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

1220 N Street, Auditorium Sacramento, CA 95814

Tuesday, April 24, 2018 9:00 AM – 12:00 PM

Board Members	CDFA & Guests	Jessica Mackenzie
Van Butsic	G.V. Ayers	Alex Mkandawire
Rick Gurrola	Stacy Aylesworth	Jake Meyers
Allison Justice	Jack Bennett	Jered Micheli
Matt McClain	George Bianchini	Dee Morizono
Valerie Mellano	Chris Boucher	Nitin Patel
Tom Pires	Poonam Chandra	Carl Pfeiffer
David Robinson	Joshua Chase	Michelle Phillips
John Roulac	Jeff Chedester	Scott Renteria
Lawrence Serbin	Cynthia Crook	Wayne Richman
Richard Soria	Justin Eve	Dodee Schmitt
	Ted Fitzgerald	Roosevelt Shannon
	Jacob Freepons	Conor Stephen
	Tim Gibson	Raymond Strack
	Patrick Goggin	Ned Thimmayya
	Al Goodwin	Tiffany Tu
	Jay Healy	Cathy Vue
	Tyler Hoff	Brian Webster
	Joshua Kress	Luke Wilson
	Erin Lovig	Marie Ziegel
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1. Roll Call and Opening Remarks

Meeting called to order at 9:02 AM by Joshua Kress, Program Supervisor of the CDFA Nursery, Seed, and Cotton Program. Board members and Program staff provided self-introductions.

Kress announced Eric Carlson was no longer serving on the Industrial Hemp Advisory Board effective February 19, 2018. The vacancy was advertised on March 15, 2018 and the posting closed on April 19, 2018.

Lawrence Serbin, Vice Chair, briefly reviewed the meeting's agenda. Kress reviewed general housekeeping information. Kress also reminded board members to submit travel receipts for processing their travel expense claims.

2. Review of Minutes from October 19, 2017 and January 18, 2018 Board Meetings

The draft minutes from the October 19, 2017 Board Meeting were presented to the Board. No changes were requested.

<u>Board Motion #1</u>: Richard Soria moved to accept the minutes for the October 19, 2017 Board Meeting as presented. Valerie Mellano seconded the motion.

There were no further discussions or comments.

The Board voted on Motion #1 as follows:

Yes: Van Butsic, Rick Gurrola, Allison Justice, Matt McClain, Valerie Mellano, Tom

Pires, David Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None Absent: None

Motion carried.

The draft minutes from January 18, 2018 Board Meeting were presented to the Board. No changes were suggested.

<u>Board Motion #2</u>: David Robinson moved to accept the minutes for the January 18, 2018 Board Meeting as presented. Tom Pires seconded the motion.

There were no further discussions or comments.

The Board voted on Motion #2 as follows:

Yes: Van Butsic, Rick Gurrola, Allison Justice, Matt McClain, Valerie Mellano, Tom

Pires, David Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None Absent: None

Motion carried.

There were no public comments regarding this item.

3. Industrial Hemp Standard for Seed Certification

Alex Mkandawire, California Crop Improvement Association (CCIA), presented information on industrial hemp standards for seed certification (attached).

Mkandawire provided a brief overview of CCIA, variety certification, field and seed standards for seed certification, and the seed certification process. Mkandawire also noted that CCIA's Board of Directors approved the industrial hemp standards for seed certification for California on February 22, 2018.

Serbin asked Mkandawire if CCIA worked with out-of-state farmers for seed certification. Mkandawire explained that out-of-state farmers would work with CCIA's sister organizations. However, CCIA would recognize and accept seed certification completed by their sister organizations.

Serbin asked Mkandawire if that same relationship applies to variety certification. Mkandawire confirmed that CCIA would recognize and accept seed certification completed by their sister organizations.

Serbin asked Mkandawire if CCIA would be notified by their sister organizations when certified seeds entered the state. Mkandawire explained that CCIA's sister agencies would notify CCIA by forwarding the interstate certificate.

John Roulac asked if there was a process to test cultivars that had been approved in a different environment. Mkandawire noted that CCIA did not have the capabilities to conduct variety trials.

Matt McClain asked if CCIA approved the industrial hemp variety list and seed certification standards. Mkandawire stated that CCIA's Board of Directors met on February 22, 2018 and approved both the variety list and the seed certification standards.

McClain asked if the seed certification process was required for all fruits and vegetables grown in California. Mkandawire explained that CCIA's seed certification process applied mostly to row crops and a few vegetable seeds.

McClain asked if the seed certification process was unique to industrial hemp. Mkandawire stated that the CCIA's seed certification standards for industrial hemp was based on the accepted standards from AOSCA and CCIA's sister organizations.

McClain asked about the U.S. Drug Enforcement Administration permit requirements in the seed certification process. Mkandawire explained that CCIA had no recommendations regarding compliance with federal law.

Allison Justice asked a question regarding certified industrial hemp clones. Mkandawire stated that AOSCA was meeting in June 2018 to discuss how to certify industrial hemp clones.

Wayne Richman, Executive Director of the California Hemp Association, asked about the relationship between established agricultural research institutions and CCIA. Mkandawire explained CCIA worked closely with the county agricultural commissioners, but that further clarification was needed for working with establish agricultural research institutions for the seed certification process.

Tyler Hoff, Bulk Seed Warehouse, asked for an approved varieties list broken down by post-harvest use. Mkandawire stated that CCIA was currently compiling that information.

Raymond Strack commented that there was a lack of information on the approved cultivars list online and asked about the variety certification process. Mkandawire stated that an overview of variety certification was provided at the January 18, 2018 board meeting.

Robinson asked for a timeline of when the additional information would be made available on the approved cultivar list. Mkanadawire replied that it may take a month to compile and post the information. McClain noted that some of the information was available on the AOSCA website.

Justin Eve, 7 Generations, asked if CCIA was the only seed certification agency in California. Kress explained that CCIA was recognized as the State's seed certifying agency.

Josh Chase, TekCor, asked if other crops needed certified seeds and if there was a possibility to remove the requirement of using certified seed. Serbin replied that this was going to be discussed during the discussion on pending legislation.

There were no motions regarding this item.

4. Sampling and Testing Task Force Report and Review and Approval of Minutes from February 22, 2018 Task Force Meeting

Allison Justice and Richard Soria presented information regarding sampling and testing of industrial hemp compiled from the task force meeting on February 22, 2018, as well as their recommendations (attached). The task force meeting included representatives from Colorado, Indiana, Kentucky, Steep Hill Laboratories, and CDFA's Center for Analytical Chemistry,

Roulac asked if practices from Canada were taken into consideration during the development of the recommendations. Justice noted that there was no representation from Canada during the task force meeting. Kress explained that Canada's practices were referenced by the other state's representatives during the task force meeting.

Justice and Soria presented their recommendations on sampling timeline, sample collection method, sample handling, THC testing method, sample laboratory preparation and storage, sample retention and disposal, and THC determination and actions:

- Sampling to be done no more than 30 days prior harvest.
- Samples to be taken randomly by inspector with the farmer physically present.
- At least five random samples from different plants taken per variety to be milled and combined to one composite sample.
- Samples to include stem, stalks, flowers, leaves, seeds, and buds (all parts intended to be included in the extraction process).
- Avoid sampling field edges.
- No sampling of male plants.
- Indoor and outdoor growing areas to be treated as separate sampling areas even if they are the same variety.
- Samples to be placed in a brown paper bag (or other breathable bag), properly labeled chain-of-custody (signed by both farmer and inspector), and sealed in a manner to show evidence of tampering.
- Samples to be kept in a cool storage.
- Samples to be tested for THC content using gas chromatography with a flame ionization detector.
- Each variety (5 samples from different plants) to be dried and then milled to a homogenous powder-like consistency at lab.
- Different varieties to be kept and tested separately.
- Laboratories do not determine which parts of the plants are used for testing
- If THC content is passing, sample to be retained by lab for 30 days.
- If THC content is over 0.3% or under 1%, sample to be retained for 60 days.
- Registrant to be notified within 10 days of sampling results.
- If farmer chooses to harvest prior to the 10 days allocated to receive testing results and still wishes to qualify for a retest, farmer must keep each variety in properly labeled batches. This includes the drying process as well as after milling and storage. For retest, the farmer can submit samples in which they would later send to the extraction process (ex. Grinded flower/stem/seed).

Serbin asked if Justice and Soria had recommendations on who would conduct the field inspections and sampling. Soria noted that there were certified laboratories throughout California already conducting cannabis testing and reasoned that using certified laboratories would alleviate the responsibilities on the counties. Justice agreed and stated that using certified laboratories

would potentially expedite the testing process since there would be enough staff from certified laboratories to handle the workload, and the counties would not have to take the sampling and testing responsibilities into consideration in determining the registration fee.

Serbin asked who would receive a copy of the laboratory testing results. Justice stated that the laboratory should forward the results to both the farmer and the county.

Robinson asked about the recommendation to not test male plants. Justice explained that male plants had very low THC content.

Serbin asked about sampling plants harvested prior to flowering. Soria suggested to include guidelines that allowed the inspectors to use discretion in determining whether sampling was required for plantings that have not flowered.

Serbin asked about the recommendation requiring laboratories to retain samples for 30 days. Kress noted that sample retention was mainly for regulatory purposes like retesting and evidence.

Pires asked if there was portable testing for THC content available. Justice stated that there were options for portable testing, however, they were found to be inaccurate. Serbin noted that he was aware that portable testing kits were available for approximately 50 dollars.

McClain asked if the cannabis testing laboratories were registered with the US Drug Enforcement Administration (DEA). Justice stated that she found one DEA-registered laboratory in San Francisco.

McClain asked if the cannabis testing laboratories were also certified to International Organization for Standardization (ISO) standards. Justice replied that most cannabis testing laboratories were ISO-certified.

Rick Gurrola asked if the task force had any recommendations on approved crop destruction methods. Soria recommended leaving the crop destruction method to the commissioners' discretion. Gurrola raised concerns regarding placing crop destruction responsibilities on the commissioners. Robinson recommended that approved crop destruction methods be determined by the local board of supervisors, which allowed the commissioners and local law enforcement to work together to address crop destruction. Gurrola requested that the Board discuss the topic further to determine statewide standards for approved crop destruction methods.

