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

> 1220 N Street, Auditorium Sacramento, CA 95814

Wednesday, December 12, 2018

9:30 AM – 3:30 PM

Board Members

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

CDFA & Guests G.V. Avers Anthony Biagi Timothy Blank Chris Boucher Teresa Bowers Mary Bright Frank Brown Linda Delair Tony DeVeyra Justin Eve Jean Johnson Jeff Johnson Janice Jurado Joshua Kress Peter Koulouris Mateo Munoz

Hayden Oilar D. Phillips Michelle Phillips Jennifer Price Seth Resson Wayne Richman Robin Sanchez Brett Sanders Dave Schaaf Kris Taylor Jennie Tedlos Tiffany Tu Thi Vo Cathy Vue Adam Vusek Brian Webster Marie Ziegel

1. Roll Call and Opening Remarks

Meeting called to order at 9:35 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. Review and Approval of Minutes from September 26, 2018 Board Meeting Meeting minutes from the September 26, 2018 Board meeting were not available for the Board's review and approval. The agenda item was postponed.
- 3. Review and Approval of Amendment to List of Approved Seed Cultivars (Per FAC § 81002)

Joshua Kress reviewed the Board's recommendation to adopt the methodology and procedures for the list of approved seed cultivars. Kress read the proposed amendment to the list of approved seed cultivars developed by Joshua Chase and Matt McClain.

Chase and McClain presented their thoughts on the proposal, describing the proposal as a comprehensive list that would ensure that all plant material grown has been tested for THC levels below 0.3 % before its use.

Timothy Blank, California Crop Improvement Association (CCIA), read his letter to the Board expressing his concerns with the proposed amendment. Blank proposed that the Board amend the proposal to restrict cultivars developed and seed produced outside of a seed certification or quality assurance program from being marketed for sale for commercial production in California. He recommended to limit the use of those cultivars or seeds to a company's or individual's internal production needs.

John Roulac requested clarification on Blank's recommendation to the proposed amendment. Blank explained that growers would be able to bring in a variety into California for their own use but would not be able to market the propagative material for sale. Blank compared his proposal to the requirements for plant variety protection.

Serbin questioned if Blank's recommendation fell outside of the Board's authority. He commented that preventing the sale of hemp seed would further delay the development of the CBD industry.

David Robinson inquired if changes proposed in Senate Bill (SB) 1409 coincided with Blank's recommendations. Kress replied that the amendments in SB 1409 would not affect the Board's process to amend the list of approved seed cultivars.

Blank stated that CCIA was actively working with groups producing CBD varieties for certification.

Matt McClain asked if the Organisation for Economic Co-operation and Development (OECD) certified varieties with THC up to 1%. Blank explained that CCIA did not fully incorporate OECD's list of certified varieties since the OECD list did not distinguish between pharmaceutical and low THC varieties of cannabis and he did not know the THC threshold for OECD. CCIA was reviewing each variety on the OECD's list for THC content.

McClain noted that the proposed amendment required the use of varieties that have been proven to meet the THC requirement. Blank explained that although the proposed language was suitable, it did not ensure a variety as uniform, distinct, and stable. The certification process would require a variety to demonstrate those characteristics over generations.

McClain inquired about potential issues of using imported seed varieties in California's microclimates. Blank recommended that certified varieties from other countries be regionally tested, as is done for other crops like alfalfa and wheat. He explained that would be ideal but would require funding for variety research.

Tom Pires asked about expediting the availability of varieties through programs like the quality assurance program. Blank explained that varieties currently being developed may not qualify under the quality assurance program because the varieties are not considered traditional landraces.

G.V. Ayers, Gentle Rivers Consulting, suggested changing the term "licensing authority" to "regulatory authority" in the proposed amendment for clarification. Ayers explained that most licensing authorities for industrial hemp did not conduct the testing activities. Furthermore, Ayers recommended clarifying that the crop from which the seed or tissue

culture plants were harvested from must be tested in accordance with the testing method approved by the authority at origin. Ayers also stated that the proposed amendment should be revised to reference a licensed or registered participant. Serbin and McClain agreed with Ayer's recommendations.

Karen Dixon, Schiavi Seed, encouraged the Board to review the labeling and record retention requirements in the federal Seed Act to further protect farmers. She noted that potential issues may arise due to the high genetic variability of industrial hemp plants. Dixon explained that not requiring the use of certified seeds may result in issues similar to what Colorado experienced.

Board Motion #1:

Tom Pires moved to accept the proposal to amend the list of approved seed cultivars, with the following corrections:

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

Subsection(a)(3)(A) – "The crop from which the seed or propagative materials were harvested from shall have been tested by the licensing in accordance with a testing method approved by the regulatory authority in the state of origin and found to have no more than three-tenths of one percent tetrahydrocannabinol (THC) on a dry weight basis."

Subsection(a)(4)(A) – "The crop from which the seeds or tissue culture plants were harvested from shall have been tested in accordance with a testing method approved by the department of agriculture in the country of origin and found to have no more than three-tenths of one percent THC on a dry weight basis."

Lawrence Serbin seconded the motion.

