrola reiterated that planting material would be inspected at point of entry and may require certification, depending on the crop and origin.

Serbin asked about the inspection process at the border protection station. Gurrola explained that drivers were required to show the manifest and declare the shipment. Inspectors may or may not inspect the shipment depending on the feasibility. Shipments were then placed under a hold to destination, where the local county could inspect the shipment.

Serbin stated that since there were pre-existing rules in place for agricultural products that there was no need to place any additional requirements specifically for industrial hemp. Gurrola expressed concerns regarding the lack of knowledge of the pests industrial hemp plants may harbor. He recommended that more information was needed from subject matter experts. Kress

recommended the inclusion of language reiterating that shipments must be inspected and released at destination since not all stations are 24/7 operational and there were ways to drive around a station. Gurrola stressed that counties did not charge for the inspection of the shipments.

Roulac stressed the need to find a balance for preventing pests. Roulac provided the red imported fire ant as an example of a major pest of concern. Roulac commented that industrial hemp cultivation already faced various layers of rules and regulation and the cost to operate a business in California was steep. Roulac recommended to adjust the proposal and seek public comments.

Kress explained that the law required the proposal to be presented at a public meeting. He clarified that the discussion was for the Board to come to a general consensus on the details. Kress explained that the actual language would be drafted and posted along with the notice and agenda for the next meeting. Public commenting would take place at the next meeting and what would be agreed upon at the meeting would not be subject to further review pursuant to the Administrative Procedures Act.

Roulac recommended that the public be provided 30 days to review the notice and proposed amendment.

Serbin asked about the proposed 10 vegetative propagules limitation. Chase explained that the purpose of the restriction was to limit the pest risk. Chase noted that during the proposed 30-day observation, growers could expand the material within the greenhouse. He noted that planting would be delayed but the requirement would limit the pest risks. McClain commented that it would be more logical to import seed than cuttings. Chase emphasized that there was no proposed limit on the quantity of imported seed.

Serbin asked if the proposed limit was for clones or types of clones. Chase explained that the proposal was 10 clones of a given variety. He noted that the importation of grapevine cuttings was limited to 10 or 30 cuttings at a time. Serbin stated that it did not seem commercially viable to limit the number of vegetative propagules that can be imported. Chased agreed that it would not be viable for a grower trying to plant 100 acres. However, 10 cuttings could be expanded to provide planting material enough for a few acres in a couple months, and hundreds of acres a few months later.

Richard Soria asked if vegetative propagules and clones meant small plants. Chase replied that vegetative propagule was defined as a cutting from a plant, with or without roots. Soria asked about provisions for mother plants. Chase responded that it was not defined in the proposal, but the size of a propagule was not restricted in the proposal.

Justice stated that although she understood the attempt to limit the pest risk, she felt that the proposed limit on the number of vegetative propagules was too limiting. She noted that the limit would require farmers to have a setup for propagation. Justice suggested removing the limits on vegetative propagules from the proposal.

Pires and Roulac agreed. Roulac stated that Oregon, a leader in CBD production, would be restricted by the limitation if businesses wanted to expand down into California. Roulac explained that once there was enough material to meet the demand for planting material, the market would allow for greenhouse operations.

McClain explained that he preferred seed importation to allow the California nursery system to propagate instead of giving preference to clonal material outside of the state. Roulac noted that

California's industry was two years behind, and the limitation would further delay the industry's growth. Chase stated that he was willing to expand the amount of vegetative material allowed but was in favor of limiting the amount. He noted that the existing infrastructure in California could expand varieties quickly.

McClain suggested expanding the proposed limit to 1,000 vegetative propagules. Serbin commenteded that farmers should be able to make the decision and further limitations will only delay the growth of the industry. McClain stated that the reason why California had fallen behind was due to restrictive legislation and explained that the purpose of amending the approved seed cultivar list was to provide more sources and opportunities to the farmers. Serbin explained that a limitation on vegetative propagules would limit farmers from being able to use clones from proven plants and that seeds were more of a risk for farmers.

Serbin asked for a voice vote on which board members were in favor of limiting the number of vegetative propagules that can be imported. Chase and McClain were in favor of a limitation. Justice, Pires, Roulac, Serbin, and Soria were opposed to a limitation. Gurrola abstained from the vote.

Kress explained that allowing planting material with THC content up to 1.0% from international sources did not comply with existing state law, even if the material was certified. McClain agreed to revise the proposal to limit the THC content of international planting material to 0.3% and allow seed breeders to focus on varieties with THC between 0.3% and 1.0%. Kress reiterated that seed breeders and established agricultural research institutions were not required to use approved seed cultivars.

Kress asked the Board if they would like to see any additional restrictions beyond federal law for planting material from international sources. Serbin replied he did not. McClain suggested requiring certified seeds. Chase explained that in-vitro plants would not be certified by AOSCA member organizations, and therefore would be excluded if certification was required.

McClain recommended the proposal be revised to change the THC limit from 1.0% to 0.3%. Serbin agreed.

Justice ask for clarification on in-vitro plants. Chase explained that in-vitro meant sterile test tube plants, free from insects, soil, and most bacteria.

Serbin reiterated his recommendation to remove the 30-day greenhouse quarantine requirement for planting material from both out-of-state and international sources. Kress clarified that the proposal will be revised to remove the 30-day greenhouse quarantine requirement and include language for inspection and release by the county.

Serbin stated that there was already federal oversight on out-of-state shipments of planting material. Chase noted that there were no federal regulations on industrial hemp except for the requirement of a DEA permit. Kress recommended inclusion of language in the proposal to inform the public that planting materials are required to be inspected and/or released by the county. Kress explained that although shipments were subject to inspections at the border protection stations or ports, only a percentage of shipments were inspected. Kress recommended including language that was a current, albeit not universally known, requirement. Serbin agreed that the recommendation was reasonable.

Wayne Richman, California Hemp Association, explained that legal provisions in the cannabis industry ensured that farmers within the state would have the advantage. Richman suggested the same should be considered for industrial hemp. He expressed concerns regarding allowing unlimited planting material to come into the state.

Justin Eve, 7 Generations, supported the idea of allowing farmers to have access to planting material with a THC content of up to 1.0%. He explained the THC restriction of 0.3% would limit the seed stock availability. Eve noted that he supported quarantining to minimize pest risk.

Eve also noted that in-vitro is defined as in glass and not necessarily tissue culture. He suggested clarification on the definition of in-vitro plants.

Tony DeVeyra, California Hemp Foundation, stated that no restriction the number of imported transplants will hurt the nursery infrastructure in California. He explained that it did not make logical business sense for farmers to import clones each year as it would not take long for nursery propagators to mass produce. He recommended on restricting vegetative propagules to a small amount to minimize the pest risk.

DeVeyra commented that deep sequencing may not be needed for tissue cultures. Kress explained that other crops may require testing and therapy, depending on the crop and pest risk. Chase explained that in-vitro would ensure no visual pests, but not microscopic pests. DeVeyra asked if in-vitro was limited to material sourced internationally. Chase confirmed. DeVeyra asked if deep sequencing would be required. Kress explained the Board had recommended to exclude the quarantine and deep sequencing requirements.

Kress requested a motion to allow the task force and the Department to move forward with the proposal. Kress explained the process would require the development of the regulation language. Once drafted, the proposed language would be posted with the next meeting notice and agenda to allow for public review.

Board Motion #1:
Lawrence Serbin moved to recommend that the Department draft regulations based on the proposal presented by the task force with the following amendments:

- Addition of seeds or transplants produced under a quality assurance program
- Removal of the 30-day quarantine requirement for vegetative propagules from another state or country
- Removal of the deep sequencing requirement for vegetative propagules from another state or country
- Removal of the limit on the number of imported vegetative propagules
- Addition of a requirement for notification of shipments to county agricultural commissioner
- Amendment of the THC limit for planting material from international sources to 0.3% to comply with federal law

Joshua Chase seconded the motion.

Chase asked if the inspection by the county would be required. Kress explained that seed shipments from known sources are frequently released over the phone instead of a visual inspection. Gurrola stated the that shipments would be subject to inspection.