Justice noted that many of the states burned the crop as a method of crop destruction. Serbin asked if approved crop destruction methods were outlined in the law. Justice stated crop destruction methods were not listed in the current statute. Gurrola recommended to include the Air Resources Board in the discussion regarding burning as a viable crop destruction method. McClain suggested biochar gasification as an approved method.

Mellano asked about the stability of the sample during handling and storage. Justice replied that the brown bag recommendation was to block UV rays from the samples. Justice noted that there may be degradation of the sample during handling and storage, but no accumulation of THC content.

Mellano requested clarification on the sampling volume. Justice explained that the recommendation was for five random samples per variety per plot. Kress stated there was no

consistency from state-to-state in the defining a representative sample per plot. Kress explained the bigger concern among the states was to have enough sample material to conduct the tests.

Serbin requested clarification on the compositing of samples. Justice explained that all five samples would be milled together to homogenize the samples prior to testing.

Roulac asked about the recommendation of requiring laboratories to notify registrants of test results within 10 days of sampling. Justice explained that the task force was suggesting this guideline because it would depend on the laboratories' capabilities.

Roulac asked about the process of implementing the guidelines recommended by the task force. Kress stated that the process would depend on whether the Board would like to see the recommendations as general best practice guidelines or as requirements. Kress noted that any recommendations the Board would like to see as requirements outlined in regulations would go through the rulemaking process.

Serbin recommended that the Board waited until after the review of the federal status and proposed state legislation presentation to make any motions regarding the task force's recommendations on sampling and testing for THC content. Serbin noted that legislative changes may impact any motions the Board may make.

Robinson asked if the task force had recommendations on who would be responsible for aggregating testing results data. Justice replied that the task force did not discuss this topic, however, the laboratories would be able to supply the state with data on testing results. Kress explained that the states who participated in the task force meeting used state laboratories to conduct the THC testing.

George Bianchini commented that cannabis laboratories licensed by the California Bureau of Cannabis Control (BCC) could cost approximately \$1,000 per testing. Bianchini recommended a moisture level of 10-12% for testing calculations, which he explained mirrored the percentage used in cannabis testing calculations. Bianchini also explained that a company he hired discovered testing results from ISO-certified cannabis laboratories could vary 10-20%.

Bianchini expressed concerns regarding THC material that remained after CBD processing since the BCC was not allowing hemp products to be sold in cannabis dispensaries.

Strack echoed Bianchini's concern that such variation in testing results from ISO-certified cannabis laboratories would negatively impact industrial hemp testing since the THC content threshold is low. Strack also raised concerns that requiring the use of cannabis laboratory may cause a bottleneck problem due to the already high demand from the cannabis industry and potential increase in workload from the industrial hemp industry.

Strack recommended that the Board considered composting and biochar as approved crop destruction methods.

Healy echoed Strack's recommendation for the Board to consider composting for environmental and economic reasons. Healy stated that the storage of harvested material for 30 days can be detrimental to the chemical properties the material would be processed for. He recommended a 24- to 48-hour turnaround on the test results.

Eve suggested under-tilling rather than composting as an approved crop destruction method since composting required transporting the material to another location. Eve stated that burning and biochar may not be feasible crop destruction methods due to carbon issues.

Eve recommended that sampling be conducted by acres. He also explained that seed breeders in the industry used the term "seed variety" and not "cultivars". Eve suggested that the Board work with Oregon in developing guidelines for sampling and testing. Eve recommended that the Board considered HPLC as the testing method since it detected more cannabinoid content. Eve recommended that THC testing be completed by a laboratory certified by the DEA, ISO, or the Food and Drug Administration, and to not use laboratories currently conducting cannabis testing. Eve also noted that industrial hemp had a degradation period of 30 to 45 days due to oxidation.

5. Brief Update on Federal Status and Proposed State Legislation for Industrial Hemp Patrick Goggin, Hemp Industries Association, provided an update of the federal status and proposed state legislation for industrial hemp.

Goggin explained that US Senator Mitch McConnell introduced the federal Hemp Farming Act of 2018 (S.2667) in the Senate, and a corresponding bill (H.R.5485) was introduced in the House of Representatives. This bill included the following changes to federal law:

- Amendment to the Agricultural Marketing Act of 1946 to allow states to regulate hemp growth and production.
- Exclusion of hemp from the Controlled Substance Act.
- Definition of hemp as 0.3 THC on a dry weight basis.
- Inclusion of extracts and cannabinoids in definition of hemp.
- Allowance of the participation of Indian tribes in the cultivation of industrial hemp.
- Allowance of cultivation of industrial hemp with an U.S Department of Agriculture-approved plan.
- Allowance of competitive grant funding for industrial hemp research.
- Requirement for the Secretary of Agriculture to submit a report on industrial hemp pilot programs to determine the viability of domestic production and sale of industrial hemp.
- Addition of hemp as an eligible commodity for crop insurance.

Goggin noted similar language could be included in the 2018 Farm Bill.

Serbin asked if removing industrial hemp from the Controlled Substance Act would allow growers to engage with the banking industry. Goggin stated that there was a potential amendment to include a banking provision and a wet standard for THC content.

Roulac praised Goggin's efforts to legalize industrial hemp. Roulac explained that changes in leadership within the legislative branch may accelerate the legalization of industrial hemp.

McClain asked about the timeline for this bill. Goggin explained that if S.2667 failed as a standalone bill, it may be included as part of the farm bill.

An unidentified member of the public asked about the support and opposition to S.2667. Goggin explained that S.2667 had bipartisan support, as shown in the original bill cosponsors, and that S.2667 may receive opposition from the DEA.

Goggin reviewed the proposed state legislation, Senate Bill 1409 (SB 1409), and explained that it was cleanup bill to help further the progress of California's industrial hemp industry. Goggin

stated that SB 1409 was heard by the Senate Public Safety Committee and was expected to proceed with a unanimous vote. Goggin noted that SB 1409 included the following changes to state law:

- Removal of fiber/oilseed language that conflicted with the expanded definition adopted under Proposition 64 to include extracts.
- Removal of prohibition of pruning, tending, and culling of plants.
- Removal of prohibition of ornamental cultivation.
- Allowance for cities and counties to restrict cultivation.
- Removal of date limitation on approved seed cultivars.

Goggin noted that the term "densely planted" was not removed from SB 1409 because the removal required a two-third majority vote, according to the Office of Legislative Counsel.

Goggin noted that the following changes were being considered for future amendments to SB 1409:

- Limitation on the prohibition of cultivation by counties and cities to only cross-pollination concerns.
- Allowance for CDFA to establish a pilot program.
- Removal of the DEA-certified laboratory requirement.
- Incorporation of IHAB recommended sampling and testing guidelines

Goggin also noted an additional bill, Assembly Bill 710, that proposed changes to account for any future changes in federal law regarding CBD.

Serbin noted that CDFA and the Board did not make the law; the Board's purpose was to advise CDFA and CDFA's purpose was to implement the law.

Serbin suggested that SB 1409 should remove testing requirements since approved hemp seed cultivar was already required. Goggin explained that removing testing requirements could result in state law not being in compliance with pending federal law.

Kress asked if targeted testing would be sufficient for S.2667, or if S.2667 would require testing of every planting. Goggin responded that targeted testing would be considered a testing process.

Roulac asked Kress if CDFA recommended targeted testing. Kress noted that current California law required testing of every planting, and the Board could make recommendations regarding the law.

Robinson explained that targeted testing would not impact law enforcement's efforts in testing to determine if industrial hemp plantings contained the acceptable THC content.

Robinson asked how the public could submit comments and suggestions regarding pending state legislation. Goggin stated that comments and suggestions should be forwarded to State Senator Wilk's office, Eddie Bernacchi from Politico Group, or Goggin himself.

McClain asked about the definition of industrial hemp. Goggin statedd that the definition of industrial hemp was part of Section 11018.5 of the Health and Safety Code.

McClain asked about the term "densely planted". Goggin confirmed that the term was not defined in current law.

McClain asked about the reason behind removing the oilseed and fiber language. Goggin explained that the proposed removal of the oilseed and fiber language was to align current law to the Proposition 64's intention to include extracts and derivatives in the definition of industrial hemp.

McClain asked if the proposed language that allowed cities and counties to prohibit the cultivation of industrial hemp based on cross-pollination concerns applied to established agricultural research institutions. Goggin explained that the proposed amendment did not specify if cities and counties would be authorized to prohibit established agricultural research institutions from cultivating. McClain expressed concerns regarding the broadness the authority and personally recommended that the proposed language did not apply to established agricultural research institutions.

McClain asked if there were plans for SB 1409 to amend the DEA-registered laboratory requirement. Goggin confirm that there were plans to amend the laboratory requirement.

McClain asked about the proposed language to authorize CDFA to establish an agricultural pilot program. Goggin explained the proposed language came from the Office of Legislative Counsel and provided CDFA some flexibility. McClain recommended changing "may" into "shall" to require CDFA to establish an agricultural pilot program.

McClain noted that SB 1409 did not include language regarding tribal cultivation of industrial hemp.

Robinson recommended to allow time for board members to review SB 1409 and propose recommendations at the next board meeting. Goggin explained that recommendations made at the next board meeting may be too late to take into consideration.

Serbin stated that a task force would be more effective in reviewing and providing recommendations to SB 1409.

Roulac asked about the timeline of SB 1409. Goggin explained that SB 1409 was expected to be heard in the Assembly with the Agriculture or Public Safety Committee in June and the second policy committee in August. Goggin stated that he expected SB 1409 would be heard by the Appropriations Committee at the end of August and placed on the Governor's desk in September.

Serbin asked for volunteers for a legislation task force to review SB 1409 and present recommendations at the next board meeting. McClain and Mellano volunteered.

An unidentified member of the public commented that he believed the Board was establishing sound guidelines for cultivation in California.