The Board voted on Motion #1 as follows:

Yes:Van Butsic, Joshua Chase, Rick Gurrola, Matt McClain, Tom Pires, David
Robinson, John Roulac, Lawrence Serbin, Richard SoriaNo:NoneAbstained:NoneAbsent:Allison Justice, Valerie Mellano

Motion carried.

Robinson recommended that Board explore the recommendations from Blank and Dixon for consideration.

McClain asked about the effective date of the amendment to the list of approved seed cultivars. Kress explained that the methodology and procedure to amend the list of approved seed cultivars had yet to be posted online. Kress also explained that the program will take the Board's recommended amendment to list of approved seed cultivars to the Secretary for approval. Once approved by the Secretary, the regulation would go to the Office of Administrative Law as a file and print regulation and then to the

Secretary of State for publishing. Kress noted the process should be fairly quick and that the program will have a better understanding of the timeframe for a file and print regulation once the methodology and procedure to amend the list of approved seed cultivars is published.

 Review of Draft Guidelines for Sampling and Testing for THC Content Kress reviewed the draft guidelines for sampling of industrial hemp for THC content based on the Board's recommendations.

Pires asked for clarification on whole plant sampling. Kress stated that SB 1409 specified that the composite would include dried flowering tops. Composites samples would contain the dried flowering tops of five different plants in the field that would be combined and tested together. Pires asked if the samples would include stems, stalks, flowers, leaves and seeds. Kress reiterated that samples would include dried flowering tops, however that is defined for consistency. Kress noted that the recommendation from the Board was to not remove any portion of the plant during the sample collection process.

Pires explained that he interpreted the recommendation to mean whole plant testing. Chase suggested defining dried flowering tops as the apex, apical, and lateral buds and include stems, stalks, flowers, leaves, and seeds as a homogenous sample.

Serbin explained that cutting the top few inches of the plant will include the flower, seeds, and stems, compared to other plants where the top of the plant would only include the flower.

Chase suggested defining dried flowering tops as the top 10-12 inches of the plant and specifying that the sample would be a homogenized sample that includes the flower, leaves, seeds, and stalks. He commented that sampling the apical portion of the would not be a representative sample of the plant.

Pires emphasized the importance to specify the sample composition.

Robinson requested that the sampling guidelines used the same terms "registrant" and "designee" as recommended by the Board.

Robinson asked about the registrant contact information. Kress explained that the contact information would be required on the pre-harvest report.

Roulac asked about submitting wet versus dry samples. Soria explained that the samples would be collected and then dried in the laboratory.

McClain suggested defining the dried flowering top as 10-18 inches from the top, the top half, or top third of the plant. McClain also recommended including male plants in the sample for a more accurate representation of the crop.

Serbin asked about the pre-harvest report. Kress explained that the sampling guidelines did not outline the components of the pre-harvest report previously proposed by Allison Justice and Soria. Kress noted that the program would develop the pre-harvest report based on the recommendations and provide to counties. The program would include any mandatory components of reporting in the regulation text.

Rick Gurrola asked if CDFA was going to provide sampling guidelines to counties. Kress replied that there would be guidelines for the counties. Kress explained that there was no consistency between other states' sampling guidelines, although other states required at least five samples for any field. Kress expected that a general guideline would be developed as more research is conducted to determine representative sample sizes.

Gurrola asked about sampling abnormal plants. Serbin replied that abnormal plants would be evidence that someone was growing another variety. Kress asked if it was better to require sampling of abnormal plants separately as a group, not individually. Gurrola agreed.

Chase recommended removing the recommendations to sample abnormal plants separately from the composite sample and exclude sampling male plants from the composite sample. Robinson agreed that abnormal plants did not need to be singled out and explained that law enforcement would take their own sample if they believed that the plant was cannabis instead of industrial hemp. Kress asked if the Board had any objections to removing the abnormal plants provision. There were no objections.

Serbin recommended including male plants in the sample. Serbin explained that mature plantings of unfeminized seed would result in half of planting be male plants. Chase echoed Serbin's recommendation.

Robinson asked if both male and female plants have flowering tops. Serbin explained that male plants will mature earlier and would produce small features that would release pollen. Only female plants produce high levels of THC and CBD, however industrial hemp plants may be hermaphrodites and produce both male and female plant parts.

Robinson noted that SB 1409 specified sampling of the dried flowering tops. Serbin stated that flowering tops would not include male plants. Kress asked if dried flowering tops would exclude male plants. Chase explained that male plants technically have flowers. Chase suggested sampling both male and female plants to obtain a representative sample of the field. Kress explained that a separate sampling of male and female plants would be difficult if the plants are intermixed in the field. Chase explained that an all-male field is possible due to various cultivation practices.

George Bianchini, SG Farms, commented that the 2018 Farm Bill defined industrial hemp as all parts of the plant and recommended sampling to consist of the whole plant and include samples from both male and female plants.

Dixon explained that seed certification required a certain percentage of male and female plants. Dixon encouraged the Board to review Canada's industrial hemp sampling and testing guidelines. Several other countries have standards set that should be taken into consideration for exporting. She cautioned the Board to not overregulate in order to avoid further delays in developing the industrial hemp industry in California.

Serbin asked Dixon if she knew Canada's standards for industrial hemp sampling and testing. Dixon replied that Canada's standards addressed testing for delta-9 THC analysis, field sampling, and sample handling and preparation to name a few.