Roulac asked if the THC restriction applied to farmers and not seed breeders. Kress confirmed.

The Board voted on Motion #1 as follows:

Yes:	Joshua Chase, Rick Gurrola, Allison Justice, Matt McClain, Tom Pires, John Roulac, Lawrence Serbin, and Richard Soria
No:	None
Abstained:	None
Absent:	Van Butsic, Valerie Mellano, David Robinson

Motion carried.

3. Sampling and Testing Task Force Report

Justice and Soria presented additional recommendations regarding sampling and testing for THC content to address items raised by Kress at the July 25, 2018 meeting when he presented the draft guidelines based on the Board's original recommendation from the April 24, 2018 meeting.

Justice explained that she and Soria recommended the use of BCC-licensed laboratories which are also ISO-accredited.

Kress noted that the requirement for sampling to occur within 30 days of harvesting is included in SB 1409 but did not comply with existing law.

Justice explained that she and Soria recommended temperatures between 45-95 degrees Fahrenheit to further clarify the original recommendation of maintaining samples in cool storage during transport. Justice also explained that they recommended samples were delivered to the laboratory on the same day sampling occurred.

Soria explained that they recommended the removal of the word "random" in the proposed guidelines to avoid any confusion. Soria also explained that they recommended the submission of a harvest report 30 days before harvesting. The laboratory would then conduct sampling and testing within that timeframe.

Soria stated that they recommended a moisture content of 13% and the use of 1 mm screens for sample preparation.

Soria stated that they recommended allowing harvesting before the farmer received the test results, but not allowing the material to enter into the marketplace until the farmer received the test results. Justice explained the recommendation would provide the flexibility of harvesting and blending of the crop with passing material in cases where retesting was required.

Kress explained that current law and SB 1409 required that test results are obtained prior to harvesting but it was not clear when retesting should occur. Kress noted that retesting and enforcement guidelines would need to be further defined.

Justice noted that the task force revised general standard operating procedures for cannabis testing laboratories to fit industrial hemp. Justice explained that the task force's recommendations included requirements for sampling and chain of custody of samples.

Serbin asked if the county would be required to come to the farm for sampling. Justice and Soria confirmed that their proposal did not require the county to be present during sampling. Gurrola questioned the purpose of including the county in the sampling and testing process since the recommendations did not provide for enforcement oversight by the counties. Gurrola pointed out

that the proposal only provided for the counties to receive the test results but did not provide for confirmation of the test results. Gurrola stressed the need for a methodology for enforcement oversight.

Serbin commented that he liked that the proposal did not include the counties. Gurrola asked who would be providing the oversight. Gurrola noted that it did not have to be the counties and offered law enforcement as an alternative. Gurrola explained that the county would more likely refer to law enforcement when taking regulatory enforcement action. Gurrola noted that the only requirement in the law for the county was registration.

Pires agreed with Gurrola's perspective and commented that there should be some oversight.

Justice asked if it made sense to have the counties supervise the laboratory staff during sampling. Gurrola explained that the counties could sign off on the chain of custody, but that currently crop destruction did not have to be the counties' responsibility. Gurrola stressed the importance of oversight and the money at stake for crop destruction. He commented that the guidelines should reassure the public and lawmakers of proper enforcement.

Kress asked for clarification from the Board on the regulatory official involved with sampling, oversight on laboratories to ensure regulations are followed, and the roles of the state and county for enforcement purposes. Serbin replied that the samples should be taken by an approved laboratory. Serbin asked if using a BCC-licensed laboratory would alleviate the need for enforcement. Justice commented that laboratories are committed to be being professional and maintain proper conduct. Soria commented that laboratories would risk losing their license if they participated in illegal activities.

Serbin asked about the laboratory requirements. Kress explained that current law required the use of DEA-registered laboratories. He stated that if SB 1409 passed, then the requirement would be changed to a department-approved laboratory. Kress noted that the Department would ask the Board to help define an approved laboratory.

Roulac suggested looking at other states like Colorado or Oregon. He stated that he understood testing in Colorado took approximately 2-3 weeks. Kress explained sampling and testing in most states were conducted by state employees. Kress noted that he was not aware of any sizable state program that was conducting 100% testing. He commented that California law required every planting to be tested.

McClain asked about ISO-accredited laboratories. Justice explained that there were roughly 100 ISO-accredited laboratories in California and the BCC required laboratories to maintain such accreditation.

McClain commented that county agricultural commissioners should be taken out of the sampling and testing process as much as possible and law enforcement should handle crop destruction instead. Soria agreed with McClain that law enforcement should be involved with crop destruction.

Serbin commented that the use of approved laboratories would potentially eliminate the need for oversight. He raised concerns regarding workload placed on counties and felt that law enforcement was not necessary for the destruction of a crop.

Pires asked about sampling requirements. Serbin explained that farmers could conduct as many tests as they wanted. However, the proposal for the official sample prior to harvesting was to be sampled by laboratory staff.

Justice asked for Gurrola's perspective on the impact of the proposed sampling process on the counties. Gurrola replied that current law only mandated the counties be involved with registration. Gurrola suggested the use of county code enforcement as an alternative to law enforcement. Gurrola expressed concerns regarding inadequate oversight.

Serbin asked about crop destruction. Justice replied that the task force did not look into crop destruction. Serbin suggested remediation as a possible crop destruction method.

Kress explained that the discussion regarding crop destruction was outside the scope of the sampling and testing task force. He recommended that a task force be assigned for further investigation.

Richman suggested that farmers should be able to obtain a cannabis cultivation license to avoid crop destruction.

G.V. Ayers stated the recommendation to use BCC-licensed laboratories may bottleneck testing activities for farmers. He commented that BCC-licensed laboratories may only be authorized to test cannabis.

Serbin asked about laboratory requirements in SB 1409. Kress replied that SB 1409 proposed the use of "department-approved" laboratories and the Department needed a recommendation from the Board to identify the laboratories.

Serbin raised concerns of cross contamination with the use of BCC-license laboratories. Justice replied that there was potential bottlenecking with the use of either DEA-registered or BCC-licensed laboratories. Justice commented that the BCC-licensed laboratories are interested in conducting testing for industrial hemp. Justice commented that BCC-licensed laboratories would provide the fastest way for farmers to have access to testing laboratories.

Chase asked if the requirement could be expanded to require ISO-accredited laboratories. McClain noted that the bottleneck issue may be alleviated as laboratories receive additional investments. McClain recommended including pesticide testing.

McClain asked for clarification on the role of the farmer during sampling. Soria explained that the laboratory staff should conduct the sampling with the farmer present. Kress noted that this practice was currently used for cannabis.

Serbin and Pires agreed with the sampling protocol proposed by the task force. Gurrola stated that he agreed with the sampling protocol with the assumption there was oversight on the sampling.

Richman suggested requiring industrial hemp be segregated in a separate room at the laboratory from cannabis to avoid cross contamination.

Board Motion #2:

Lawrence Serbin moved to have CDFA incorporate the task force's recommendations on sampling and testing for THC content into draft regulations to be presented to the Board prior to initiating the rulemaking process. Richard Soria seconded the motion.

Chase asked about the CDFA's need for additional recommendations from the Board. Kress replied that question would be for the Board to answer. Kress explained that some of the sampling and testing recommendations conflicted with current law. He noted that the motion was to accept the task force report with the caveat that SB 1409's passage may require additional discussion. Kress also noted that the Board did not provide a recommendation on the testing laboratory.

Chase asked about the process for drafting regulations. Kress explained that the Department would update the guidelines with the recommendations presented and present the guidelines back to the Board. Kress noted that the Department cannot move forward with the rulemaking as proposed due to the conflicts with existing law.

Chase asked if the Department could move forward with regulations based on current law. Serbin explained that it would not help since current law requires the use of a DEA-registered laboratory.

Chase asked if regulations could be drafted with language to require the use of DEA-registered laboratories. Kress explained that the requirement was in current law and did not need further clarification in regulation.