Conor Stephen, a senior studying Agriculture and Environmental Plant Sciences at the California Polytechnic State University in San Luis Obispo, advocated for support to establish an industrial hemp pilot program at his university.

Ted Fitzgerald, a third-year student studying Agriculture Business at the California Polytechnic State University in San Luis Obispo, requested the Board's support to allow research of industrial hemp on his campus.

Chris Boucher asked about federal enforcement within California. Goggin explained Farm Bill compliant material can be transported and sold interstate. However, established agricultural research institutions must be an institution of higher education to be compliant with current federal law. Goggin stated that current federal legislation would resolve the issue. Boucher requested that CDFA followed up with the federal checkpoints within the state to get clarification on this issue.

Richman stated that the California Hemp Association was opposing some of the changes proposed in SB 1409.

Roosevelt Shannon suggested that the Board require testing for all fields to ensure full compliance to federal and state law.

Bianchini expressed concerns regarding the lack of guidelines in proposed state and federal legislation regarding the THC content of material produced through the processing of industrial hemp.

Hoff asked if state law would need to be updated if federal law was amended as outlined in S.2667. Goggin explained that he did not believe the anticipated changes in the federal law would have any impact to the efforts at the state level.

There were no motions regarding this item.

4. Sampling and Testing Task Force Report and Review and Approval of Minutes from February 22, 2018 Task Force Meeting (Continuing)

Kress reviewed each recommendation regarding sampling and testing for the Board to discuss what action need to be taken by CDFA to proceed.

Kress noted the recommendation regarding sample collection did not specify who would be the sampler and that it was suggested that samples would be collected by a representative from the cannabis laboratory conducting the testing.

Roulac expressed cost concerns regarding cannabis laboratories conducting sampling and testing for industrial hemp. Soria noted one cannabis laboratory was charging \$500 for sampling and testing, including terpene and pesticide testing.

Justice explained that the task force's recommendation of using cannabis laboratories for sampling and testing of industrial was based on the immediate availability of the laboratories. Justice explained the task force also considered the state laboratory and ISO-certified laboratories. Justice raised potential workload issues with requiring the state laboratory to conduct the testing. Justice noted that private ISO-certified laboratories would take time to be established in the industry.

Robinson asked if current law had requirements regarding data collection. Kress explained that current law does not provide any data collection requirement and the task force did not include

any recommendation on data collection. Kress noted that other states had access to testing data because they required the use of state laboratories.

Soria suggested including standards on data collection. Robinson recommended aggregated data on testing results include the number of test results below 0.3%, greater than 0.3% but less than 1.0%, and greater than 1.0%, and reported annually to CDFA. Kress noted that the task force outlined a recommendation to have test results provided to both the registrant and the counties, which would allow the counties to aggregate the data themselves.

Mellano asked about modifying the guidelines in the future. Kress explained that it would depend on the Board's recommendation to establish the guidelines as best practices or as requirements. Serbin noted legislative changes may impact the recommended sampling and testing guidelines. Robinson recommended the sampling and testing guidelines be complied as a draft document.

Motion #3: Robinson moved that CDFA create a draft protocol based on the recommended sampling and testing guidelines presented by the task force and include the recommendation to have the counties aggregate data provided by the testing laboratories to assist CDFA in publishing an annual report to be presented to the Board for further discussion. Soria seconded the motion.

Kress asked if there is a recommendation on who would be collect and test the samples. Soria stated that the recommendation will need further discussion.

Justice expressed concerns regarding moisture content and requested that the Board wait for further research to be conducted before recommending a guideline on moisture content.

Healy, raised concerns regarding storing harvested material for 30 days. Roulac and Justice clarified that testing was to be conducted no more than 30 days prior to harvesting and the laboratory had 10 days to provide results to the grower.

Jessica Mackenzie asked if the Board was making a recommendation on who was responsible to conduct the THC testing. Robinson responded that the recommendation would be determined at a later time.

The Board voted on Motion #3 as follows:

Yes: Van Butsic, Rick Gurrola, Allison Justice, Matt McClain, Valerie Mellano, Tom

Pires, David Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None Absent: None

Motion carried.

The draft minutes from February 22, 2018 Task Force Meeting were presented to the Board. No changes were suggested.

Motion #4: Roulac moved to accept the minutes for the February 22, 2018 Task Force Meeting as presented. Justice seconded the motion.

There were no further discussions or comments.

The Board voted on Motion #4 as follows:

Yes: Van Butsic, Rick Gurrola, Allison Justice, Matt McClain, Valerie Mellano, Tom

Pires, David Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None Absent: None

Motion carried.

5. Report on Industrial Hemp Cultivation Survey

Michelle Phillips present a summary of a survey of the public through the CDFA industrial hemp mailing list to determine the public's intent to cultivate industrial hemp (attached).

Phillips noted that CDFA received 298 responses out of the 1,666 email recipients that were contacted. 232 respondents stated that they intended on registering; respondents were most interested in cultivating hemp for cannabinoid production and fiber. San Diego, Monterey, Riverside, Los Angeles, Yolo, Fresno, San Bernardino, San Luis Obispo, Kern, Mendocino, and Santa Cruz counties had the most respondents intending to register as a grower and/or seed breeder.

McClain asked how CDFA acquired the email list. Phillips stated that the list was the CDFA mailing list used to update interested parties regarding industrial hemp. Kress added that the list is the same list used to notify the public regarding upcoming board meetings.

Brian Webster asked if the report would be made available to the public. Kress noted that requests for documents should be sent to CDFA at industrialhemp@cdfa.ca.gov, and that documents would be included in the minutes as well.

There were no motions regarding this item.

6. Election of Officers

Kress stated that the Board had a vacancy at Chair since Carlson had stepped down from the Board. Kress asked if the Board would like to move to appoint a new Board Chair.

<u>Motion #5</u>: Robinson moved to nominate Serbin as the Board Chair. Roulac seconded the motion.

There were no further discussions or comments.

The Board voted on the Motion #5 as follows:

Yes: Van Butsic, Allison Justice, Matt McClain, Valerie Mellano, Tom Pires, David

Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None

Absent: Rick Gurrola

Motion carried.

Kress asked if the Board would like to move with a motion to appoint a new Vice Chair or another officer. Kress explained that the Vice Chair would lead the meeting in the absence of the Board Chair. Soria volunteered to be the Board's Vice Chair.

Motion #6: Robinson moved to nominate Soria as the Vice Chair. Serbin seconded the motion.

There were no further discussions or comments.

The Board voted on Motion #6 as follows:

Yes: Van Butsic, Allison Justice, Matt McClain, Valerie Mellano, Tom Pires, David

Robinson, John Roulac, Lawrence Serbin, and Richard Soria

No: None Abstained: None

Absent: Rick Gurrola

Motion carried.

7. Public Comments and Next Meeting/Agenda Items

Kress provided an update on the Board's recommendation at the October 17, 2017 meeting to have CDFA promulgate regulations to establish a registration and renewal fee of not less than \$1,000 per applicant to be collected by the county agricultural commissioner, that the county of board of supervisors set and adopt a free greater than \$1,000 pursuant to county rules, and that \$1,000 per applicant be forwarded by the commissioner to CDFA. Kress explained CDFA was not able to move forward in promulgating the regulations because it was determined that it was not in line with current statute.

Serbin asked if Kress had any recommendations on a fee structure. Kress explained that current law did not allow county agricultural commissioners to set a fee and the county agricultural commissioners did not have broad authority to set fees. Kress suggested further investigation by the Board to determine alternative options for a fee structure.

Serbin asked about reimbursement of costs to the counties. Kress explained that CDFA had the general authority to reimburse the counties. However, reimbursement to the counties would require additional administrative processes.

McClain asked if there was an estimate on the county cost. Kress stated that there was no estimate on the counties' cost, but that could be part of the investigation of a task force. Kress noted that the costs between the counties varied greatly. Kress suggested looking at the counties' fees already established for a wide range of activities.

McClain recommended Gurrola participate in a registration fee task force. Robinson volunteered to work on the registration fee task force, as well.

Serbin appointed Gurrola and Robinson to a registration fee task force, and assigned them to further investigate and present a recommendation to Board at the next board meeting.

Hoff asked about the timeline of the regulations for the registration fee. Kress explained the 45-day commenting period would initiate once the proposed regulations were posted.

Eve presented to the Board an application template and offered to provide assistance to the Board. Kress noted that the information provided by Eve would be made available to the public.

Webster commented on the slow progress to establish a registration program. Webster requested the Board to form a task force to determine what CDFA could do to expedite the rulemaking process and provide a status update on regulations at each board meeting. Serbin responded that CDFA was required to follow the rulemaking process set by the Administration Procedures Act.

The Board tentatively set the next board meeting for May 15, 2018, pending confirmation.

8. Adjournment

Meeting adjourned by Serbin at 12:51 PM.