Kress explained that the sampling and testing task force reviewed Canada's standards. Kress asked Dixon if she had particular language that she recommended the Board to consider. Dixon offered to submit her recommendations to the Board for consideration.

Frank Brown, Raylyn Farms, urged the Board to make sampling recommendations that would not jeopardize the crops. Brown explained that the THC analysis would vary greatly due to sampling. He explained that most of the plant's THC is located in the trichomes or flowers of the plant; the stalks and stems do not contain a significant amount of THC.

Serbin and Roulac asked Brown about sampling techniques to yield low THC results. Brown recommended the Board considered whole plant sampling to yield the most accurate and positive results for the grower.

Robinson asked Brown if sampling the top third of a plant with 18% THC would result in a compliant THC analysis. Brown explained that sampling the top third of the plant would result in an approximately 75% reduction of the THC reading, but not low enough to meet the 0.3% THC limit.

Patrick Goggin, Hoban Law Group, noted that the California definition of industrial hemp included all parts of the plant, similar to the federal definition. Goggin encouraged the Board make reasonable recommendations that would not penalize growers over an insignificant amount of THC. Goggin suggested that the Board review standards set by other states and consider establishing rounding guidelines.

Robinson asked if Goggin has a recommendation on what the sample should consist of. Goggin replied that he would recommend everything that the Board is already considering.

Richard De Andrade, Solare Incorporated, recommended looking to the published studies for sampling and testing standards so regulations are consistent with what has been done before.

Wayne Richman, California Hemp Association, stressed the importance for whole plant testing, homogenizing samples, and including male plants. Richman asked about false positives. Serbin explained that existing law allowed resting for crops that initially tested above the 0.3% but below 1.0%. Kress confirmed.

Richman inquired about the cost of the additional test due to false positives. Serbin stated that the farmer would be allowed to choose the laboratory.

Rene Garcia, 4G Farming, asked about cost difference between testing a portion of the plant versus the whole plant. Soria replied that there were no cost differences.

Robinson noted that existing law required the sample consist of dried flowering tops. Robinson did not believe whole plant testing would be consistent with the requirement calling for samples of dried flowering tops. Robinson asked if the Board is to consider defining dried flowering top. Kress confirmed that the Board would need to determine whether the term needed further clarification and what that clarification would be. Chase noted that SB 1409 authorized CDFA to establish the plant parts to be included in the sample. Chase commented that the commissioners could grind or chip the plant material in the field. Gurrola raised concerns regarding potential cross-contamination due to the use of equipment in the field to grind or chip the plant material.

Gurrola echoed Robinson's comment regarding the need to define dried flowering tops. Chase stated that the plant could be considered a flowering top in some cases SB 1409 provided CDFA the flexibility to redefine what plant parts shall be taken as a sample.

Soria supported including all plant parts as part of sample.

Jeremy Simonch, Cannaderm, recommended the Board to as least consider utilizing a whole branch, if not the whole plant, as part of the sample.

McClain explained that the male plant would scientifically qualify as a flower and recommended sampling the top third of the plant including laterals.

Mary Bright, Golden State Hemp Farms, asked about the justification to sample the top one third of the plant. Bright noted that existing law stated that the sample shall consist of dried flower tops and therefore not exclusionary.

Justin Eve, 7 Generations Producers, suggested sampling other parts of the plant including the bottom third of the plant. Eve recommended that the sample consist of all plant parts from the top and bottom 12 inches of the plant to have true representation of the THC levels.

A member of the public stressed the importance of considering the different characteristics of the plants grown for certain purposes. He explained that testing plants grown for fiber would be pointless since the plants would have very little levels of THC. He suggested establishing sampling and testing guidelines based on the crop's use and other countries' standards.

Garcia suggested redefining dried flowering tops as the whole plant above five inches from the soil.

Ayers clarified that existing law, as amended by SB 1409, provided CDFA to further specify the portions of the plant to be included in the sample. Ayers believed the language from SB 1409 would provide CDFA the flexibility to define what is included in the sample.

Brian Webster expressed support for Garcia's recommendation of specifying the sample as the whole plant to five inches above the soil.

Kress reviewed the draft guidelines for testing of industrial hemp for THC content based on the Board's recommendations. He noted that the guidelines included a few additional recommendations from the CDFA Center for Analytical Chemistry.

McClain emphasized the importance to align the THC testing guidelines with the 2018 Farm Bill.

Bianchini noted that the 2018 Farm Bill required measuring THC post decarboxylation. Bianchini recommended the Board consider allowing the measurement of THC content based on a sliding scale for moisture content. Bianchini also recommended avoiding manual manipulation of the THC.

Garcia asked about other testing requirements besides THC. Kress stated that the existing industrial hemp law only required THC testing, but other laws may apply and require testing like pesticide residual. Kress noted that those requirements were outside of scope of the Board.

Richman asked for the definition for constant weight and requested for moisture content to be specified.

Goggin suggested that the Board considered rounding the percentage content of THC. He also commented that additional testing may be required in the future for industrial hemp products to protect public safety.