McClain asked if regulations were needed to clarify testing protocols. Kress replied that the recommendations presented by the task force would be incorporated into the guidelines for sampling and testing. Kress noted the outstanding question for the Board to identify the testing laboratory. Kress explained that the Board could decide what else it felt was needed to be included in the guidelines, and that any recommendations that conflicted with current law would be amended to mirror current law.

McClain asked if the Board could change the DEA-registered laboratory requirement. Kress replied that the Board did not have discretion to amend the law.

Soria stated that he was referred back to Kress when he spoke to the DEA regarding testing.

Chase asked if CDFA's laboratory was registered with the DEA. Kress replied that he did not believe the state laboratory was registered with the DEA. He explained that DEA-registered laboratories consisted of governmental laboratories that tested controlled substances.

Chase commented that there was no workaround to the DEA-laboratory. Serbin stated that the Board was aware that a legislative amendment was needed. Kress explained that any recommendations that cannot be acted on would be removed from a proposed regulation prior to rulemaking.

Pires asked about cultivating in 2019 and urged the Board to continue the progress.

McClain asked if CDFA would proceed to post the proposed regulations for public comment. Kress explained that it would depend if the Department had a complete regulation and there were no conflicts with changes to the law.

Serbin reiterated that the Board should see the final rules before CDFA proceeded with the rulemaking process.

The Board voted on Motion #2 as follows:

Yes:	Joshua Chase, Allison Justice, Matt McClain, Tom Pires, John Roulac, Lawrence Serbin, and Richard Soria
No:	Rick Gurrola
Abstained:	None
Absent:	Van Butsic, Valerie Mellano, David Robinson

Motion carried.

4. Public Comments Next & Next Meeting/Agenda Items

Roulac raised concerns regarding the California Department of Public Health's (CDPH) determination on CBD in food products. Serbin commented that the Board did not advise the CDPH.

Pires asked about the status of board membership for tribal representation. Kress explained that the board membership was outlined in current law. He noted that the recommendation for tribal representation required legislative change and a recommendation was presented during the discussion on SB 1409. McClain commented the Board's recommendation did not get included in current version of SB 1409.

Chase asked about amending the laboratory requirement in current law. Kress explained that SB 1409 included language to change the requirement.

Chase asked about the status of the registration fee regulation. Kress explained that the regulation was under internal review and approval within the Department. Kress noted that the public would be notified once the regulation was posted. Serbin asked what was delaying the regulation. Kress replied that there was nothing in particular causing delays.

Gurrola asked if the Department could check on the status of the regulation. Kress replied yes.

McClain asked if the status of the regulation be an agenda item for the next board meeting. Kress replied yes.

Serbin asked for volunteers to work on the task forces to further investigate testing laboratories and crop destruction. Justice and Soria volunteered to further investigate testing laboratories. Pires and Chase volunteered to further investigate crop destruction methods.

McClain asked if there was anything else needed from the Board for amending the list of approved seed cultivars at the next meeting. Kress explained that the Department would meet with the task force for further discussion.

McClain asked if there was anything else needed from the Board for the registration application. Kress replied no.

Eve asked if the rulemaking would include the harvest report or sample description. Kress explained that the Department will re-present the guidelines for sampling and testing after incorporating the recommendations from the task force.

Eve suggested allowing more laboratories beyond BCC-licensed laboratories to conduct the THC testing for industrial hemp.

Eve requested an outline of the internal review process for the registration regulation.

Eve commented that the language on the CDFA website was misleading and suggested removing the language declaring cannabis as a Schedule I drug or adding the full text of Section 7606 of the 2014 farm bill. Kress explained that any suggestions on text posted to the CDFA website can be forwarded to program's general inbox.

Serbin echoed Eve's suggestion to include the 2014 Farm bill language on the CDFA website. Pires commented the language would be helpful for establishing agreements with schools. Gurrola noted that the farm bill provides for an agricultural pilot program, which California did not have. Serbin commented that the all of the federal law should be referenced if CDFA was to include some federal language on the website.

Richman raised concerns regarding the use of BCC-licensed laboratories for industrial hemp.

Mateo Munoz, Restorative Botanicals, commented that there was an executive order that required the Department to meet and consult with Native American tribes that would help offset the lack of tribal representation on the Board.

Munoz echoed Roulac's concern over CDPH's determination on CBD in food products. He noted that cannabis was allowed in edibles and beverages.

Serbin requested that the Board meet next to discuss approved laboratories, amending the list of approved seed cultivars, the status of the registration fee regulation, crop destruction, and the CDFA webpage.

The Board tentatively set the next board meeting for September 2018, pending confirmation.

5. Adjournment

Meeting adjourned by Serbin at 1:24 PM.

Respectfully submitted by:

Michelle Phillips
Senior Environmental Scientist (Specialist)
CDFA Nursery, Seed and Cotton Program

Proposed Methodology and Procedure to Update the List of Approved Seed Cultivars
For Consideration by the Industrial Hemp Advisory Board
at the October 30, 2018 Board Meeting

In Title 3, California Code of Regulations, Division 4, adopt:

Chapter 8. Industrial Hemp Cultivation

Article 2. Regulations for Industrial Hemp Cultivation

§ 4921. Methodology and Procedure to Update the List of Approved Seed Cultivars.

(a) The Secretary adopts the following methodology and procedure to add, amend, or remove a seed cultivar from the list of approved seed cultivars.

(1) Upon request from the chair of the Board, or of any four members of the Board, the Department shall schedule a public hearing to consider a proposal to update the list of approved seed cultivars by adding, amending, or removing seed cultivars. A notice and text of the proposal shall be made available to the public no less than 30 days prior to the hearing.

(2) The public hearing to consider a proposal to update the list of approved seed cultivars shall be part of a regularly scheduled meeting of the Industrial Hemp Advisory Board.

(3) The public hearing shall include:

(A) Presentation of the proposal to update the list of approved seed cultivars;
(B) Presentation of the purpose for the update; and
(C) Opportunity for public comment, pursuant to Section 11125.7 of the Government Code.

(4) After receiving comments from the public, the Board shall vote to accept, amend and accept, or deny a proposal for recommendation to the Secretary.

(5) Upon recommendation by the Board to adopt a proposal and approval by the Secretary, the Department shall amend the list of approved seed cultivars and shall submit the amended list to the Office of Administrative Law to be filed promptly with the Secretary of State. Pursuant to Section 81002 of the Food and Agricultural Code, the proposal shall not be subject to further review.

(6) The Department shall post the list of approved seed cultivars to its website and shall provide electronic and/or mail notification of amendments to list of approved seed cultivars to parties that have requested notification. An interested party may go to

the Department's website and elect to receive automatic notifications of any changes to the list of approved seed cultivars via an electronic mail listserv.

(b) Amendment of the methodology and procedure.

(1) By motion, the Board may recommend amending the methodology and procedure in subsection (a). In consultation with the chair of the Board, the Department shall schedule a public hearing to consider the recommendation, and a notice and text of the proposed amendment shall be made available to the public no less than 30 days prior to the hearing.

(2) The public hearing to consider a proposal to amend the methodology and procedure shall part of a regularly scheduled meeting of the Industrial Hemp Advisory Board.

(3) The public hearing shall include:

(A) Presentation of the proposal to amend the methodology and procedure;
(B) Presentation of the purpose for the amendment; and
(C) Opportunity for public comment, pursuant to Section 11125.7 of the Government Code.

(4) After receiving comments from the public, the Board shall vote to accept, amend and accept, or deny the proposal for recommendation to the Secretary.

(5) Upon recommendation by the Board to adopt the amendment and approval by the Secretary, the Department shall amend the methodology and procedure, and shall submit the amended methodology and procedure to the Office of Administrative Law to be filed promptly with the Secretary of State. Pursuant to Section 81002 of the Food and Agricultural Code, the proposal shall not be subject to further review.

(6) The Department shall provide electronic and/or mail notification of the amendment to the methodology and procedure to parties that have requested notification. An interested party may go to the Department's website and elect to receive automatic notifications of any changes to the methodology and procedure via an electronic mail listserv.

Note: Authority cited: Sections 407 and 81002, Food and Agricultural Code
Reference: Sections 81001 and 81002 Food and Agricultural Code

THCA and THC: What's the Difference?

The relation? THCA becomes THC.