Respectfully submitted by:

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



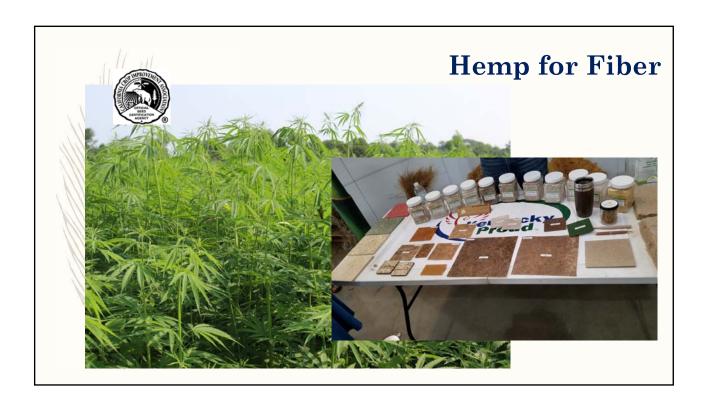




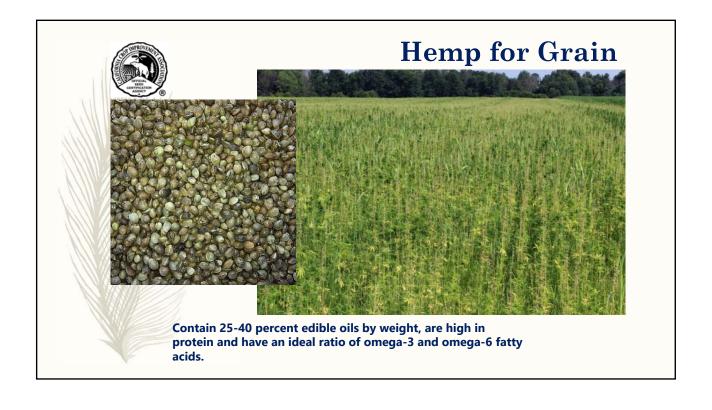
California Crop Improvement Association (CCIA)



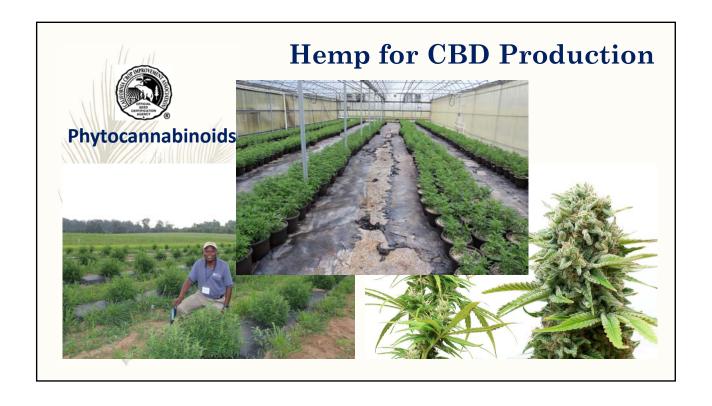
The CCIA's objective is to ensure that California certified seed is of high quality. Quality characteristics of seed include trueness to variety, varietal purity, freedom from noxious and problematic weeds, low inert matter, and high germination.



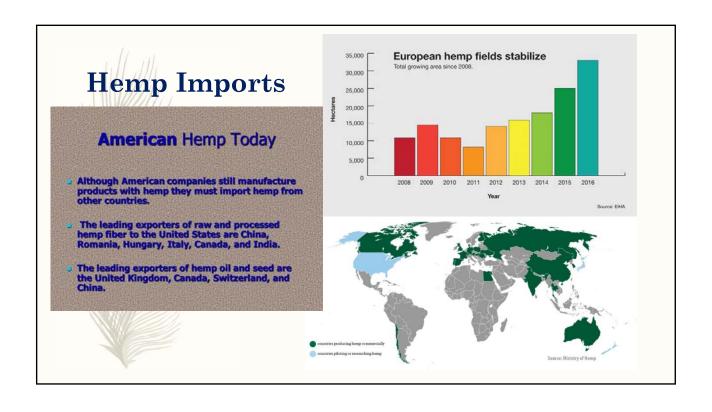


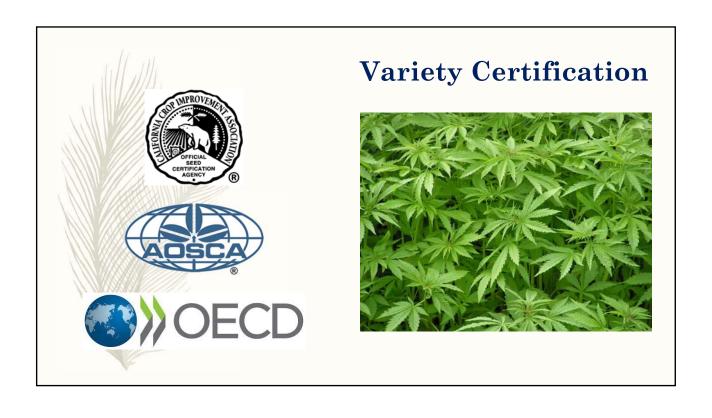




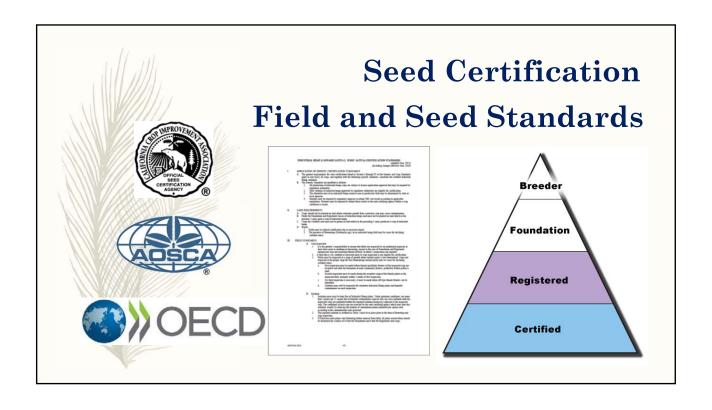


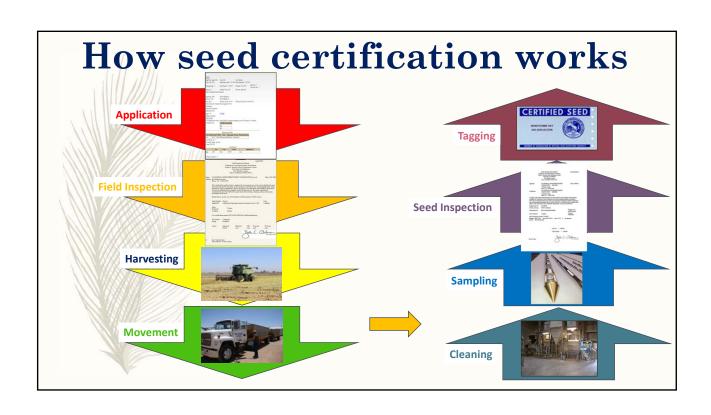


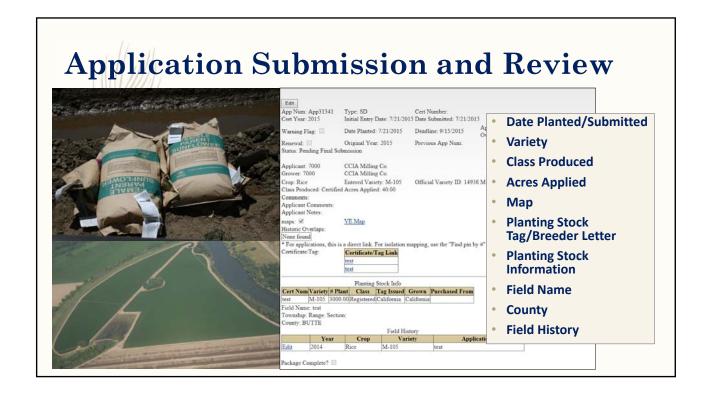


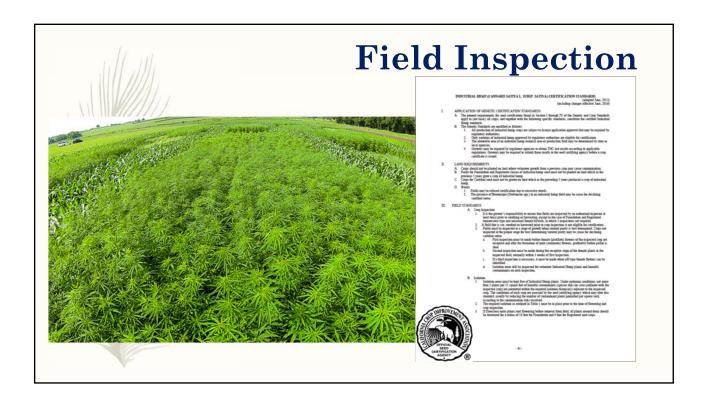












LAND REQUIREMENTS

- A. Crops should not be planted on land where volunteer growth from a previous crop may cause contamination.
- B. Fields for Foundation and Registered classes of industrial hemp seed must not be planted on land which in the previous 5 years grew a crop of industrial hemp.
- C. Crops for Certified seed must not be grown on land which in the preceding 3 years produced a crop of industrial hemp.
- D. Weeds
- 1. Fields may be rejected due to excessive weeds.
- 2. The presence of Broomrape (*Orobanche* spp.) in an industrial hemp field may be cause for rejection.

Field Standards



FIELD STANDARDS

A. Crop Inspection

1. It is the grower's responsibility to ensure that fields are inspected by an authorized inspector at least twice prior to swathing or harvesting, except in the case of Foundation and Registered monoecious types and unisexual female hybrids, in which 3 inspections are required.

2. A field that is cut, swathed or harvested prior to crop inspection is not eligible for certification.

3. Fields must be inspected at a stage of growth when varietal purity is best determined. Crops not inspected at the proper stage for best determining varietal purity may be cause for declining certified status.

Field Standards



FIELD STANDARDS

B. Isolation

1. There shall not be any Cannabis sativa plants within 330 feet of the inspected crop. However, not more than 4 plants per acre of harmful contaminants (including species other than Cannabis sativa that can cross pollinate with the inspected crop) shall be permitted beyond 330 feet within the isolation distance of the inspected crop. 2. The required isolation as outlined in Table 1 must be in place prior to the time of flowering and crop inspection. 3. If Dioecious male plants start flowering before removal from field, all plants around them should be destroyed for a radius of 10 feet for Foundation and 6 feet for Registered seed crops.