Tiffany Tu, CDFA Center for Analytical Chemistry, commented that CDFA's laboratory have been developing testing methods and conversed with other state laboratories as well. She explained that other laboratories initially weighing the sample and then drying the sample until the weight remained the same between drying intervals to achieve constant weight. Serbin asked if that meant the sample would be fully dried. Tu replied no and explained that constant weight is reached when the sample cannot be dried any further.

McClain asked about the laboratory's preferred testing methodology. Tu stated that the laboratory was considering gas chromatography and liquid chromatography coupled with mass spectrometry. Tu noted that different analytical instrumentations could produce different results.

Serbin asked if gas chromatography and liquid chromatography decarboxylate THC. Tu explained that the gas chromatography would decarboxylate the THC during the testing process. Tu stated that liquid chromatography would not decarboxylate delta-9 THC and measure delta-9 and THC-A content separately. She explained that the conversion of THC-A to THC with gas chromatography was about 60-80%.

Serbin commented that a laboratory test report could indicate a THC percentage content below the 0.3%, but above the 0.3% limit when considering total THC. Tu agreed and replied that the finding would depend on the laws and regulations.

Serbin inquired about THC calculations in both federal and state laws. Kress confirmed that state law did not specify beyond THC. Kress stated that federal law specified delta-9 THC and required testing that included decarboxylation.

Roulac asked about rounding down at 0.35% or less. Tu described potential rounding scenarios. Goggin suggested rounding down from 0.35%.

Kress asked about tolerances for other testing. Tu explained that every methodology would have a measurement of uncertainty and it would be determined and built in through the methodology development and validation process. Additionally, Tu stressed the need for a constant weight which would create consistency in the lab analyses. Brown commented that different analytical instrumentations would produce different results.

De Andrade suggested establishing testing standards that would be federally compliant.

Bianchini provided an example of a laboratory test report to illustrate the impact of measuring total THC.

Goggin emphasized the importance of meeting the minimum requirements for THC outlined in federal law for state plan approval.

Chase suggested taking 10 inches of the middle third of a plant, including all plant parts, as a sample.

Pires suggested simplifying the sampling standards to include laterals as opposed to the top third of the plant.

McClain commented that the two remaining issues to address were defining dried flowering tops and removing the recommendation to avoid male plants.

Serbin noted that sampling the lower part on a plant would result in lower THC content. Serbin expressed interest in defining dried flowering top as the whole plant five inches above ground or top half of the plant to provide the crop the highest probability of passing. Soria agreed with Serbin's recommendation to sample the whole plant.

Robinson emphasized on having clear standards for regulatory oversight. Gurrola asked for the definition of dried flowering top. Kress explained that the discussion was to determine the definition of dried flowering top while staying in the spirit of the law. Gurrola did not believe that existing law allowed defining dried flowering top as the whole plant.

Kress reviewed SB 1409 and clarified that the law required a laboratory test report measuring the THC levels of a random sampling of the dried flowering tops of the industrial hemp grown. Chase pointed out that existing law provided the Department authority to establish the portions of the plant to be sampled and the plant parts to be included in the sample.

Board Motion #2:

Lawrence Serbin moved to recommend that the sample included the entire plant five inches above the ground, including the flowering tops, the flowering lateral branches of female and male plants.

John Roulac seconded the motion.

Chase commented that samples of five whole plants may be a large sample that require a truck to transport. He recommended reducing the sample size. Serbin commented that a private lab may not be concerned with the sample size. Robinson asked if it was possible to sample a pound of each plant part to get a fair representative of the total plant chemistry without taking a whole plant. Chase recommended to take a 12-inch cross section in the middle of a plant as a sample.

De Andrade recommended that the Board propose various sampling standards for different crop purposes.

Chase raised concerns regarding the laboratory selecting a portion of the sample for analysis. Kress noted that the Board recommended the sample be ground up and homogenized the entire sample.

Soria asked how a whole plant would fit in a paper bag.

Bianchini noted that existing law required registrants to cultivate at least one-tenth of an acre at the same time which would make it reasonable to collect samples from five different plants.

Garcia suggested sampling the whole plant five inches above the ground. Webster echoed Garcia's suggestion.

A member of the public recommended taking samples from both the top and bottom of the plant.

Jared McKelly, Steadfast Agricultural Consulting, commented on his experience cultivating industrial hemp in Kentucky and Tennessee. He explained that the grower would collect a sample for each sample taken by the regulatory official. The samples collected would later be homogenized for THC testing.

Pires asked if the size of the sample was an issue. McKelly explained that sample sizes of 24 inches had issues of being rejected by the testing laboratory due to insect damage.

Roulac asked if the issue of the large sample size was due to the likelihood of a larger insect population. McKelly explained that five plants from each field would be expensive.

Richman recommended to sample the whole plant to simplify the sampling standard.

A member of the public requested a definition of field and recommended taking smaller samples due to the issues with larger samples.

Kristofer Taylor, Regenerative Food and Juices Company, echoed McKelly's suggestion for a smaller portion of the plant as it was economically feasible. He recommended different sample portions based on the type of crop.

Garcia commented that the farmer would still lose the plant whether the top and bottom or whole plant is being tested. He explained that whole plant sampling is more economical than losing the crop due to a failed THC test report.

Teresa Bowers, CDFA Center for Analytical Chemistry, questioned the practicality of testing entire plants. Bowers noted the need for a cleaning procedure between each

sample. Bowers added that sampling from the top third of plant is more reasonable from a laboratory's perspective.