THCA non-intoxicating when consumed in raw cannabis (fresh, uncured, and unheated) but intoxicating once it has become THC

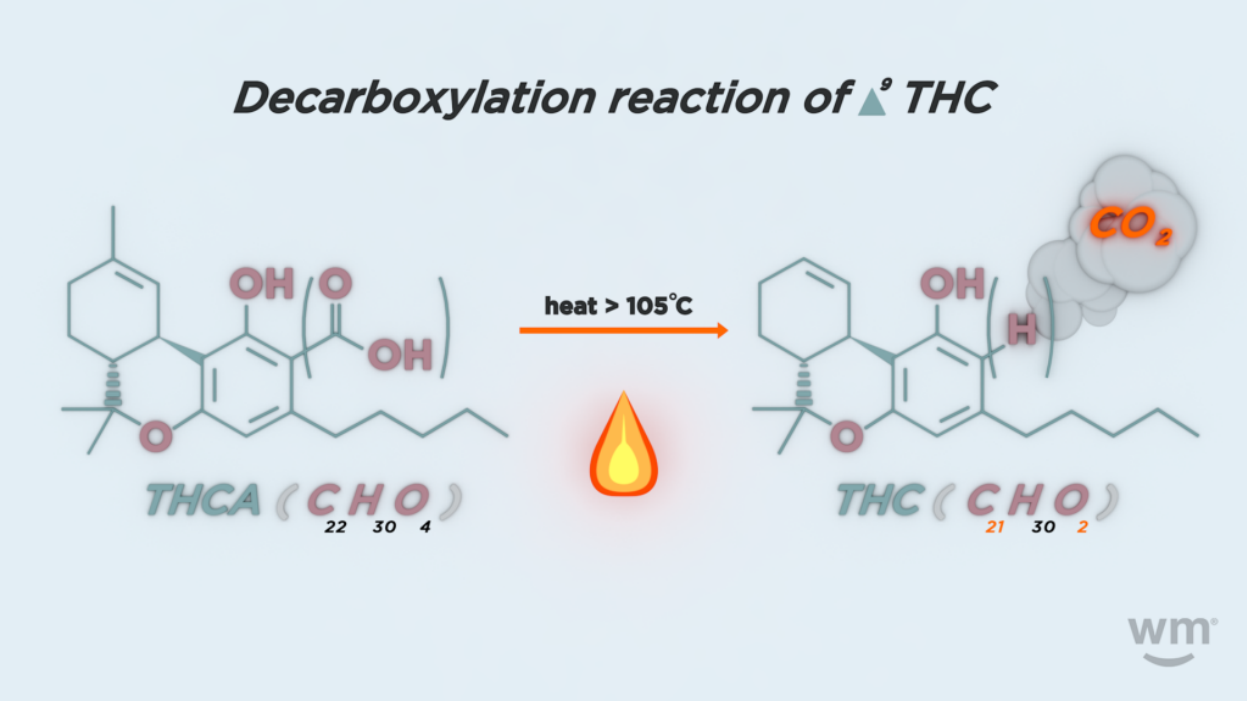
Only a few cannabinoids cause the euphoric high that is unique to the cannabis plant. Most people assume that during the growth period the cannabis plant is producing THC, when it is actually primarily producing a larger molecule: THCA.

THCA is the non-intoxicating precursor that becomes THC when exposed to heat over a prolonged period of time. THCA that's found in the cannabis plant won't make you feel high. This is how you can eat or drink the raw plant and not feel its intoxicating effects. The THCA molecule doesn't fit into the brain's cannabinoid receptors.

THCA is a larger compound than THC. This is due to the extra carboxyl group attached to the molecule; it's this carboxyl group that defines THCA as an acid. In fact, most cannabinoids (CBDA, CBGA, THCVA) take this acidic form when harvested and it is only later that they become the cannabinoids (CBD, CBG, THCV).

The term for converting THCA into THC is decarboxylation. Simply put, it's the process of removing the carboxylic acid group from a cannabinoid, a change that enhances its ability to interact with the body. Without decarboxylation, THCA have very little affinity for the cannabinoid type I (CBI) receptor since they can't fit. CB1 receptor activation is a requirement for intoxication; if molecules don't fit here, they can't get you high.

Heat removes a carboxylic acid group from THCA, and the molecule decarboxylates into THC. As a smaller cannabinoid, THC is able to bind to CB1 receptors throughout the human body, producing intoxication.



The human body is not capable of converting THCA into THC.

Heat, Light, and Other Ways THCA Converts to THC.

THCA is considered “thermally unstable,” which is another way to emphasize that it will alter when provoked by heat. Because of THCA’s instability, the molecule lends itself to several different methods of decarboxylation

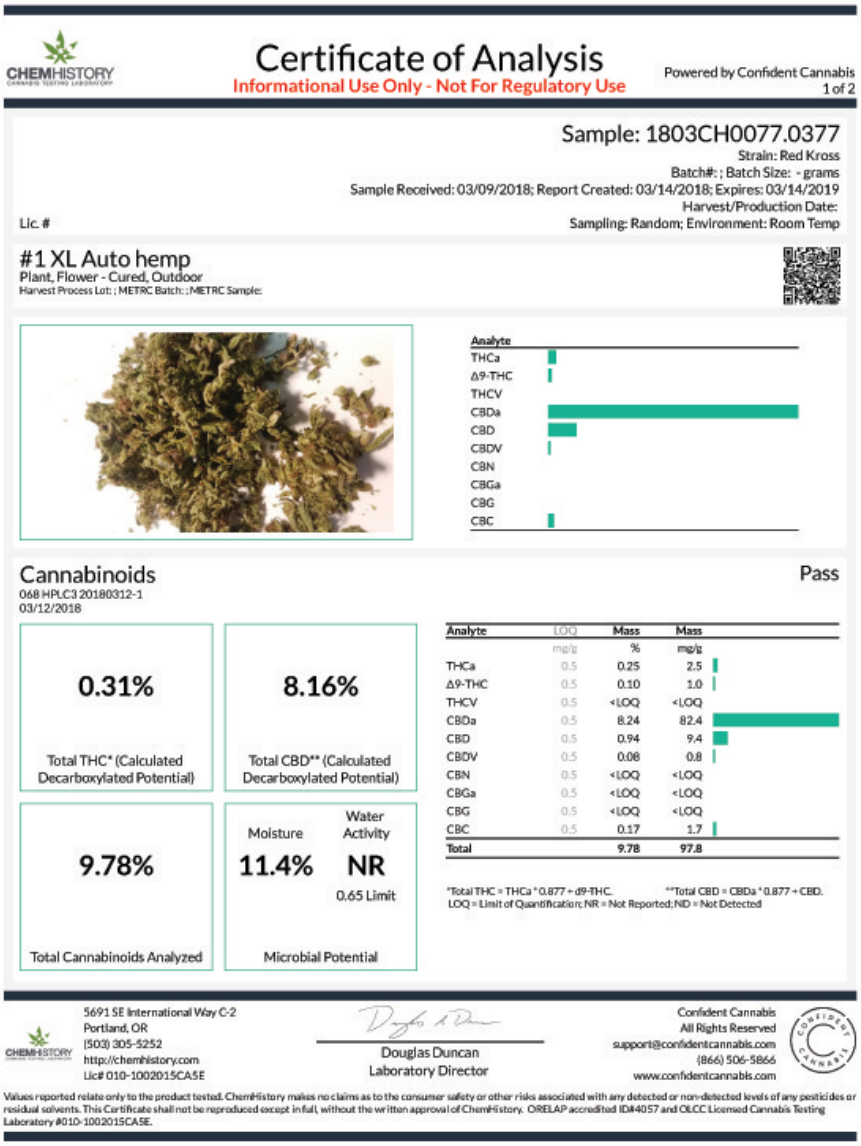
.

Sunlight conversion: THCA can convert to THC to varying degrees through exposure to light and heat. If a cannabis plant sits in the warm sun for an extended period of time, its THCA compounds will slowly convert to THC.