Field Standards



Field Standards

Table 1. Isolation Distances

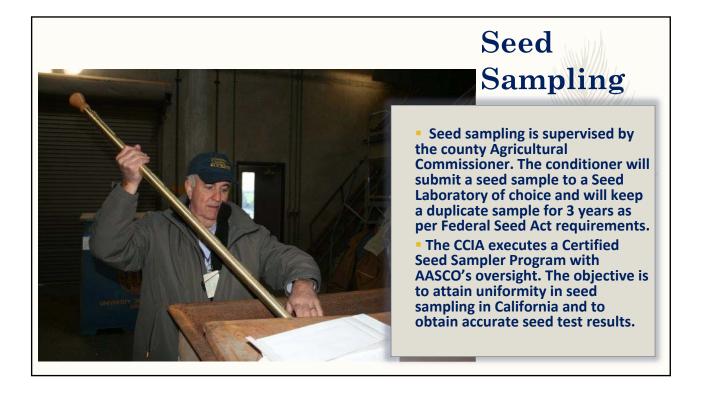
Inspected Crop	Other Crops	Isolation Distance	
Dioecious type:			TO THE WAY
Foundation and Registered	Other variety & Non cert Lower Class crop	16150' (3 mile) 6460' (1.2 mile)	
Certified	Other variety & Non cert	3230' (0.6 mile)	
Monoecious and Hybrid type:			
Foundation and Registered	Dioecious & Non cert Other Monoecious Lower Class crop	16150' (3 mile) 6460' (1.2 mile) 3230' (0.6 mile)	
Certified	Other variety & Non cert	3230' (0.6 mile)	THE PARTY OF THE P
	2 100		





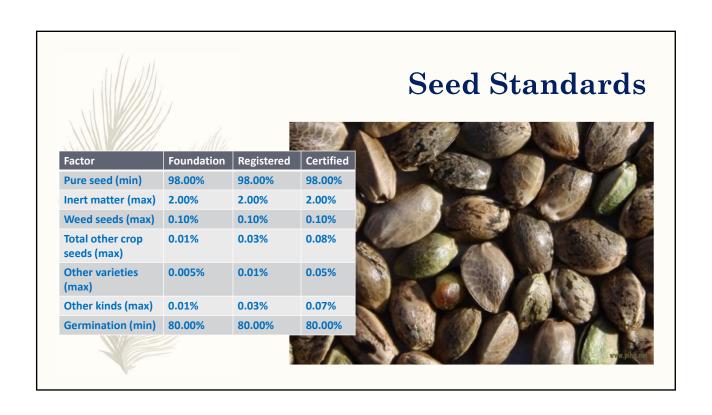




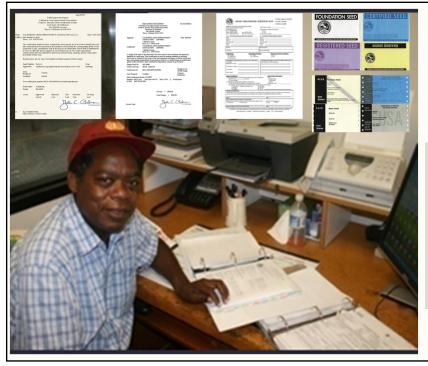












Seed Tagging and Audit

Review of Documentation

- 1. Determine field size from application;
- Determine in-dirt amount of seed (correlate with yield);
- 3. Field Inspection Report;
- 4. Seed Transfer Certificate?
- 5. Eligibility of seed sampler;
- 6. Laboratory Report of Analysis;
- 7. Seed Inspection Report;
- 8. Tags received and used.



Industrial Hemp Standards Comparison

IHAB Sampling and Testing Task Force - February 22, 2018

Sampling Timeline

FAC 81006(f)(1): 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.

State	Standard
Colorado	 Sampling must be completed 30 days prior to harvesting Registrant must submit harvesting report 30 days prior to harvesting Notify commissioner within 5 days of any harvesting date changes
Indiana	
Kentucky	Pre-harvest sampling triggered by notification of harvesting Notification of harvesting must occur 15 days prior to expected harvesting date
Minnesota	Sampling should occur 70-90 days after planting (optimal date being 70 days after planting, and not later than 90 days after planting)
Oregon	Sampling to occur no more than four (4) weeks (28 days) prior to harvest

Recommendation: Sampling to be done no more than 30 days prior harvest.

Sampling CollectionFAC Section 81006(f)(2): 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.

State	Standard
Colorado	Sample volume at inspector's discretion Provides sample weight guidelines based on plot size Inspector's discretion to combine varieties in one composite sample Treat indoor and outdoor growing areas as separate sampling areas even if plant material is same variety Collect top 2 inches of female plant flower should be sampled, 2 inches tips of female plants, or top 2 inches flowers of female plants in the top part of the plant in full sun Do not sample male plants Avoid field edges
Indiana	 Approximately 30 inflorescences per variety of plant from the top of the plant Separate sample for aberrant or atypical plant from composite sample Collect complete flower head of a plant including stems, stalks, and flowers as well as foliage leaf material, involucral leaves and buds Inspector collects by walking at right angles to the rows of plants and take a representative sample of the variety of the plant.
Kentucky	Cuttings will be collected to make one representative sample. Clip the top 20 cm of hemp plant's primary stem, including female floral material. Take cuttings from at least five (5) hemp plants within the plot. A separate sample must be taken from each non-contiguous plot of a given variety. A separate sample must be taken for each variety. Material selected for Pre-Harvest sampling will be determined by inspector.

Sampling Collection

FAC Section 81006(f)(2): 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.

State	Standard	
Minnesota	Sampling volume and pattern at inspector's discretion Provides sample count guidelines based on field size Small fields may be sampled in a X pattern Larger or irregular-shaped fields be sampled by walking field perimeter and taking paths into field to collect 1-2 samples along each path Collect top 2 inches of female flowering plants or top 2 inches of available plant material for fiber and non-flowering fields Avoid field edges	
Oregon	Sampling volume based on field condition for harvest lot (Harvest lot is defined as 1) industrial hemp that is grown in one contiguous growing area or 2) grown in a portion or portions of one contiguous growing area) normal fields: sample in a X pattern; maximum 30 samples in one composite dense fields: sample by walking field perimeter and taking paths (minimum 5 feet) into field to collect; maximum 30 samples in one composite	
	greenhouses or small fields: minimum composite sample size of 4 ounces Provides table of number for random samples to be taken based on total number of plants (1-200,000) No more than one sample per plant	
	 Collect approximately 8 inches of flowering tops when flowering tops are present Avoid field edges 	

Recommendation: Samples taken randomly by inspector with the farmer physically present. At least five random samples from different plants taken per variety to be milled and combined to one sample. These are to include stem, stalks, flowers, leaves, seeds, and buds (all parts intended to be included in the extraction process). Avoid field edges. No testing of male plant. Indoor and outdoor growing areas should be treated as separate sampling areas even if

Sample Handling

California Law - No statutory requirements.

State	Standard	
Colorado	Place samples in brown paper bag with chain of custody tape to seal Keep samples out of sun and keep cool Ideally same day delivery but can be held if necessary (weekend, etc.)	
Indiana	Seal sample with chain of custody labels Keep sample in a dark, not hot, storage area Store samples in locked freezer or dryer	
Kentucky	Place the complete sample in a paper bag. Seal the bag by folding over the top once and stapling the bag shut. Store samples in locked cabinet at lab	
Minnesota	Brown paper bag with chain of custody tape to seal Keep out of sun and keep cool	
Oregon	 Place each sample in a paper bag. Seal in a manner to show evidence of tampering. Store dried homogenized sample in a freezer 	

Recommendation: Place sample in brown paper bag (or other breathable bag), properly labeled chain-of-custody (signed by both farmer and inspector), and sealed in a manner to show evidence of tampering. Keep sample in cool storage.

How does the board feel about State Certified Labs collecting samples?

THC Testing Method

California Law - No statutory requirements.

State	Standard
Colorado	Gas chromatography with a flame ionization detector
Indiana	Gas chromatography with a flame ionization detector
Kentucky	Gas chromatography with a flame ionization detector
Minnesota	High performance liquid chromatography with ultraviolet light detector
Oregon	Sampling policies and procedures must be accredited by Oregon Environmental Laboratory Accreditation Program (ORELAP)

Recommendation: Gas chromatography with a flame ionization detector.

HPLC will show slightly higher cannabinoid levels.

Sample Lab Prep & Storage

California Law - No statutory requirements.

State	Standard
Colorado	 Dry sample until constant weight achieved Sieve sample to discard seeds and stems Homogenize sample by grinding for approximately 30 seconds or until a fine, even texture is achieved Samples stored at room temperature in designated container in locked room
Indiana	 Dry sample to constant weight (weight change is less than 0.1g) Sieve sample to remove seeds and stems Homogenize sample by grinding to achieve uniform, powder-like consistency
Kentucky	Grind dried material using 5 mm screen and 1 mm screen
Minnesota	 Samples with high moisture content may be dried on a drying rack or in a low heat dryer Dried sample then ground up in a mortar and pestle
Oregon	Dry leaf and flower sample until brittle Pulverize and sieve sample using 1 mm screen Blend and homogenize sieved material

Recommendation: Each variety (5 samples from different plants) will be dried and then milled to a homogenous powder-like consistency at lab. Different varieties will be kept and tested separately. The lab does not determine which parts of the plants are for testing.

Sample Retention/Disposal

No statutory requirements.

State	Standard
Colorado	Dispose raw samples in trash receptacle if THC content is passing Secure raw samples in secure storage if THC content fails Sample and analytical extracts are disposed as non-chlorinated hazardous liquid waste
Indiana	 Sample extracts, analytical extracts and raw samples with THC levels above acceptance criteria will be retain and collected by law enforcement. Sample extracts, analytical extracts and raw samples with THC levels at or below acceptance criteria will be incinerated.
Kentucky	
Minnesota	Retained by the lab for 30 days
Oregon	

Recommendation:

If THC content is passing, sample should be retained by lab for 30 days.

If THC content is over 0.3% or under 1%, sample will be retained for 60 days.

THC Determination and Actions

FAC Section 81006(f)(5) If the laboratory test report indicates a percentage content of THC that is equal to or less than three-tenths of 1 percent, the laboratory shall provide the person who requested the testing not less than 10 original copies signed by an employee authorized by the laboratory and shall retain one or more original copies of the laboratory test report for a minimum of two years from its date of sampling.