A member of the public suggested that sampling a small portion the top and bottom of the plant would be more feasible and economical. He noted that the laboratory did not need much plant material to conduct the THC analysis.

Roulac asked Chase to clarify his recommendation. Chase reiterated his proposal to sample approximately 10-12 inches from the middle one-third of the plant. Chase also stated that he liked the idea of taking 12-inch sample from the top and bottom of the plant.

McClain asked Chase if he was proposing taking the 12 inches of a lateral branch and not the stalk. Chase confirmed. McClain noted that Chase's proposal still required a lot of plant material when a fraction of it is needed for analysis.

Roulac asked about the weight of the proposed sample size.

Kress summarized the motion on the table was to sample the entire plant starting at five inches above the ground and to include both male and female plants.

Robinson expressed his concern of the sample volume and the potential financial burden on the grower. He echoed the suggestion of taking samples of lateral branches from the top and bottom of the plant. Gurrola stated that current law stated that it shall be random sampling of dried flower tops and therefore would prohibit him from voting in favor of the motion.

Pires commented that the flowering top is not a representative sample of the plant. Pires suggested incorporating lower lateral branches into the sample.

Roulac inquired about sampling the middle third of the plant. Pires responded that a member of the public advised him that taking a sample from the middle third of the plant would not be a representative sample.

Brown stated that samples from different parts of plant would yield different results and that smaller sample sizes would cause greater error in the results. Brown suggested allowing whole plant sampling for retesting or reducing the THC content by the percentage of inert matter in the plant.

Taylor noted that the flowering top may not necessarily at the top of the plant. He recommended taking samples where flowering tops may be present or take the top of the plant if no flowers present.

Eve agreed with Taylor's comment. He suggested to include both the flowering top as well as a portion of the plant from the bottom of the plant as part of the sample. Eve also recommended that the samples be taken by a laboratory representative. He emphasized taking into consideration the financial burden for the sampling and testing process. Eve stated that failed crops should be retested by the state laboratory.

Richman expressed his support for whole plant sampling. Robinson asked about taking a small sample from the plant and reserving whole plant sampling for retesting. Richman expressed concerns regarding chain of custody in Robinson's proposal.

Robinson suggested giving the grower discretion for the first sample to be either the whole plant or two 12-inch portions from the flowering top and a different area of the plant. If the grower chose to take two 12-inch portions from the plant for the first sampling, the grower would have the option to use the rest of the plant for retesting.

Roulac asked for clarification and supported Robinson's proposal. Roulac stated that he would like more specification for the portions of the plant to be sampled if whole plant sampling is not chosen.

Kress asked about potential concerns from law enforcement with inconsistent sampling methodologies. Robinson stated that law enforcement is more concerned with the harvesting of crops without testing and less concerned with what portions of the plant is taken.

Pires asked about the risk of allowing more time to lapse while testing and retesting. Serbin explained that there is a point where the levels begin to rise as the plants begins to mature and develop. McClain confirmed that the THC content could potentially increase while waiting for the test result.

Gurrola stated that based on his interpretation of the law, it would have to be the flowering tops until the law changes.

Chase expressed support for whole plant testing but also expressed concerns with laboratory processing of such samples. Serbin commented that it was the laboratories' responsibility to ensure that they have the equipment to handle whole plant testing.

Gurrola explained that counties may transport the samples to the laboratory using shipping carriers like FedEx and U.S. Postal Service.

Chase expressed concerns regarding space during sampling. Serbin explained that the laboratory could use pruning shears to chop samples into smaller pieces. Kress noted the potential issues regarding cutting the main stem of the plant and cross contamination concerns. Roulac echoed Chase's and Kress' concerns.

Brown suggested allowing laboratories to collect the samples.

Simonch raised concerns over drying large quantities of samples.

Serbin withdrew Motion #2.

Serbin suggested that samples should be both male and female and that farmers should be allowed to choose if they want the entire plant or the top third of the plant sampled.

Roulac proposed sampling the middle third. Serbin expressed his concern of testing the middle third because it excludes the top of the plant. Serbin recommended specifying the top third or the top 12-24 inches of the plant is taken. Roulac proposed sampling a branch from both the top and bottom of the plant.

Serbin inquired about transporting the sample. Kress explained that the Board recommended to have the commissioner responsible for sample collection and sample delivery to maintain chain of custody.

Brown recommended that the commissioner to designate people to do the sampling on their behalf.

Board Motion #3:

Matt McClain moved to recommend that both male and female plants, if present, are sampled and the top third of the plant is taken as a sample.

Lawrence Serbin seconded the motion.

Roulac suggested an amendment to take a lateral branch from the top third and the bottom third of the plant as the sample.

Roulac asked about defining the top third of the plant. McClain explained that he recommended to take the top third of the plant as the sample. Roulac expressed concerns with sampling from the top of the plant.

Robinson suggested giving farmers the option for whole plant sampling during the initial sampling and sampling whole plant if resampling is needed.

Chase suggested defining the top as a certain distance from the flowering top and include the leaves, stems, seeds, and flowers.

