

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

Van Butsic (Absent)
Joshua Chase
Rick Gurrola
Allison Justice
Matt McClain
Valerie Mellano (Absent)
Tom Pires
David Robinson (Absent)
John Roulac
Lawrence Serbin
Richard Soria

CDFA & Guests

G.V. Ayers
Anthony Biagi
Chris Boucher
Tony DeVeyra
Justin Eve
Janice Jurado
Joshua Kress
Peter Koulouris
Mateo Munoz

Hayden Oilar
D. Phillips
Michelle Phillips
Wayne Richman
Robin Sanchez
Jennie Tedlos
Tiffany Tu
Cathy Vue
Marie Ziegel

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 was not 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. Chase 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 commented 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 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



OREGON

- Oregon doesn't have any requirements other than they are registered and have their crop tested no more than 28 days prior to harvest showing 0.3% THC or less.
- How plants get to the farmer is up to them.

NORTH CAROLINA

NC State does maintain a list of seed/clone companies:

<https://industrialhemp.ces.ncsu.edu/seed-sources-for-planting/>

1.) Licensees who wish to import seed from abroad using the DEA import process must use true certified seed.

2.) Licensees who wish to import seed from within the United States must do the following:

a.) notify the Department of Ag BEFORE they bring propagative material into the state.

b.) Purchase from a person lawfully participation in an industrial hemp pilot program in another state (get a copy of their license, permit, registration, etc.)

c.) Have a lab test accompany the shipment showing that the seed/clones contain less than 0.3% THC

NORTH CAROLINA CONTINUED

From proposed temporary rules

(a) Approved seed or transplants for cultivating industrial hemp in North Carolina shall be from one of the following:

(1) Seed or transplants produced from seed or living plant parts that meet the criteria for Breeder, Foundation, Registered, or Certified categories as defined by the North Carolina Crop Improvement Association, including certification by other seed agencies recognized by NCCIA.

(2) Seed or transplants produced lawfully under an industrial hemp pilot program within the United States provided that the seed or transplants have accompanying documentation of:

(A) being produced by a licensed grower within the state of production, and

(B) have accompanying documentation that the crop from which the seed or transplants were harvested had a THC analysis of 0.3% or less by dry weight.

NORTH CAROLINA CONTINUED

(b) Growers or other organizations in North Carolina may produce seed or transplants for distribution or sale for cultivation, if the source is overseen by NCCIA and certified by NCCIA to be true to type under American Organization of Seed Certifying Associations (AOSCA) guidelines. No other seed or transplants may be produced in North Carolina for distribution or sale in North Carolina.

(c) All seed or transplants produced in North Carolina for distribution or sale in North Carolina to be utilized for cultivation of industrial hemp shall include a certifying tag of varietal purity issued by NCCIA or another official certifying agency.

(d) A business entity, including an agricultural co-operative enterprise ("co-op") or other farm aggregator ("aggregator") who contracts with one or more permitted growers, may, upon registering with the Commission, obtaining any required permitting from the United States Drug Enforcement Agency, and pursuant to Federal and State law, obtain bulk quantities of seed or transplants approved under this Rule for distribution to permitted growers. A permitted grower may own and plant seed or transplants obtained from such registered op-ops or aggregators, who must document quantities delivered to each named grower within 10 days of delivery.

KENTUCKY

- KDA must approve all seed or plants entering the program;
- compliant testing results of the parent must be provided.
- KDA allows International Seed Imports and Out-of-State Domestic Seed/Propagule purchases.
- Seed/plants brought to KY must come from an entity licensed by their state's hemp program.
- Transporting across state lines is at your own risk. This interstate transfer is legal in KY, but other state's could seize in transit and charge with trafficking.
- Movement across state lines is supported by Federal Consolidated Appropriations Act of 2018.
- All planting materials must arrive at KDA for inventory and distribution.
- Performance of varieties/strains and their THC results are tracked.
- KDA Summary of Varieties List (86 varieties since 2014)

http://www.kyagr.com/marketing/documents/HEMP_LH_Summary-of-Varieties.pdf

COLORADO

- Colorado does not have any requirements for only using approved seed cultivars.
- There is a CDA Approved Certified Seed program. It follows the principles adopted by AOSCA but with a couple of caveats, the most major one being CDA will do the THC testing before approving a variety for certified seed production and we do not allow the breeder or grower to submit results.

PROPOSAL FOR CALIFORNIA

Approved seed and transplants for cultivating industrial hemp in California shall be from one of the following:

(1) Seed or transplants produced from seed or living plant parts that meet the criteria for Breeder, Foundation, Registered, or Certified categories as defined by the California Crop Improvement Association (CCIA), including certification by other seed agencies recognized by CCIA. All such seed and transplants shall include a certifying tag of varietal purity issued by CCIA or another official certifying agency; or

PROPOSAL FOR CALIFORNIA (CONT.)