State	Standard
Colorado	
Indiana	Samples with the level of THC≤1.0% are considered passing. Samples above the critical level are considered failing. Composite test result greater than 0.3% THC will be considered not in compliance Samples not passing acceptance criteria will be confirmed by being rerun
Kentucky	Test results with the level of THC of less than or 3,999 ppm are considered passing and material allowed to market Any variety testing above 3,000 ppm shall become designated as a Variety of Concern. Any marketing of materials testing between 3,001 ppm and 3,999 ppm is at the License Holder's risk Harvested materials of concern cannot comingle with other harvests Floral materials harvested for phytocannabinoid extraction cannot move beyond the process, nor comingled, nor extracted until KDA releases material Registrant will be notified within 45 days of sampling of testing and eligibility of harvested material to move into market research

Recommendation: Suggest registrant will be notified within 10 days of sampling if pass or fail.

THC Determination and Actions

FAC Section 81006(f)(6) If the laboratory test report indicates a percentage content of THC that is greater than three-tenths of 1 percent and does not exceed 1 percent, the registrant that grows industrial hemp shall submit additional samples for testing of the industrial hemp grown.

FAC Section 81006(f)(7) 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 (6) 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 take place within 48 hours 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.

State	Standard	
Minnesota	THC concentration reported to approximately 0.00200% reporting limit by weight (dependent on exact mass of testing sub-sample) Round test results down to nearest tenth of a percent for final determination THC concentration above 0.3% is a failed test and original sample will be retested	
Oregon	Laboratory shall retest retained sample at the request from a grower after the sample failed initial testing for THC content	

Recommendation: If farmer chooses to harvest prior to the 10 days allocated to receive testing results and still wishes to quality for a retest, farmer must keep each variety in properly labeled batches. This includes the drying process as well as after milling and storage. For retest, the farmer is allowed to submit samples in which they would later send to the extraction process (ex. Grinded flower/stem/seed).

Hemp Farming Act of 2018

Section-by-Section Summary

Section 1: Short Title – "Hemp Farming Act of 2018"

Section 2: Hemp Production

This section would amend the Agricultural Marketing Act of 1946 (7 U.S.C. 1621 et seq.) to let states build off investments made through the successful pilots established under the 2014 Farm Bill by authorizing them to regulate hemp growth and production by submitting a plan to the U.S. Department of Agriculture (USDA). These plans must demonstrate how states and tribes plan to maintain relevant information regarding locations of hemp production, testing hemp for THC concentration, dispose of plants and products that are out of compliance with this act, and account for negligent and other violations of the state or tribal plan. Hemp production in states and tribes that do not have USDA approved plans must continue to following federal laws and regulations that are promulgated by the USDA.

Section 3: Funding for Hemp Research

This section would make hemp research eligible for competitive grant funding under the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3319d(c)(3)(E)) and the Critical Agricultural Materials Act (7 U.S.C. 178c(b)(9)).

Section 4: Legitimacy of Industrial Hemp Research

Within 120 days of enactment, the Secretary of Agriculture would be required to submit a report to Congress reviewing the hemp pilot programs established under the 2014 Farm Bill to determine the economic viability of domestic production and sale of hemp. The authority for hemp pilot projects set forth in the last farm bill would expire within a year.

Section 5: Federal Crop Insurance

Adds hemp as an eligible commodity for the purposes of crop insurance on both a pre- and postharvest basis. This allows farmers to access capital for cultivation and production of hemp and hemp products.

Section 6: Exclusion of hemp from controlled substances schedules

Currently, hemp is considered a schedule I substance under the Controlled Substances Act (21 U.S.C. 802). This section would remove hemp with a concentration of not more than 0.3 percent delta-9 tetrahydrocannabinol (THC) from the controlled substances list. This includes the descheduling of all derivatives, extracts, and seeds of hemp as long as those portions of the plant remain below the THC threshold.

Section 7: Rule of Construction

This section contains language to clarify that nothing in this act authorizes interference with the interstate transportation or commerce of hemp or hemp products.

115TH CONGRESS 2D SESSION

S.

To amend the Agricultural Marketing Act of 1946 to provide for State and Tribal regulation of hemp production, and for other purposes.

IN THE SENATE OF THE UNITED STATES

	introduced	the fo	ollowing	bill;	which	was	read	twice
and referred to	the Commit	tee on	1					

A BILL

To amend the Agricultural Marketing Act of 1946 to provide for State and Tribal regulation of hemp production, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- This Act may be cited as the "Hemp Farming Act
- 5 of 2018".
- 6 SEC. 2. HEMP PRODUCTION.
- 7 The Agricultural Marketing Act of 1946 (7 U.S.C.
- 8 1621 et seq.) is amended by adding at the end the fol-
- 9 lowing:

"Subtitle G—Hemp Production

2	"SEC. 297A. DEFINITIONS.
3	"In this subtitle:
4	"(1) Hemp.—The term 'hemp' means the plant
5	Cannabis sativa L. and any part of that plant, in-
6	cluding the seeds thereof and all derivatives, ex-
7	tracts, cannabinoids, isomers, acids, salts, and salts
8	of isomers, whether growing or not, with a delta-9
9	tetrahydrocannabinol concentration of not more than
10	0.3 percent on a dry weight basis.
11	"(2) Indian tribe.—The term 'Indian tribe'
12	has the meaning given the term in section 4 of the
13	Indian Self-Determination and Education Assistance
14	Act (25 U.S.C. 5304).
15	"(3) Secretary.—The term 'Secretary' means
16	the Secretary of Agriculture.
17	"(4) State.—The term 'State' means—
18	"(A) a State;
19	"(B) the District of Columbia;
20	"(C) the Commonwealth of Puerto Rico;
21	and
22	"(D) any other territory or possession of
23	the United States.
24	"(5) State department of agriculture.—
25	The term 'State department of agriculture' means

1	the agency, commission, or department of a State
2	government responsible for agriculture in the State.
3	"(6) Tribal Government.—The term 'Tribal
4	government' means the governing body of an Indian
5	tribe.
6	"SEC. 297B. STATE AND TRIBAL PLANS.
7	"(a) Submission.—
8	"(1) IN GENERAL.—A State or Indian tribe de-
9	siring to have primary regulatory authority over the
10	production of hemp in the State or territory of the
11	Indian tribe shall submit to the Secretary, through
12	the State department of agriculture (in consultation
13	with the Governor and chief law enforcement officer
14	of the State) or the Tribal government, as applica-
15	ble, a plan under which the State or Indian tribe
16	monitors and regulates that production as described
17	in paragraph (2).
18	"(2) Contents.—A State or Tribal plan re-
19	ferred to in paragraph (1)—
20	"(A) shall only be required to include—
21	"(i) a practice to maintain relevant in-
22	formation regarding land on which hemp is
23	produced in the State or territory of the
24	Indian tribe, including a legal description

4

1	of the land, for a period of not less than
2	3 calendar years;
3	"(ii) a procedure for testing, using
4	post-decarboxylation or other similarly reli-
5	able methods, delta-9 tetrahydrocannabinol
6	concentration levels of hemp produced in
7	the State or territory of the Indian tribe;
8	"(iii) a procedure for the effective dis-
9	posal of products that are produced in vio-
10	lation of this subtitle; and
11	"(iv) a procedure to comply with the
12	enforcement procedures under subsection
13	(d); and
14	"(B) may include any other practice or
15	procedure established by a State or Indian
16	tribe, as applicable, to the extent that the prac-
17	tice or procedure is consistent with this subtitle.
18	"(3) Relation to state and tribal law.—
19	"(A) No preemption.—Nothing in this
20	subsection preempts or limits any law of a
21	State or Indian tribe regulating the production
22	of hemp, to the extent that law is consistent
23	with this subtitle.
24	"(B) References in plans.—A State or
25	Tribal plan referred to in paragraph (1) may

1	include a reference to a law of the State or In-
2	dian tribe regulating the production of hemp, to
3	the extent that law is consistent with this sub-
4	title.
5	"(b) Approval.—
6	"(1) In general.—Not later than 60 days
7	after receipt of a State or Tribal plan under sub-
8	section (a), the Secretary shall—
9	"(A) approve the State or Tribal plan if
10	the State or Tribal plan complies with sub-
11	section (a); or
12	"(B) disapprove the State or Tribal plan
13	only if the State or Tribal plan does not comply
4	with subsection (a).
5	"(2) Amended Plans.—If the Secretary dis-
6	approves a State or Tribal plan under paragraph
17	(1)(B), the State, through the State department of
8	agriculture (in consultation with the Governor and
9	chief law enforcement officer of the State) or the
20	Tribal government, as applicable, may submit to the
21	Secretary an amended State or Tribal plan that
22	complies with subsection (a).
23	"(c) Technical Assistance.—The Secretary may
4	provide technical assistance to a State or Indian tribe in

1	the development of a State or Tribal plan under subsection
2	(a).
3	"(d) Violations.—
4	"(1) In general.—A violation of a State or
5	Tribal plan approved under subsection (b) shall be
6	subject to enforcement solely in accordance with this
7	subsection.
8	"(2) Negligent violations.—
9	"(A) IN GENERAL.—A hemp producer in a
10	State or the territory of an Indian tribe for
11	which a State or Tribal plan is approved under
12	subsection (b) shall be subject to subparagraph
13	(B) of this paragraph if the State department
14	of agriculture or Tribal government, as applica-
15	ble, determines that the hemp producer has
16	negligently violated the State or Tribal plan, in-
17	cluding by negligently—
18	"(i) failing to provide a legal descrip-
19	tion of land on which the producer pro-
20	duces hemp;
21	"(ii) failing to obtain a license or
22	other required authorization from the
23	State department of agriculture or Tribal
24	government, as applicable; or

7

1	"(iii) producing Cannabis sativa L.
2	with a delta-9 tetrahydrocannabinol con-
3	centration of more than 0.3 percent on a
4	dry weight basis.
5	"(B) CORRECTIVE ACTION PLAN.—A hemp
6	producer described in subparagraph (A) shall
7	comply with a plan established by the State de-
8	partment of agriculture or Tribal government,
9	as applicable, to correct the negligent violation,
10	including—
11	"(i) a reasonable date by which the
12	hemp producer shall correct the negligent
13	violation; and
14	"(ii) a requirement that the hemp
15	producer shall periodically report to the
16	State department of agriculture or Tribal
17	government, as applicable, on the compli-
18	ance of the hemp producer with the State
19	or Tribal plan for a period of not less than
20	the next 2 calendar years.
21	"(C) RESULT OF NEGLIGENT VIOLA-
22	TION.—Except as provided in subparagraph
23	(D), a hemp producer that negligently violates
24	a State or Tribal plan under subparagraph (A)
25	shall not be subject to any criminal or civil en-