Roulac asked Chase for clarification on his suggestion. Chase specified that his recommendation would be to sample a certain amount down from the flowering top to the main stem. Roulac expressed concerns regarding the consistency in sampling based on Chase's suggestion.

Roulac asked Robinson for clarification on his suggestion. David confirmed that samples would come from a third of the plant to include the flowering top along with the other plant parts present.

Roulac asked about the sample weight for the suggestions. Chase responded that the sample weight would depend on the length of the sample.

McClain withdrew Motion #3.

Board Motion #4:

David Robinson moved to recommend that the grower choose portions of the plant be collected as a sample from the following options:

- Whole plant five inches above the ground, or
- 18 inches of a lateral branch from the top of the plant and 18 inches of a lateral branch from the lower one-third of the plant.

Tom Pires seconded the motion.

Jeff Johnson suggested sampling the entire plant and homogenizing it onsite.

Chase suggested allowing the commissioner and the grower to homogenize the sample at their discretion. Robinson cautioned that the suggestion would cause inconsistency in sampling.

The Board voted on Motion #4 as follows:

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

Motion carried.

Kress reviewed a letter from Lisa Brown and Kevin Johnson asking the Board to develop a protocol for drying wet samples. Kress noted that this was potential topic for the board to discuss during a future meeting.

5. Discussion on Importation of Industrial Hemp Planting Materials

Kress noted that CDFA was working with the University of California Agriculture and Natural Resources (UCANR) on researching ways to import industrial hemp planting materials.

6. Discussion on Establishment of Agricultural Pilot Program

Kress summarized the board recommendations for the Agricultural Pilot Program from the October 30, 2018 meeting.

Serbin asked about the THC allowances for established agricultural research institutions. Kress explained that state law allowed established agricultural research institutions to retain planting materials that are greater than 0.3% THC for the purposes of developing a variety that would end up being below 0.3%.

McClain asked if established agricultural research institutions who voluntarily register can maintain the other exemptions outlined in existing law. Kress stated that it was unclear.

McClain inquired about the effective date for the Agricultural Pilot Program. Kress explained that the proposed language needs to be adopted through the rulemaking process.

McClain asked if established agricultural research institutions would not be participating in the Agricultural Pilot Program unless they voluntarily register. Kress confirmed.

Richman expressed concerns with the proposed language and its impact to the exemptions for established agricultural research institutions.

Bianchini asked about the purpose of the Agricultural Pilot Program for established agricultural research institutions. Serbin explained that there would be three ways to

conduct research in California: through one of the universities, through the Agricultural Pilot Program, and as an established agricultural research institution.

Goggin explained that registrations would not be considered federally compliant without an Agricultural Pilot Program.

Seth Rosson expressed the need to implement an Agricultural Pilot Program to provide compliance for growers.

Webster supported the proposed Agricultural Pilot Program.

A member of the public asked if there were planting requirements for the Agricultural Pilot Program. Kress responded that any planting requirements outlined in existing law would still apply.

Webster asked about the timeline of the implementation of the Agricultural Pilot Program. Kress explained that the Agricultural Pilot Program would need to be adopted through regular rulemaking.

Goggin reiterated his concerns with registration without establishing an Agricultural Pilot Program.

A member of the public asked if CDFA had authority to establish the Agricultural Pilot Program through emergency regulation. Kress explained any emergency authority would be case specific.

7. Brief Update on Program Activities

Kress explained that the public comment period for the proposed regulation pertaining to the registration ended on December 24, 2018.

Kress noted that there were no additional recommendations on the requirements for the application form. Thus, CDFA would forward with the application template to the counties ahead of registration.

Chase inquired about the timeline for the application forms. Kress explained that there was no anticipated timeline, but the release of the application forms will depend on the rulemaking for the registration fee.

Chase suggested that we may already be an Agricultural Pilot Program.

McClain echoed Goggin's suggestion to have the Agricultural Pilot Program to be in place once registration became available.

8. Additional Public Comments

Chase inquired if CDFA would be looking into importing plant material into the state. Kress explained that they are working with UCANR to further investigate.

Bianchini inquired about communication between CDFA and local law enforcement. Robinson replied that he gave updates at the California State Sheriff's Association quarterly meetings. Brown encouraged CDFA to finish the rulemaking process so farmers can begin farming industrial hemp in California.

A member of the public asked about local restrictions based on precipitation. Serbin replied that there aren't any to his knowledge. Robinson suggested checking in with local authorities regarding any environmental concerns.

9. Next Meeting/Agenda Items

Kress reviewed outstanding tasks for CDFA and noted one outstanding question regarding moisture content. He explained that CDFA did not need any additional recommendations from the Board to move forward with the current workload.

The Board tentatively set the next board meeting for early 2019, pending confirmation.

10. Adjournment

Meeting adjourned by Kress at 3:41 PM.

Respectfully submitted by:

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

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

§ 4920. List of Approved Seed Cultivars.