Room temperature conversion: THCA also converts to THC when stored at room temperature for a long enough time. In an olive oil extract, 22% of THCA will convert to THC over the course of 10 days at 77 degrees. Under the same conditions, 67% of THCA in an ethanol extraction will convert. Over time, cannabis stored at room temperature with very little light exposure will convert 20% of its THCA to THC.

Smoking: If dried and cured bud is exposed to a high degree of heat for a short time, as a match or lighter would provide during smoking, much of the existing THCA rapidly changes to THC. However, not all THCA converts to THC (smoking isn't the most efficient method of decarboxylation).

Do Labs Test for THCA or THC?



CHEMHISTORY

Certificate of Analysis

Informational Use Only - Not For Regulatory Use

Powered by Confident Cannabis
1 of 2

Sample: 1803CH0077.0377
Strain: Red Kross
Batch#: ; Batch Size: - grams
Sample Received: 03/09/2018; Report Created: 03/14/2018; Expires: 03/14/2019
Harvest/Production Date:
Lic. #
Sampling: Random; Environment: Room Temp

#1 XL Auto hemp
Plant, Flower - Cured, Outdoor
Harvest Process Lot: ; METRC Batch: ; METRC Sample:

Analyte
THCa
Δ9-THC
THCV
CBDa
CBD
CBDV
CBN
CBGa
CBG
CBC

Cannabinoids
068 HPLC3 20180312-1
03/12/2018

Pass

0.31%
Total THC* (Calculated Decarboxylated Potential)

8.16%
Total CBD** (Calculated Decarboxylated Potential)

9.78%
Total Cannabinoids Analyzed

Moisture 11.4%
Water Activity NR
0.65 Limit
Microbial Potential

Analyte	LOQ mg/g	Mass %	Mass mg/g
THCa	0.5	0.25	2.5
Δ9-THC	0.5	0.10	1.0
THCV	0.5	<LOQ	<LOQ
CBDa	0.5	8.24	82.4
CBD	0.5	0.94	9.4
CBDV	0.5	0.08	0.8
CBN	0.5	<LOQ	<LOQ
CBGa	0.5	<LOQ	<LOQ
CBG	0.5	<LOQ	<LOQ
CBC	0.5	0.17	1.7
Total		9.78	97.8

*Total THC = THCa * 0.877 + d9-THC. **Total CBD = CBDa * 0.877 + CBD.
LOQ = Limit of Quantification; NR = Not Reported; ND = Not Detected

CHEMHISTORY
5691 SE International Way C-2
Portland, OR
(503) 305-5252
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Douglas Duncan
Laboratory Director

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Laboratories testing for THC will sometimes show both the results for THCA as well as THC. Each cannabinoid is listed separated. But this usually will depend

upon the type of test used. For example, if a laboratory uses **High Performance Liquid Chromatography (HPLC)**, the THCA is not carboxylated and both THCA and THC will show up in the test. But if a laboratory uses **Gas Chromatography**, the THCA will be carboxylated, and therefore it will not show up in the test result. Results will only be given as THC. It should be noted that with gas chromatography, not all the THCA will convert to THC, so the THC reading may be lower.

Federal Legislation

Both the 2014 farm bill and pending 2018 farm bill specifically state:

"*The term ''industrial hemp" means the plant Cannabis sativa L. and any part of such plant, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis*."

The 2018 Farm Bill specifically states *"the procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration level of hemp produced in the state or territory"*

States That Define THC as being only Delta-9 THC

California
Oregon
Kentucky
Colorado
North Carolina
North Dakota
Minnesota

Other states may do so as well. It seems most of the states followed the 2014 Federal Farm Bill and defined THC to be Delta-9 THC.

States Testing Methods

States Using **Gas Chromatography**: Colorado, Kentucky, and Indiana
States Using **High Performance Liquid Chromatography (HPLC)**: Minnesota

Oregon does not specify a testing method, but they specify that the THC calculation includes THCA and labs need to keep their samples below 70 to avoid decarboxylation.

Option 3

30 days prior to harvest **Pre-Harvest Report** sent to County Ag Commissioner

Sampling must be performed by the County Ag Commissioner. The County Ag Commissioner has the option of designating an ISO certified lab to collect the sample. A farm representative must be present when samples are taken.

Lab must follow COC consistent with State law and be documented to record the collection, transport and receipt of samples by the Ag Commissioner or lab.

Lab sends results to farmer and County Ag Commissioner's office.

Farmer sends harvest/destruction report to County.

County Ag Commissioner confirms destruction/remediation.

DRAFT Industrial Hemp Sampling Guidelines for Testing for THC Content

A. **Notification of Harvest Date –**
   1. Registrants should inform the [SAMPLER TBD] of the following information:
      i. Harvest date
      ii. Variety
      iii. Location
      iv. Authorized representative
   2. Registrants should inform the [SAMPLER TBD] of any changes to the above information no less than 5 days prior to scheduled sampling.

B. **Sampling Timeframe –** Sampling should occur no more than 30 days prior to harvesting. Samples should be collected prior to any harvest or destruction of plants. The registrant should coordinate with the [SAMPLER TBD] on a date and time for the collection of the samples. Any changes to the harvest date may require additional testing prior to harvest.

C. **Site Verification –** [SAMPLER TBD] should verify collection site corresponds to registered location using GPS coordinates prior to the collection of samples.

D. **Collection of Samples –** Samples should be collected by [SAMPLER TBD]. The registrant or an authorized representative should be present during the collection of samples and allow [SAMPLER TBD] access to all industrial hemp plants within the registered land area and all areas and facilities used for cultivation.

E. **Sample Volume and Composition –**
   1. A separate composite sample should be taken for each plant variety.
   2. A separate composite sample should be taken for the same plant variety grown both indoors and outdoors.
   3. A separate composite sample should be taken for each non-contiguous field.
   4. Each composite sample should consist of at least five samples from different plants of the same plant variety.
      i. Samples should include the plant's stem, stalks, flowers, leaves, seeds, and buds (all parts intended to be included in the extraction process).
      ii. Samples should not be taken from male plants.
      iii. [SAMPLER TBD] should avoid collecting samples near field edges.
   5. Any abnormal plants should be sampled individually.

F. **Sample Handling –**
   1. Samples should be placed in a breathable bag (e.g. brown paper bag) and kept in a cool storage (between 45 and 90 degrees Fahrenheit) in a manner not conducive to mold.
   2. Samples should be sealed in a manner to show evidence of tampering and labeled to show chain of custody. The chain of custody label should be signed by both the registrant or authorized representative and the inspector.
   3. Samples should be labeled with identifying information
   4. Samples should be delivered to the laboratory on the same day as collected.

G. Confirmation of Harvest
   1. [via a TBD harvest report]

DRAFT Industrial Hemp Testing Guidelines for THC Content

A. **Sample Preparation –** Each composite sample should be dried to a moisture content of no more than 13% and milled to a homogenous powder-like consistency to a 1 mm screen. No plant parts should be removed during the sample preparation process.

B. Sample Storage –

C. **Testing –** Each composite sample should be tested separately for THC content by [APPROVED TESTING ENTITY].

D. **THC Testing Method –** Samples should be tested for THC content using gas chromatography with a flame ionization detector.

E. **Sample Retention –** Samples with THC levels less than 0.3% should be retained by the laboratory for 30 days. Samples with THC levels more than 0.3% but less than 1.0% should be retained for 60 days.

F. Sample Disposal –

G. **Notification of Test Results –** Registrants should be notified of test results within 10 days of sampling.

H. **Retesting of Harvested Material –** Plantings harvested prior to notification of the test results could retest if registrant kept each variety in properly identified separate lots throughout the drying, milling, and storage process. Co-mingling with other plantings or varieties will result in [ACTION TBD]. Registrants should be able to submit new samples from the harvested material for retesting.

Commented [KJ1]: Conflicts with both existing and proposed statute as written

[Note from CDFA: In addition to the above, are specific requirements necessary for other laboratory SOP's regarding: cross-contamination, identification of samples, sample size, sample storage, sample disposal, etc.?]