1	forcement action by the Federal Government or
2	any State government, Tribal government, or
3	local government other than the enforcement
4	action authorized under subparagraph (B).
5	"(D) REPEAT VIOLATIONS.—A hemp pro-
6	ducer that negligently violates a State or Tribal
7	plan under subparagraph (A) 3 times in a 5-
8	year period shall be ineligible to produce hemp
9	for a period of 5 years beginning on the date
10	of the third violation.
11	"(3) OTHER VIOLATIONS.—If the State depart-
12	ment of agriculture or Tribal government in a State
13	or the territory of an Indian tribe for which a State
14	or Tribal plan is approved under subsection (b), as
15	applicable, determines that a hemp producer in the
16	State or territory has violated the State or Tribal
17	plan with a culpable mental state greater than neg-
18	ligence—
19	"(A) the State department of agriculture
20	or Tribal government, as applicable, shall im-
21	mediately report the hemp producer to—
22	"(i) the Attorney General; and
23	"(ii) in the case of a State department
24	of agriculture, the chief law enforcement
25	officer of the State; and

1	"(B) paragraph (1) of this subsection shall
2	not apply to the violation.
3	"(e) Authorization of Appropriations.—There
4	are authorized to be appropriated such sums as are nec-
5	essary to carry out this section.
6	"(f) Effect.—Nothing in this section prohibits the
7	production of hemp in a State or the territory of an Indian
8	tribe for which a State or Tribal plan is not approved
9	under this section in accordance with other Federal laws
10	(including regulations).
11	"SEC. 297C. AUTHORITY TO ISSUE REGULATIONS AND
12	GUIDELINES.
13	"The Secretary shall have sole authority to issue Fed-
14	eral regulations and guidelines that relate to the produc-
15	tion of hemp, including Federal regulations and guidelines
16	that relate to the implementation of section 297B.".
17	SEC. 3. FUNDING FOR HEMP RESEARCH.
18	(a) Supplemental and Alternative Crops.—
19	Section 1473D(c)(3)(E) of the National Agricultural Re-
20	search, Extension, and Teaching Policy Act of 1977 (7
21	U.S.C. 3319d(c)(3)(E)) is amended by inserting "(includ-
22	ing hemp (as defined in section 297A of the Agricultural
23	Marketing Act of 1946))" after "material".
24	(b) Critical Agricultural Materials.—Section
25	5(b)(9) of the Critical Agricultural Materials Act (7

1	U.S.C. 178c(b)(9)) is amended by inserting ", and includ-
2	ing hemp (as defined in section 297A of the Agricultural
3	Marketing Act of 1946)" after "hydrocarbon-containing
4	plants".
5	SEC. 4. LEGITIMACY OF INDUSTRIAL HEMP RESEARCH.
6	(a) In General.—Section 7606 of the Agricultural
7	Act of 2014 (7 U.S.C. 5940) is amended—
8	(1) by redesignating subsections (a) and (b) as
9	subsections (b) and (a), respectively, and moving the
10	subsections so as to appear in alphabetical order;
11	(2) in subsection (b) (as so redesignated), in
12	the subsection heading, by striking "In General"
13	and inserting "Industrial Hemp Research"; and
14	(3) by adding at the end the following:
15	"(c) Study and Report.—
16	"(1) IN GENERAL.—The Secretary shall con-
17	duct a study of agricultural pilot programs—
18	"(A) to determine the economic viability of
19	the domestic production and sale of industrial
20	hemp; and
21	"(B) that shall include a review of—
22	"(i) each agricultural pilot program;
23	and
24	"(ii) any other agricultural or aca-
25	demic research relating to industrial hemp.

1	"(2) REPORT.—Not later than 120 days after
2	the date of enactment of this subsection, the Sec-
3	retary shall submit to Congress a report describing
4	the results of the study conducted under paragraph
5	(1).".
6	(b) Repeal.—Effective on the date that is 1 year
7	after the date of enactment of this Act, section 7606 of
8	the Agricultural Act of 2014 (7 U.S.C. 5940) is repealed.
9	SEC. 5. FEDERAL CROP INSURANCE.
10	(a) Definition of Hemp.—Section 502(b) of the
11	Federal Crop Insurance Act (7 U.S.C. 1502(b)) is amend-
12	ed —
13	(1) by redesignating paragraphs (8) through
14	(11) as paragraphs (9) through (12), respectively;
15	and
16	(2) by inserting after paragraph (7) the fol-
17	lowing:
8	"(8) Hemp.—The term 'hemp' has the meaning
9	given the term in section 297A of the Agricultural
20	Marketing Act of 1946.".
21	(b) Insurance Period.—Section 508(a)(2) of the
22	Federal Crop Insurance Act (7 U.S.C. $1508(a)(2)$) is
23	amended by striking "and sweet potatoes" and inserting
24	"sweet potatoes, and hemp".

1	(c) Submission of Policies and Materials to
2	Board.—Section 508(h) of the Federal Crop Insurance
3	Act (7 U.S.C. 1508(h)) is amended—
4	(1) in paragraph (1)(B)—
5	(A) by redesignating clauses (i) through
6	(iii) as subclauses (I) through (III), respec-
7	tively, and indenting appropriately;
8	(B) in the matter preceding subclause (I)
9	(as so redesignated), by striking "The Corpora-
10	tion shall" and inserting the following:
11	"(i) In General.—The Corporation
12	shall";
13	(C) in clause (i)(I) (as so redesignated), by
14	inserting "subject to clause (ii)," before "will
15	likely"; and
16	(D) by adding at the end the following:
17	"(ii) Waiver for Hemp.—The Cor-
8	poration may waive the viability and mar-
9	ketability requirement under clause (i)(I)
20	in the case of a policy or pilot program re-
21	lating to the production of hemp."; and
22	(2) in paragraph (3)(C)—
23	(A) in clause (ii), by striking "and" at the
24	end;

1	(B) in clause (iii), by striking the period at
2	the end and inserting "; and; and
3	(C) by adding at the end the following:
4	"(iv) in the case of reviewing policies
5	and other materials relating to the produc-
6	tion of hemp, may waive the viability and
7	marketability requirement under subpara-
8	graph (A)(ii)(I).".
9	(d) AGRICULTURAL COMMODITY.—Section 518 of the
10	Federal Crop Insurance Act (7 U.S.C. 1518) is amended
11	by inserting "hemp," before "aquacultural species".
12	(e) RESEARCH AND DEVELOPMENT AUTHORITY.—
13	Section 522(b) of the Federal Crop Insurance Act (7
14	U.S.C. 1522(b)) is amended—
15	(1) in paragraph (2), by adding at the end the
16	following:
17	"(K) Waiver for Hemp.—The Board
18	may waive the viability and marketability re-
19	quirements under this paragraph in the case of
20	research and development relating to a policy to
21	insure the production of hemp."; and
22	(2) in paragraph (3)—
23	(A) by striking "The Corporation" and in-
24	serting the following:

1	"(A) In general.—Subject to subpara-
2	graph (B), the Corporation"; and
3	(B) by adding at the end the following:
4	"(B) Waiver for Hemp.—The Corpora-
5	tion may waive the marketability requirement
6	under subparagraph (A) in the case of research
7	and development relating to a policy to insure
8	the production of hemp.".
9	SEC. 6. CONFORMING CHANGES TO CONTROLLED SUB-
10	STANCES ACT.
11	(a) IN GENERAL.—Section 102(16) of the Controlled
12	Substances Act (21 U.S.C. 802(16)) is amended—
13	(1) by striking "(16) The" and inserting
14	"(16)(A) Subject to subparagraph (B), the"; and
15	(2) by striking "Such term does not include
16	the" and inserting the following:
17	"(B) The term 'marihuana' does not include—
18	"(i) hemp, as defined in section 297A of the
19	Agricultural Marketing Act of 1946; or
20	"(ii) the".
21	(b) Tetrahydrocannabinol.—Schedule I, as set
22	forth in section 202(c) of the Controlled Substances Act
23	(21 U.S.C. $812(c)$), is amended in subsection $(c)(17)$ by
24	inserting after "Tetrahydrocannabinols" the following: ",
25	except for tetrahydrocannabinols in hemp (as defined

15

- 1 under section 297A of the Agricultural Marketing Act of
- 2 1946)".
- 3 SEC. 7. RULE OF CONSTRUCTION.
- 4 Nothing in this Act authorizes interference with the
- 5 interstate commerce of hemp (as defined in section 297A
- 6 of the Agricultural Marketing Act of 1946, as added by
- 7 section 2).