- (a) The Secretary, as provided in Section 81002 of the Food and Agricultural Code, adopts the following list of approved seed cultivars.
 - (1) Industrial hemp seed or propagative materials certified as breeder, foundation, registered, or certified seed or stock by one of the following agencies:
 - (A) Member organizations of the Association of Official Seed Certifying Agencies,
 - (B) Organization of Economic Cooperation and Development, or
 - (C) An officially approved and recognized seed-certifying agency listed in Title 3, California Code of Regulations, Section 3875, as provided in Section 52401 of the Food and Agricultural Code.
 - (2) Industrial hemp seed or propagative materials produced in a quality assurance program approved by one of the following agencies:
 - (A) Member organizations of the Association of Official Seed Certifying Agencies,
 - (B) Organization of Economic Cooperation and Development, or
 - (C) An officially approved and recognized seed-certifying agency listed in Title 3, California Code of Regulations, Section 3875, as provided in Section 52401 of the Food and Agricultural Code.
 - (3) Industrial hemp seed or propagative materials produced by a licensed participant in a state industrial hemp agricultural pilot program, pursuant to Section 7606 of the federal Agricultural Act of 2014 (7 U.S.C. Sec. 5940).
 - (A) The crop from which the seed or propagative materials were harvested from shall have been tested by the licensing authority in the state of origin and found to have no more than three-tenths of one percent tetrahydrocannabinol (THC) on a dry weight basis.
 - (B) The commissioner shall be notified of the importation of all propagative materials other than seed into the county. The shipment is subject to inspection by the commissioner and shall not be used for cultivation until released by the commissioner.
 - (4) Industrial hemp seeds or tissue culture plants imported from outside the United States that meets federal importation requirements.

- (A) The crop from which the seeds or tissue culture plants were harvested from shall have been tested by the department of agriculture in the country of origin and found to have no more than three-tenths of one percent THC on a dry weight basis.
- (B) The commissioner shall be notified of the importation of all propagative materials other than seed into the county. The shipment is subject to inspection by the commissioner and shall not be used for cultivation until released by the commissioner.
- (C) For the purposes of this section, the term "tissue culture" means in vitro material introduced into culture from nodal cuttings at a particular time and from a single plant and grown in aseptic conditions to be used as a source of propagative material.
- (5) Industrial hemp seed or propagative materials produced in California in accordance with the provisions of Division 24 of the Food and Agricultural Code and this chapter.
 - (A) The crop from which the seed or propagative materials were harvested from shall have been tested by a department-approved laboratory and found to have no more than three-tenths of one percent THC on a dry weight basis.
- (b) Upon request from the commissioner, a registrant shall provide documentation confirming that any seeds or propagative materials are on the list of approved seed cultivars.
- Note: Authority cited: Sections 407 and 81002, Food and Agricultural Code Reference: Sections 81001 and 81002 Food and Agricultural Code

From: Timothy Blank
Sent: Sunday, December 9, 2018 7:21 PM
To: Joshua Kress
Cc: John C Palmer
Subject: public comment for IH proposed regulations

Josh,

Please share this comment with the Hemp Advisory Board. I plan to say something similar during the public comment period at the meeting as well.

Unlike any other crop produced in California, industrial hemp has both a mandatory sampling requirement along with a mandatory destruction requirement if the test samples are too high. This makes industrial hemp a highly risky crop to produce and will likely result in bankruptcies and litigation when test results are too high. This risk is greatly magnified when the planting of non-Certified seed is allowed. This is not speculation, but it has been observed in Colorado (with the destruction of thousands of acres of industrial hemp) which took a similar path when they approved the production of industrial hemp without a seed certification requirement.

In trying to think of a comparable industry where there are heavy regulations in place for the production of the crop, the organic industry comes to mind as growers must demonstrate to a third party organization that they are meeting federal process-based standards. But even in the highly regulated organic crop industry, there is not a mandatory testing requirement for minimum levels of contaminants, so there is not a risk of crop loss.

The seed certification process of varietal testing and review, along with maintenance of varietal purity through seed increases, is the best pre-emptive measure the California hemp industry can adopt to avoid planting a crop that will test too high for THC. At the same time, I recognize the current frustration with a seed certification requirement that many in the emerging hemp industry are expressing, namely, an apparent insufficiency in varietal choices and inventory. This is a short-term problem, but nevertheless a real problem for those pioneering the industry in California in the initial years. With this in mind, to prevent the liability of selling uncertified seed, but also to allow for the production of uncertified seed on a commercial scale, I propose to the Hemp Advisory Board adopt the following (or similar) addition to the proposed hemp regulations:

Cultivars developed and planting seed produced outside of a seed certification or quality assurance program cannot be marketed for sale for commercial production in California and can only be utilized for a companies' or individual's internal production needs.

Sincerely, Timothy Blank California Crop Improvement Assn.



G. V. Ayers

916.316.7459 6365 Arcadia Ave. Loomis, CA 95650

gv@gentlerivers.com www.gentlerivers.com

December 12, 2018

Lawrence Serbin, Chair Industrial Hemp Advisory Board Department of Food and Agriculture Plant Health and Pest Prevention Services 1220 N Street Sacramento, CA 95814

RE: Proposed Amendment to the List of Approved Seed Cultivars

Dear Chairman Serbin

I am writing regarding the proposed amendment to the List of Seed Cultivars (Title 3, California Code of Regulations, Division 4, Chapter 8, Article 2 Section 4920). There are two clarifying amendments which should be made to prevent unintended consequences regarding seed cultivars from another state or from another country.