Industrial Hemp Advisory Board Crop Destruction Task Force

IHAB – October 30, 2018

SB 1409 Amendments to Sec. 81006

- (8) A registrant that grows industrial hemp shall destroy the industrial hemp grown upon receipt of a first laboratory test report indicating a percentage content of THC that exceeds 1 percent or a second laboratory test report pursuant to paragraph (7) indicating a percentage content of THC that exceeds three-tenths of 1 percent but is less than 1 percent. If the percentage content of THC exceeds 1 percent, the destruction shall begin within 48 hours, and be completed within 7 days, after receipt of the laboratory test report. If the percentage content of THC in the second laboratory test report exceeds three-tenths of 1 percent but is less than 1 percent, the destruction shall take place as soon as practicable, but no later than 45 days after receipt of the second test report.

Revised Proposal To The IHAB

In accordance with Section 81006, prior to harvest samples with a THC level greater than zero point three percent THC shall be reported by the approved lab to the California Department of Food and Agriculture (CDFA) and the grower/licensee. The grower/licensee must then submit a form to the County Agriculture Commissioner stating how the crop will be destroyed. Confirmation of the destruction will be performed by the County Agriculture Commissioner. All costs for destruction will be paid for by the grower/licensee. The following destruction methods to render the final product less than zero point three percent THC are acceptable:

Revised Proposal To The IHAB Cont.

The crop may be incorporated back into the soil;

incinerated or burned if allowed by local or state authorities, or;

blended or composted with other organic matter and/or soil.

INDUSTRIAL HEMP PILOT PROGRAM

IHAB - October 30, 2018

California Law SB 1409

Section **81007** is added to the Food and Agricultural Code, to read:

As part of the registration program established pursuant to this division, the department may establish and carry out, by regulation, an agricultural pilot program pursuant to Section 7606 of the federal Agricultural Act of 2014 (7 U.S.C. Sec. 5940) in accordance with the purposes of that section.

2014 Federal Farm Bill

SEC. 7606. Legitimacy of industrial hemp research

(a) In general

- Notwithstanding the Controlled Substances Act (21 U.S.C. 801 et seq.), chapter 81 of title 41, or any other Federal law, an institution of higher education (as defined in section 1001 of title 20) or a State department of agriculture may grow or cultivate industrial hemp if-
- (1) the industrial hemp is grown or cultivated for purposes of research conducted under an agricultural pilot program or other agricultural or academic research; and
- (2) the growing or cultivating of industrial hemp is allowed under the laws of the State in which such institution of higher education or State department of agriculture is located and such research occurs.

(b) Definitions

(1) Agricultural pilot program

The term "agricultural pilot program" means a pilot program to study the growth, cultivation, or marketing of industrial hemp-

(A) in States that permit the growth or cultivation of industrial hemp under the laws of the State; and

(B) in a manner that-

(i) ensures that only institutions of higher education and State departments of agriculture are used to grow or cultivate industrial hemp;

(ii) requires that sites used for growing or cultivating industrial hemp in a State be certified by, and registered with, the State department of agriculture; and

(iii) authorizes State departments of agriculture to promulgate regulations to carry out the pilot program in the States in accordance with the purposes of this section.

Recommended Purposes of the Pilot Program

1.) The purpose of the CDFA pilot program is to create a federally compliant program for California farmers to research the growth, cultivation and marketing of Industrial Hemp in California.

2.) This will open the doors to new markets in other states and countries.

Recommended Role for CDFA

The Board expects the CDFA to provide farmers a pathway to grow Federally compliant Industrial Hemp, as well as gather data on growth, cultivation and marketing of the crop.

Recommended Data to be Collected Under Ag Pilot Program

The pilot program will initially only gather data from the registration and destruction forms. Additional research can be added as the private or public sector deems it necessary.

1.) How many farmers are growing Hemp?

2.) How many acres are being grown?

3.) Is the acreage for Fiber, Grain, Oil Seed, Full Spectrum Plant Oils or other industrial purposes?

4.) What are the varieties being grown?

5.) How many acres had to be destroyed?

CDFA INDUSTRIAL HEMP PILOT PROGRAM

California State Law

SB 1409
SEC. 6.

Section 81007 is added to the Food and Agricultural Code, to read:

81007.

As part of the registration program established pursuant to this division, the department may establish and carry out, by regulation, an agricultural pilot program pursuant to Section 7606 of the federal Agricultural Act of 2014 (7 U.S.C. Sec. 5940) in accordance with the purposes of that section.

Federal Law

PUBLIC LAW 113-79----Feb. 7 2014

USC 5940. SEC. 7606. Legitimacy of industrial hemp research

(a) In general

Notwithstanding the Controlled Substances Act (21 U.S.C. 801 et seq.), chapter 81 of title 41, or any other Federal law, an institution of higher education (as defined in section 1001 of title 20) or a State department of agriculture may grow or cultivate industrial hemp if-

(1) the industrial hemp is grown or cultivated for purposes of research conducted under an agricultural pilot program or other agricultural or academic research; and

(2) the growing or cultivating of industrial hemp is allowed under the laws of the State in which such institution of higher education or State department of agriculture is located and such research occurs.

(b) Definitions

In this section:

(1) Agricultural pilot program

The term "agricultural pilot program" means a pilot program to study the growth, cultivation, or marketing of industrial hemp-

(A) in States that permit the growth or cultivation of industrial hemp under the laws of the State; and

(B) in a manner that-

(i) ensures that only institutions of higher education and State departments of agriculture are used to grow or cultivate industrial hemp;

(ii) requires that sites used for growing or cultivating industrial hemp in a State be certified by, and registered with, the State department of agriculture; and

(iii) authorizes State departments of agriculture to promulgate regulations to carry out the pilot program in the States in accordance with the purposes of this section.

(2) Industrial hemp

The term "industrial hemp" means the plant Cannabis sativa L. and any part of such plant, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.

(3) State department of agriculture

The term "State department of agriculture" means the agency, commission, or department of a State government responsible for agriculture within the State.

Office of the Secretary, USDA; Drug Enforcement Administration, DOJ; Food and Drug Administration, HHS.

ACTION:
Notice

SUMMARY:

The U.S. Department of Agriculture, in consultation with the U.S. Drug Enforcement Administration and the U.S. Food and Drug Administration, has developed a Statement of Principles on Industrial Hemp to inform the public how Federal law applies to activities associated with industrial hemp that is grown and cultivated in accordance with Section 7606 of the Agricultural Act of 2014. The purpose of this notice is to set forth the statement in its entirety.

DATES:

This Statement of Principles is applicable August 12, 2016.

FOR FURTHER INFORMATION CONTACT:

Michael Poe, Telephone Number:(202) 720-3257.

SUPPLEMENTARY INFORMATION:

1. Statement of Principles

With publication of this notice, the U.S. Department of Agriculture (USDA) issues, with the concurrence of the U.S. Drug Enforcement Administration (DEA) and the U.S. Food and Drug Administration (FDA), the following Statement of Principles regarding the applicability of Federal laws to activities associated with growing and cultivating industrial hemp:

Section 7606 of the Agricultural Act of 2014 legalized the growing and cultivating of industrial hemp for research purposes in States where such growth and cultivation is legal under State law, notwithstanding existing Federal statutes that would otherwise criminalize such conduct. The statutorily sanctioned conduct, however, was limited to growth and cultivation by an institution of higher education or State

department of agriculture for purposes of agricultural or other academic research or under the auspices of a State agricultural pilot program for the growth, cultivation, or marketing of industrial hemp.

Section 7606 authorized State departments of agriculture to promulgate regulations to carry out these pilot programs but did not provide a specific delegation to the U.S. Department of Agriculture (USDA) or any other agency to implement the program. As well, the statute left open many questions regarding the continuing application of Federal drug control statutes to the growth, cultivation, manufacture, and distribution of industrial hemp products, as well as the extent to which growth by private parties and sale of industrial hemp products are permissible. Section 7606 did not remove industrial hemp from the controlled substances list. Therefore, Federal law continues to restrict hemp-related activities, to the extent that those activities have not been legalized under section 7606.