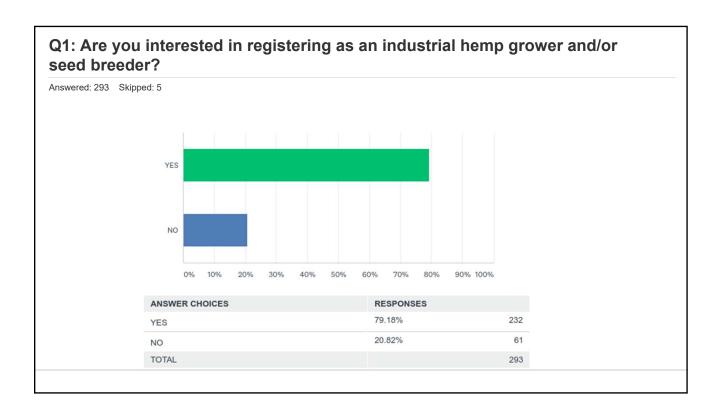
Industrial Hemp Cultivation Survey

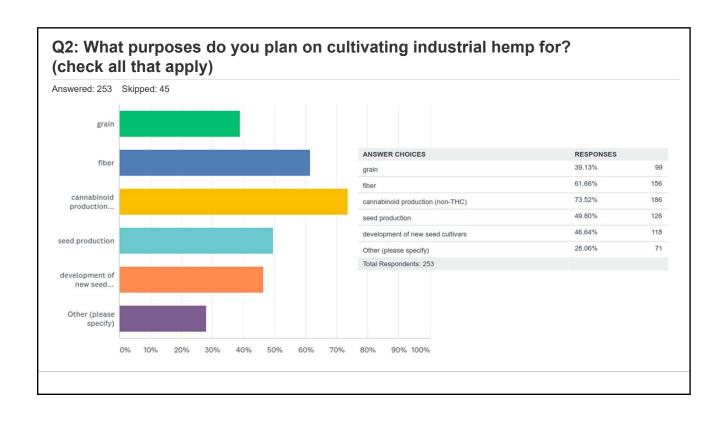
Presented on April 24, 2018

298

Total Responses
Out of 1,666 email recipients

Date Created: Monday, February 12, 2018 Date Data Pulled: Monday, March 12, 2018





Q2: What purposes do you plan on cultivating industrial hemp for? OTHER responses

Crop rotation	Biofuel	Micropropagation
Plastic	Soil remediation	Paper
Biomass	Construction material	Terpene
Bird seed	Environmental cleanup	various
Bud for smoking	Food production	Not sure
Fertility research	Batteries	Teepee production
Textile	Research	Animal feed
Oil	Landscaping	
Medicinal purposes	Biomass	

Q3: In what county (or counties) do you plan on registering as an industrial hemp grower and/or seed breeder?

Answered: 245 Skipped: 53

Answer Choices	Respon	ses
San Diego	16.60%	41
Monterey	15.79%	39
Riverside	14.57%	36
Los Angeles	13.77%	34
Yolo	11.74%	29
Fresno	11.34%	28
San Bernardino	10.93%	27
San Luis Obispo	9.72%	24
Kern	8.91%	22
Mendocino	8.50%	21
Santa Cruz	8.50%	21
Merced	8.10%	20
Ventura	8.10%	20
Kings	7.29%	18
Santa Barbara	7.29%	18
Sonoma	6.88%	17
Humboldt	6.48%	16
Sacramento	6.48%	16
San Joaquin	6.48%	16

Answer Choices	Respon	ses
Madera	6.07%	15
Orange	6.07%	15
Siskiyou	6.07%	15
Yuba	5.67%	14
Calaveras	5.26%	13
Imperial	5.26%	13
Stanislaus	5.26%	13
Butte	4.86%	12
El Dorado	4.45%	11
Trinity	4.45%	11
Alameda	4.05%	10
Inyo	4.05%	10
Plumas	4.05%	10
Tehama	4.05%	10
Contra Costa	3.64%	9
Mariposa	3.64%	9
Napa	3.64%	9
San Benito	3.64%	9
Nevada	3.24%	8

Answer Choices	Respon	ses
Placer	3.24%	8
San Francisco	3.24%	8
San Mateo	3.24%	8
Santa Clara	3.24%	8
Sutter	3.24%	8
Tulare	3.24%	8
Alpine	2.83%	7
Colusa	2.83%	7
Del Norte	2.83%	7
Lake	2.83%	7
Modoc	2.83%	7
Shasta	2.83%	7
Solano	2.83%	7
Amador	2.43%	6
Lassen	2.43%	6
Marin	2.43%	6
Mono	2.43%	6
Glenn	2.02%	5
Sierra	2.02%	5
Tuolumne	1.62%	4



Production of Industrial Hemp

Research and Development Program

Registration Application

Product of US Farm Bill Section 7606		Page 1 of 5
		Section 1
Applicant:		
Mailing Address:		
	Email:	
Website:		
	Email:	
Licensed Business Info: Sec	tion 3	
Licensed by State: Yes No		
Operates as one of the following:		
o Corporation		
o S-Corp		
o LLC		
o Partnership		
o Individual		
o Sole Proprietorship		
o Other		
Varietal Details:	Section 2 To be determined	
Varietal Name #1:		
Varietal Name #2:		
Varietal Name #3:		
Approximation of desired seed amoun	t:	
Variety 1: lb	s.	
Variety 2:lb	os.	
Variety 3: lb	os. Total:lbs	

Seed may be ordered by the Department of Agriculture once all applications are submitted. This will assist in ordering bulk amounts and limiting brokerage fees as well as fright costs. Attached to this application is a detailed order form. Submit the request form one an accurate seed total is calculated.



Field Detail	S (des	cribe location, feat	ures, and include a m	ap to detail the area, including all separated varietal sites)	Section 4
	o	Indoor			
	О	Outdoor	Total area dedica	ated to industrial hemp R&D	_Acres/SqFt
Coordinate	Info	rmation			
Latitude #1		Longitude #	1		
Latitude#2		Longitude #	3	General Field Features:	
Latitude#3		Longitude #	3		

Production of Industrial Hemp

Research and Development Program

Registration Application

Product of US Farm Bill Section 7606

Page 2 of 5

Section 5

Associated Fees:

The applicant shall pay a nonrefundable application fee of \$500.00 and;

- -Certified Outdoor Operations: Additional fee of \$5.00/acre or portion thereof.
- -Certified Indoor Operations: Additional fee of \$0.33/1000 SqFt or portion thereof.

In addition to application fees, the applicant is responsible for inspection costs, at \$50.00/hour per inspector for drive time, inspections, and sampling; mileage will be charged at the current IRS reimbursement rate.



The Department may charge a fee for any analysis which it conducts. Fees are determined based upon an approximation of the actual cost of performing tests.

Application Fee	:	\$500.00_	+		
\$5.00 x Outdoor	Acreage:		= <u>\$</u>	+	
\$0.33 x Indoor F	Footage:	# acres	= \$	Total =	
φοισσ π maoor r	ootuge.				Initial Amount Due
Production of I	nductrial	Цотп			
Research and Develo	pment Prog	ram			
Registration Application	on				
Product of US Farm Bill Section	7606				Page 3 of 5
					Section 6
Research Intentions:					
Intended Focus fo	ar Academic and	d Agricultural I	Research:		
Check any of the follow				ul hemp R & D:	
Animal Bedding _	Biofuel		Hemp	Oil Extraction	Cosmetic/Beauty
Cultivars	Dietary Su	pplement _	DNA	Sequencing/Genetics	Compost
Fiber	Food/Drink	Additive	Hem	ocrete	Insulation

Phytoremediation ____ Seed Stock ____ Undisclosed

____Other, Please Explain _____



Section 7

	earch Intentions Explained: e remaining area on this section of the form to formulate a detailed explanation of research objectives. (attach a second page if need-
Ose in	е remaining area on inis section of the form to formulate a detailed explanation of research objectives. (attach a second page if need
	Notice: NO change to this entire application can be made without CDA approval and a new application.
j	(<i>Please initial</i>) I hereby declare that all of the above information is accurate, and my intentions shall not stray from intended purposes. If research objectives prove to be unachievable I may alter objectives, with CDA approval, n a manner that is determined to be fit for the R & D program, otherwise my certification status will be terminated, and he associated help crop will be destroyed.
Resea	rch and Development Program
Regist	ration Application
Product	of US Farm Bill Section 7606 Page 4 of 5
	Section 8
Policy	/Procedure Acknowledgement
	I,
Initials	That a registration cannot be transferred or assigned to another business, individual, or entity and that a registration is valid for 1 year from the date of issuance.
Initials	That all industrial hemp plant material shall be planted, harvested, and processed within the allotted time period of 1 year after certification has been issued. The Department must be notified if material, propagative or not, is still



not present after the 1-year period has ended. That each contiguous land unit, with which industrial hemp shall be grown, will be associated with a separate Initials application. Any additional acreage or square footage will be associated with a separate application. That no registered land area may contain Cannabis Ssp. Plants or parts thereof that the registrant knows or, has a r Initials reason to know, are of a variety that will produce THC content greater than 0.3% on a dry weight basis, unless Otherwise approved of by the Department. No registrant shall use any such variety that is known to produce THC Concentration levels above 0.3% on a dry weight basis. To allow any and all inspections/sampling that CDA deems necessary in order to preserve the integrity of the research Initials /development project. Plant parts collected for THC concentration analysis will be the segments containing the highest THC concentrations. Sample test results that are greater than 1.0% THC on a dry weight basis may be submitted to the appropriate authorities for review. To pay for any and all costs for the oversight of this program. Payment must be submitted within 30 days after **Initials** invoicing. That THC concentrations for industrial hemp are declared to be under or equal to 0.3% on a dry weight basis, Initials That any information provided to CDA can be utilized for public disclosure and be provided to law enforcement agencies without further notice to the registrant. Initials That CDA only authorizes the use of certified hemp seed for R & D production purposes. Initials That it is illegal under federal law to possess viable hemp seed in California unless it is for use in the authorized Initials research trial. Any operations proposed to use land that is not owned by the applicant must be accompanied by a signed, notarized Initials affidavit from the legal owner of the land consenting to approval. Alterations of any kind to this application, excluding sections 1 and 2, will require a \$500.00 amendment fee. Initials Application details must stay consistent with all production features at all times. Signature Date **Research and Development Program Registration Application** Product of US Farm Bill Section 7606 Page 5 of 5 **Industrial Hemp Materials Order Form** Utilize this form to indicate the source of industrial hemp material (Seed, Clones, etc.) A separate form needs to be filled out for each individual variety requested. Name of Seed Requester: Approximate planting date: __ X No Previously certified industrial hemp producer: Yes If yes, provide associated certification number: _



Desired Seed Characteristics:	
If known, specific variety desired:	
Name of varietal dealer: _	
Dealer Information: If not known, List out specific seed	Country:
Quantity Details:	
Total area to be in producti Material (seed, clones, etc	on

In addition to the price of material, \$1.00/lb. must be added.

After receiving this form from each approved applicant, the CDA will combine the seed orders where possible to obtain the best price and the lowest delivery costs. After obtaining a price quotation from the seed supplier(s), the CDA will confirm the purchase of seed with each applicant wishing to participate in that order. Any variation in the seed price as delivered, will be handled by refund or invoicing as necessary.