(2) Seed or transplants produced lawfully under a state industrial hemp pilot program within the United States provided that the seed or transplants have accompanying documentation of:

- (A) being produced by a licensed grower within the state of production;
- (B) have accompanying documentation that the crop from which the seed or transplants were harvested had a THC analysis of 0.3% or less by dry weight;
- (C) no more than 10 vegetative propagules can be imported into the state;
- (D) vegetative propagules must go through a 30-day screened greenhouse quarantine overseen by the local Agricultural Commissioner's office and
- (D) material must be deep sequenced within 30 days for potential harmful pathogens.

PROPOSAL FOR CALIFORNIA (CONT.)

(3) Seeds and In-vitro plants may be imported from other countries under a DEA permit or USDA phytosanitary permit. The material must be accompanied with a

- (A) THC analysis of less than 1% THC;
- (B) plants must go through a 30-day screened greenhouse quarantine overseen by the local Agricultural Commissioner's office and
- (C) material must be deep sequenced within 30 days for potential harmful pathogens.

PROPOSAL FOR CALIFORNIA (CONT.)

(4) California Growers, breeders or other organizations in California may produce seeds or transplants for distribution or sale for cultivation, if the source from which the seed or transplants were harvested from had a THC analysis of 0.3% or less by dry weight.

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.

Commented [KJ1]: Sampling entity needs to be determined (i.e., laboratory staff or county inspectors)

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.

Commented [KJ2]: Conflicts with existing statute: FAC § 81006 (f)(1)

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 randomly 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.

Commented [KJ3]: Definition or methodology for random selection should be specified

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.

Commented [KJ4]: Conflicts with existing statute: FAC § 81006 (f)(2)

F. Sample Handling –

1. Samples should be placed in a breathable bag (e.g. brown paper bag) and kept in a cool storage 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. [DELIVERY TIMEFRAME]

Commented [KJ5]: A temperature or temperature range should be specified

Commented [KJ6]: Requirement for timeframe for delivery of sample to laboratory should be specified

G. [CONFIRMATION OF HARVEST]

Commented [KJ7]: Method for confirmation that harvest occurs within 30 days should be specified

DRAFT Industrial Hemp Testing Guidelines for THC Content

- A. **Sample Preparation** – Each composite sample should be dried and milled to a homogenous powder-like consistency. 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 [KJ8]: Should moisture content be addressed further, either here or in sampling guidelines?

Commented [KJ9]: Does particle size need to be further defined?

Commented [KJ10]: Conflicts with existing statute: FAC § 81006 (f)

Commented [KJ11]: Can the harvested crop be marketed/sold prior to receiving test results?

Commented [KJ12]: What action should be taken if harvested crops are co-mingled prior to receiving test results?

Commented [KJ13]: What is the process and what are the requirements for this?

[Note: 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.?)

Comment on sampling entity: laboratory staff of approved laboratory (approved by BCC/ISO 17025)

Comment on conflict with existing statute:

(Sampling should occur no more than 30 days prior to harvesting.)

Existing: "Sampling shall occur as soon as practicable when the THC content of the leaves surrounding the seeds is at its peak and shall commence as the seeds begin to mature, when the first seeds of approximately 50 percent of the plants are resistant to compression."

Comment of random selection:

Remove the word random.

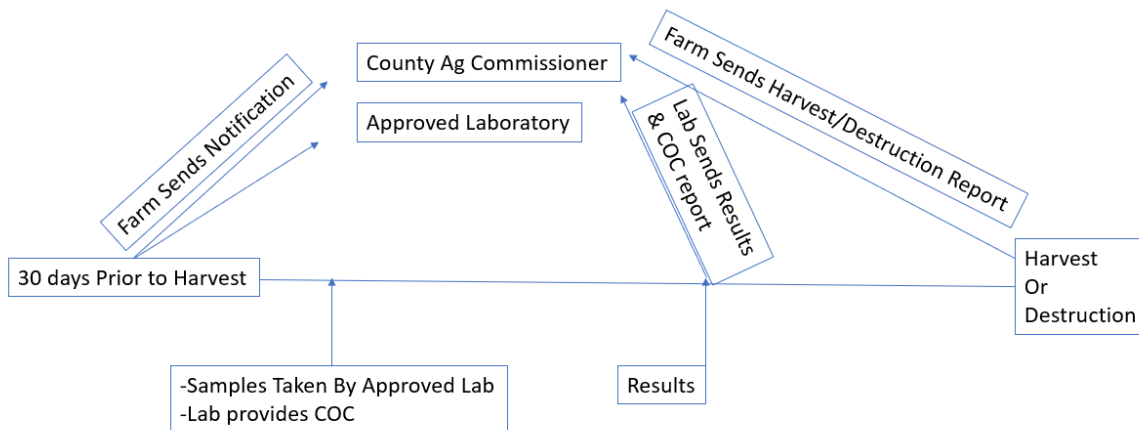
Comment of conflict with existing statute: according to SB 1409:

"The entire fruit-bearing part of the plant including the seeds shall be used as a sample. The sample cut shall be made directly underneath the inflorescence found in the top one-third of the plant."