USDA, having consulted with and received concurrence from the U.S. Drug Enforcement Administration (DEA) and the U.S. Food and Drug Administration (FDA), therefore, is issuing this statement of principles to inform the public regarding how Federal law applies to activities involving industrial hemp so that individuals, institutions, and States that wish to participate in industrial hemp agricultural pilot programs can do so in accordance with Federal law.

■The growth and cultivation of industrial hemp may only take place in accordance with an agricultural pilot program to study the growth, cultivation, or marketing of industrial hemp established by a State department of agriculture or State agency responsible for agriculture in a State where the production of industrial hemp is otherwise legal under State law.

■The State agricultural pilot program must provide for State registration and certification of sites used for growing or cultivating industrial hemp. Although registration and certification is not further defined, it is recommended that such registration should include the name of the authorized manufacturer, the period of licensure or other time period during which such person is authorized by the State to manufacture industrial hemp, and the location, including Global Positioning System coordinates, where such person is authorized to manufacture industrial hemp.

■Only State departments of agriculture, and persons licensed, registered, or otherwise authorized by them to conduct research under an agricultural pilot program in accordance with section 7606, and institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)), or persons employed by or under a production contract or lease with them to conduct such research, may grow or cultivate industrial hemp as part of the agricultural pilot program.

■The term “industrial hemp” includes the plant Cannabis sativa L. and any part or derivative of such plant, including seeds of such plant, whether growing or not, that is used exclusively for industrial purposes (fiber and seed) with a tetrahydrocannabinols concentration of not more than 0.3 percent on a dry weight basis. The term “tetrahydrocannabinols” includes all isomers, acids, salts, and salts of isomers of tetrahydrocannabinols.

■For purposes of marketing research by institutions of higher education or State departments of agriculture (including distribution of marketing materials), but not for the purpose of general commercial activity, industrial hemp products may be sold in a State with an agricultural pilot program or among States with agricultural pilot programs but may not be sold in States where such sale is prohibited. Industrial hemp plants and seeds may not be transported across State lines.

■Section 7606 specifically authorized certain entities to “grow or cultivate” industrial hemp but did not eliminate the requirement under the Controlled Substances Import and Export Act that the importation of viable cannabis seeds must be carried out by persons registered with the DEA to do so. In addition, any USDA phytosanitary requirements that normally would apply to the importation of plant material will apply to the importation of industrial hemp seed.

■Section 7606 did not amend the Federal Food, Drug, and Cosmetic Act. For example, section 7606 did not alter the approval process for new drug applications, the requirements for the conduct of clinical or nonclinical research, the oversight of marketing claims, or any other authorities of the FDA as they are set forth in that Act.
■The Federal Government does not construe section 7606 to alter the requirements of the Controlled Substances Act (CSA) that apply to the manufacture, distribution, and dispensing of drug products containing controlled substances. Manufacturers, distributors, dispensers of drug products derived from cannabis plants, as well as those conducting research with such drug products, must continue to adhere to the CSA requirements.
■Institutions of higher education and other participants authorized to carry out agricultural pilot programs under section 7606 may be able to participate in USDA research or other programs to the extent otherwise eligible for participation in those programs.

2. Regulatory Requirements

This Statement of Principles does not establish any binding legal requirements. It is, therefore, exempt from notice and comment rulemaking requirements under the Administrative Procedure Act pursuant to 5 U.S.C. 553(b). Because no notice of proposed rulemaking is required, the Regulatory Flexibility Act does not require an initial or final regulatory flexibility analysis. 5 U.S.C. 603(a), 604(a). USDA has determined that this Statement of Principles does not impose any new or revise any existing recordkeeping, reporting, or disclosure requirements on covered entities or members of the public that would be collections of information requiring OMB approval under the Paperwork Reduction Act, 44 U.S.C. 3501, et seq.

Dated: July 25, 2016.

Proposed Amendment to the List of Approved Seed Cultivars
For Consideration by the Industrial Hemp Advisory Board
at its Meeting on [date TBD]

In Title 3, California Code of Regulations, Division 4, Chapter 8, Article 2, adopt:

§ 4920. List of Approved Seed Cultivars.

(a) The Secretary, as provided in Section 81002 of the Food and Agricultural Code, adopts the following list of approved seed cultivars.

(1) Industrial hemp seed or propagative materials certified as breeder, foundation, registered, or certified seed or stock by one of the following agencies:

(A) Member organizations of the Association of Official Seed Certifying Agencies,
(B) Organization of Economic Cooperation and Development, or
(C) An officially approved and recognized seed-certifying agency listed in Title 3, California Code of Regulations, Section 3875, as provided in Section 52401 of the Food and Agricultural Code.

(2) Industrial hemp seed or propagative materials produced in a quality assurance program approved by one of the following agencies:

(A) Member organizations of the Association of Official Seed Certifying Agencies,
(B) Organization of Economic Cooperation and Development, or
(C) An officially approved and recognized seed-certifying agency listed in Title 3, California Code of Regulations, Section 3875, as provided in Section 52401 of the Food and Agricultural Code.

(3) Industrial hemp seed or propagative materials produced by a licensed participant in a state industrial hemp agricultural pilot program, pursuant to Section 7606 of the federal Agricultural Act of 2014 (7 U.S.C. Sec. 5940).

(A) The crop from which the seed or propagative materials were harvested from shall have been tested by the licensing authority in the state of origin and found to have no more than three-tenths of one percent tetrahydrocannabinol (THC) on a dry weight basis.
(B) The commissioner shall be notified of the importation of all propagative materials other than seed into the county. The shipment is subject to inspection by the commissioner and shall not be used for cultivation until released by the commissioner.

(4) Industrial hemp seeds or tissue culture plants imported from outside the United States that meets federal importation requirements.

(A) The crop from which the seeds or tissue culture plants were harvested from shall have been tested by the department of agriculture in the country of origin and found to have no more than three-tenths of one percent THC on a dry weight basis.

(B) The commissioner shall be notified of the importation of all propagative materials other than seed into the county. The shipment is subject to inspection by the commissioner and shall not be used for cultivation until released by the commissioner.

(C) For the purposes of this section, the term “tissue culture” means in vitro material introduced into culture from nodal cuttings at a particular time and from a single plant and grown in aseptic conditions to be used as a source of propagative material.

(5) Industrial hemp seed or propagative materials produced in California in accordance with the provisions of Division 24 of the Food and Agricultural Code and this chapter.

(A) The crop from which the seed or propagative materials were harvested from shall have been tested by a department-approved laboratory and found to have no more than three-tenths of one percent THC on a dry weight basis.

(b) Upon request from the commissioner, a registrant shall provide documentation confirming that any seeds or propagative materials are on the list of approved seed cultivars

Note: Authority cited: Sections 407 and 81002, Food and Agricultural Code
Reference: Sections 81001 and 81002 Food and Agricultural Code

Dear Committee members,

We have been attending and following your meetings since their inception and are interested in growing hemp next year under your direction. We recently followed the limited protocol for sampling and testing of some CBD plants that we grow under personal use and we were at a loss in terms of advising our local lab about a testing protocol for hemp. This is a lab that has been doing cannabis testing for years. We brought in our wet sample and told them it needed to be tested at no more than 13% moisture content. They were unsure about how to deal with the wet sample (since most of their samples come to them previously dried), whether to dry it in an oven or dry ice. They ended up using dry ice, yet didn't have a mechanism for testing moisture. In other words, they were not accustomed to dealing with wet samples and therefore we were not confident in the test results. This is a lab on your list of BCC Testing License list.

We feel that California needs to have a testing protocol for labs to follow for hemp wet samples. Sample size and type, handling, drying and test protocol. Otherwise, results will be wildly variant. We are attaching Oregon's protocol for your information.

Additionally, we recommend that for the sampling collection that both options be available to the grower, testing lab and/or Agricultural Commissioner.

Thank you for your attention. Lisa Brown and Kevin Johnson
mingobaby@gmail.com

Exhibit B: Testing Protocol
Industrial Hemp Pre-Harvest Testing

To be sufficient to meet the requirement for pre-harvest THC sampling and testing under OAR Chapter 603, Division 48, testing must be conducted as described in this Protocol.

A. Testing Requirements

1. Testing may only be performed by a laboratory licensed by the Oregon Liquor Control Commission (OLCC) under ORS 475B.560 and accredited by the Oregon Health Authority (OHA) pursuant to ORS 475B.565 to sample and test for tetrahydrocannabinol (THC) content (hereinafter, Laboratory)[1] or the Oregon Department of Agriculture (ODA).
2. All testing must be performed by personnel employed by a Laboratory and in accordance with OAR 603-048-0600 and this Protocol.
3. The Laboratory must follow chain of custody procedures consistent with TNI EL Standard VIM2 5.7 and 5.8 and be documented to record the collection, transport, and receipt of samples by the Laboratory.
4. Testing must be conducted in compliance with OAR 333-064-0100(3) – (7) except that the Laboratory need not test or report CBD values.
5. Until the Laboratory develops its own criteria, sample or matrix spike recovery must fall between 70-130 percent. The Laboratory must develop its own criteria after obtaining 30 data points and the sample or matrix spike recovery must fall between 70-130 percent or within more restrictive acceptance limits. Until the Laboratory develops its own criterial, the Relative Percent Difference (RPD) between duplicates must be less than or equal to 20 percent. The Laboratory must develop its own criteria after obtaining 30 data points and the sample/sample duplicate RPD must less than or equal to 20 percent or fall within more restrictive acceptance limits. The Laboratory shall include at least one sample or matrix spike and one set of duplicates to assess accuracy and precision for each extraction batch.
6. The Laboratory must perform testing under their Quality Management system as defined by their ORELAP accreditation.
7. The Laboratory must perform testing in a manner that avoids contamination of the non-sampled material with sample containers that are free of analytes of interest and appropriate for the analyses requested.
8. The Laboratory's test method and preparation steps shall avoid decarboxylation of (-)-delta 9-trans-Tetrahydrocannabinolic acid (THCA).
9. The Laboratory must determine the percentage of THC in the sample on a dry weight basis.

[1] Note that the sampling of industrial hemp for pre-harvest THC concentration itself is not accredited by OHA.

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B. Initiating a Testing Request

1. The Laboratory must receive a complete Industrial Hemp Sampling and Testing Request Form prior to testing. The Laboratory must receive a new and separate "Harvest Lot Sampling Request Description" for each Harvest Lot to be tested.
2. The Laboratory must receive a complete Industrial Hemp On-Site Sampling Form prior to testing. The Laboratory must receive a new and separate "Harvest Lot On-Site Sampling Description" for each Harvest Lot to be tested.
3. A "Harvest Lot" means:
   a. Means a quantity of industrial hemp harvested in a distinct timeframe that is:
      i. Grown in one contiguous production area within a grow site; or
      ii. Grown in a portion or portions of one contiguous production area within a grow site.
   b. Does not include a quantity of industrial hemp comprised of industrial hemp grown in noncontiguous fields or noncontiguous growing areas.[2]

C. Sample Preparation Requirements

1. The Laboratory shall dry all of the leaf and flower of the sample (not obvious stem and seeds) until brittle in a manner that does not exceed 70°C and maintains the THC level of sample (at temperatures greater than 70°C, decarboxylation of THCA to THC occurs).
2. After drying, the Laboratory shall pulverize and sieve the sample using mesh size 1 mm as described in United Nations Office on Drugs and Crime: Recommended Methods for the Identification and Analysis of Cannabis and Cannabis Products. ISBN 978-92-1-148242-3. The Laboratory shall blend and homogenize the sieved material.
3. The Laboratory shall determine the dry weight of the sieved material.
4. The Laboratory shall divide the sieved, blended and homogenized sample into two portions: the test portion and the retained file sample. The Laboratory shall store the retained file sample in a freezer until needed. The retained file sample must be of sufficient material to conduct any requested retest and any quality control performed by the testing Laboratory.

D. Retesting Requirements

1. The Laboratory shall retest a Harvest Lot upon receipt of a completed Request for Retest from a grower. "Retest" or "Retesting" means the laboratory process of retesting a retained file sample for THC content after the sample failed initial testing for THC content. A retest does not include or permit taking a new sample from the harvest lot. OAR 603-048-0010(16).
2. The Laboratory shall forward the retained file sample to another Laboratory or to the ODA upon receipt of a completed Request for Retest from the grower requesting that the sample be forwarded. The Laboratory shall:
   a. Use packaging appropriate for secure transport.
   b. Protect the sample from moisture and temperature extremes.

[2] OAR 603-048-0010(9).

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c. Include all documentation with the sample.
d. Forward the sample by the most expedient, secure, and legal means to ensure that the sample continues to be representative of the harvest lot sampled and the chain of custody is accounted for to protect its integrity.

E. Testing After Resampling

1. The Laboratory may test a Harvest Lot after a valid resampling in accordance with OAR 603-048-0625.
2. The Laboratory shall conduct testing after a resampling like any other testing in accordance with this protocol.
3. The Laboratory shall report the test results as described in Part F of the Protocol, but shall indicate that the result is pursuant to resampling.

F. Reporting and Recordkeeping Requirements

1. All documentation of sampling and testing must be retained by the Laboratory for at least three years and be provided to the Department upon request. All records must clearly identify the harvest lots by harvest lot identifier.
2. The Laboratory shall make Standard Operating Procedure (SOPs) readily accessible to all pertinent personnel and provided to ODA upon request.
3. All documents shall be controlled and retained in accordance with the TNI Environmental Laboratory standard as defined in OAR 333-007-0310.
4. When testing or forwarding the sample, the Laboratory must create and use a Chain of Custody form with the information set out below.
    a. Laboratory name
    b. Analyst's name
    c. Lab License Number
    d. Field ID/Name and Harvest Lot Identifier
    e. Testing Date/Time
    f. Custody transfer signatures
    g. Custody Transfer Dates/Times
5. The Laboratory shall determine the estimated measurement uncertainty (EMU) of the test for THC concentration of industrial hemp and make available to the ODA upon request.
6. The Laboratory shall provide to ODA upon request analytical data and any records associated with test results reported, including SOPs, chain of custody forms, quality checks, EMU determination, etc.
7. The Laboratory shall report percentage of THC in the sample on a dry weight basis to exactly two significant figures.
8. The Laboratory shall report all test results electronically to the Department at HempTestReports@oda.state.or.us using the forms provided by the Department, and include for each sample tested:
    a. Grower's name and registration number;
    b. Sample date;
    c. Sample size by weight;

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d. Testing date;
e. Tetrahydrocannabinol percentage to exactly two significant figures;
f. The harvest lot identifier that corresponds to the sample and the location of the corresponding harvest lot;
g. Copy of grower's sampling request form corresponding to the harvest lot;
h. Copy of the completed sampling form corresponding to the harvest lot; and
i. Signature of the laboratory analyst.

9. The Laboratory shall send any failed test report electronically to the Department at HempTestReports@oda.state.or.us using the forms provided by the Department **within 24 hours of the failed test**.
10. The Laboratory shall send completed copies of the Sampling and Request Form and the On-Site Sampling Form corresponding to the Harvest Lot with each test report.

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From: Dennis Wells
Date: October 5, 2018 at 2:11:02 PM PDT
To:
Subject: Re: Hemp

Good afternoon,

We test for d-9 THC only, however, I understand that there is a new rule change being considered that may change that.

The limit is 0.3 % dry weight reported to one decimal place so the ODA will accept any result up to 0.35 % due to rounding.
I don' t know the rule on destruction of Hemp.

I hope that helps you.

Have a pleasant and productive day,

Dennis Wells

Director of Operations

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Tigard, Oregon 97223

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On Fri, Oct 5, 2018 at 1:24 PM Richard Soria wrote:

Hi Dennis,
I'm on the California industrial Hemp Advisory Board. Hemp is not yet legal in Ca. as you know. The Governor signed a bill last week (SB 1409) and it will go into law in January 2019. This bill will legalize the growing of Hemp. Brianna sent me your rules & regulation and that answered most of my questions. I have a few more. Do you just test for Delta 9 THC? If the sample test is above .03% & above 1% , what is waiting time before the crop is destroyed. If the crop is destroyed, how is it

done. Thank You Richard Soria
Sent from my iPhone