Comment on temperature: 45-95F

Comment on timeframe of delivery: Same day

Comment of method for confirmation of harvest: Registrant must submit harvesting report 30 days prior to harvest to the county agricultural commissioner. Lab must submit results to county agricultural commissioner showing date of sampling to be within the 30-day window.



Comment on moisture content: Must not exceed 13% water content

Comment on particle size: 1 mm screen

Comment on harvesting prior to test report: No crop shall be marketed/sold prior to test results being received by the grower.

Comment on harvested co-mingled crop: In the event harvested crops are co-mingled prior to receiving test results:

1. If test results show content of all tested samples are less than 0.3%, the grower may market/sell the commingled crop.
2. If test results show at least one of the co-mingled crop batches are over 0.3%, there must be a retest of the homogenized material.
3. If all batches co-mingled are over 0.3%, there will be an opportunity of one re-test.

Cannabis testing laboratory SOP:

5305. Testing Sample (Blue represents edits made for Hemp)

~~(a) The distributor shall ensure that the batch size from which the sample is taken meets the requirements of this division.~~

(b) A distributor or an employee of the distributor shall be physically present to observe the laboratory employee obtain the sample of cannabis goods for testing and shall ensure that the increments are taken from throughout the batch.

- The permitted grower or employee the farmer shall be physically present to observe the laboratory employee obtain the same for testing.

(c) The sampling shall be video recorded with the batch number stated at the beginning of the video and a visible time and date indication on the video recording footage. The video recordings shall be maintained for 180 days.

-The sampling shall be video recorded with the batch number stated at the beginning of the video and a visible time and date indication on the video recording footage. The video recordings shall be maintained for 180 days.

(d) After the sample has been selected, both the distributor and the laboratory employee shall sign and date the chain of custody form pursuant to section **5709** of this division, attesting to the sample selection having occurred.

-After the sample has been selected, both the distributor and the laboratory employee shall sign and date the chain of custody form pursuant (example attached), attesting to the sample selection having occurred.

(e) A distributor shall not assist the laboratory employee nor touch the cannabis goods or the sampling equipment while the laboratory employee is obtaining the sample.

-The grower shall not assist the laboratory employee nor touch the cannabis goods or the sampling equipment while the laboratory employee is obtaining the sample.

5709. Chain of Custody (COC) Protocol – (Blue indicates additions made for hemp)

- (a) The laboratory shall develop and implement a COC protocol to ensure accurate documentation of the transport, handling, storage, and destruction of samples.
- (b) The COC protocol shall require the use of a COC form that contains, at minimum, the following information:
 - (1) Laboratory's name, physical address, and license number;
 - (2) Distributor's name, physical address, [GPS location](#), and license number;
 - (3) Unique sample identifier;
[-Approximate acreage of batch which to be sampled](#)
[-Variety of hemp for each sample](#)
 - (4) Date and time of the sample collection;
 - (5) Printed and signed name(s) of the distributor(s);
 - (6) Printed and signed name(s) of the sampler(s); and
 - (7) Printed and signed name(s) of the testing laboratory employee that received the sample.

Example Lab Chain of Custody Form

Notes: (additional on back)

Account Name: _____ Date Submitted: _____

Email address: _____ Total # Samples: _____

Phone Number(s): _____ Medical Cannabis Rec. Permit #: _____

Unique Sample Name	Sample Type	Standard	Expanded	Pesticide	Pesticide	Terpene	Microbe	Microbe	Homog.	Category 2	Category
		Cannabinoid Analysis	Cannabinoid Analysis								
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXAMPLE

Acceptance of Custody:
Infinite Chemical Analysis Labs Rep.

By signing, I verify the information on this form is correct and acknowledge that the required sample size has been provided. All samples are held for 96 hours after reports are generated. Unless otherwise requested, all samples are destroyed following this

Release of Custody:

Client Signature

- Standard Cannabinoids - delta-9-THC, THCA, CBD, CBDA, CBN, CBG, and CBGA
- Expanded Cannabinoids - Standard + THCV, delta-8-THC, CBC, CBDV
- Standard Pesticide - 19 compounds
- Category 1 Pesticide - 21 compounds (CA official test requirement as of January 1, 2018)
- Category 2 Pesticide - 45 compounds (CA official test requirement beginning July 1, 2018)
- Terpenes - 23 terpenes found in cannabis (CA official test req. beginning Dec. 31, 2018, if included on label)
- Microbial Other Than Inhalables - E. coli, Salmonella (CA official test requirement as of January 1, 2018)
- Microbial Inhalable - other + A. fumigatus, A. flavus, A. niger, A. terreus (CA off. test req. as of Jan. 1, 2018)
- Homogeneity - +/- 10% of reported value (CA official test requirement for edibles beginning Jan. 1, 2018)
- Category 1 Residual Solvents - 7 common solvents (CA official test requirement beginning July 1, 2018)
- Category 2 Residual Solvents - 14 common solvents (CA official test requirement as of Jan. 1, 2018)
- Please contact Infinite Chemical Analysis Labs for more information on any of the analyses.