The proposed amendment requires industrial hemp seed from another state to have been tested by the licensing authority in that state. The amendment also requires that seed cultivars from another country be tested by the department of agriculture in the country of origin. These provisions are problematic because a state regulatory or a national department of agriculture typically does not perform the testing of industrial hemp. As currently drafting, the language could result in farmers being unable bring industrial hemp seed or propagative material into California because the regulatory authority in the other state or country did not perform the testing on the industrial hemp.

In addition, states may not "license" the growing of industrial hemp. A state may "register" or otherwise regulate the cultivation of industrial hemp. The amendment should be stated more widely than is stated in the current language.

We recommend the following clarifying amendments.

f fnembnemA

§ 4920 (a) (3) (A) The crop from which the seed or propagative materials were harvested from shall have been tested by the licensing in accordance with a testing method approved by the regulatory authority in the state of origin and found to have no more than three-tenths of one percent tetrahydrocannabinol (THC) on a dry weight basis.

Amendment 2

§ 4920 (a) (4) (A) The crop from which the seed or tissue culture plants were harvested from shall have been tested in accordance with a testing method approved by the department of agriculture in the country of origin and found to have no more than three-tenths of one percent THC on a dry weight basis.

We appreciate the opportunity to give input on the proposed amendment to the regulations. If you have any questions or wish to discuss, don't hesitate to reach out.

Sincerely,

Industrial Hemp Sampling and Testing Extracts from the Food and Agricultural Code As amended, effective 1/1/19

81006. Industrial Hemp Growth Limitations; Prohibitions; Imports; Laboratory Testing.

(d) (1) Except when industrial hemp is grown by an established agricultural research institution, a registrant that grows industrial hemp under this section shall, before the harvest of each crop and as provided below, obtain a laboratory test report indicating the THC levels of a random sampling of the dried flowering tops of the industrial hemp grown.

(2) Sampling shall occur no more than 30 days before harvest.

(3) The sample collected for THC testing shall be taken with the grower or seed breeder present. The department shall establish, by regulation, the sampling procedures, including all of the following:

- (A) The number of plants to be sampled per field, and any composting of samples.
- (B) The portions of the plant to be sampled.
- (C) The plant parts to be included in a sample.

(D) Additional procedures as necessary to ensure accuracy and the sanitation of samples and fields.

(4) The sample collected for THC testing shall be accompanied by the following documentation:

- (A) The registrant's proof of registration.
- (B) Seed certification documentation for the seed cultivar used.
- (C) The THC testing report for each certified seed cultivar used.

(5) The laboratory test report shall be issued by a laboratory approved by the department, using a department-approved testing method, and indicate the percentage content of THC on a dry-weight basis, indicate the date and location of samples taken, and state the Global Positioning System coordinates and total acreage of the crop. If the laboratory test report indicates a percentage content of THC that is equal to or less than three-tenths of 1 percent, the words "PASSED AS CALIFORNIA INDUSTRIAL HEMP" shall appear at or near the top of the laboratory test report. If the laboratory test report indicates a percentage content of THC that is greater than three-tenths of 1 percent, the words "FAILED AS CALIFORNIA INDUSTRIAL HEMP" shall appear at or near the top of the laboratory test report. If percent, the words "FAILED AS CALIFORNIA INDUSTRIAL HEMP" shall appear at or near the top of the laboratory test report.

(6) 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.

(7) If the laboratory test report indicates a percentage content of THC that is greater than threetenths 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.

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

(9) A registrant that intends to grow industrial hemp and who complies with this section shall not be prosecuted for the cultivation or possession of marijuana as a result of a laboratory test report that indicates a percentage content of THC that is greater than three-tenths of 1 percent but does not exceed 1 percent.

(10) Established agricultural research institutions shall be permitted to cultivate or possess industrial hemp with a laboratory test report that indicates a percentage content of THC that is greater than three-tenths of 1 percent if that cultivation or possession contributes to the development of types of industrial hemp that will comply with the three-tenths of 1 percent THC limit established in this division.

(11) Except for an established agricultural research institution, a registrant that grows industrial hemp shall retain an original signed copy of the laboratory test report for two years from its date of sampling, make an original signed copy of the laboratory test report available to the department, the commissioner, or law enforcement officials or their designees upon request, and shall provide an original copy of the laboratory test report to each person purchasing, transporting, or otherwise obtaining from the registrant that grows industrial hemp the fiber, oil, cake, or seed, or any component of the seed, of the plant.

Industrial Hemp Advisory Board (IHAB)

Recommendations on Sampling

- Samples shall be collected by the county agricultural commissioner. The commissioner may designate an independent third party to collect samples on the commissioner's behalf.
- Samples taken with the registrant or a representative present.
- Sampling shall occur no more than 30 days prior to harvest.
- Registrant shall submit a pre-harvest report to the commissioner at least 30 days prior to harvest.
- Each non-contiguous field shall be sampled separately.
- Each variety grown shall be sampled separately.
- Indoor and outdoor growing areas shall be sampled separately, even if it is the same variety.
- Each composite sample shall consist of at least five primary samples from different plants of the sampled variety.
- Sample shall consist of the dried flowering tops. "Dried flowering tops" is defined as the terminal cola or apex bud of the industrial hemp plant, including any stems, stalks, flowers, leaves, or seeds.*
- Avoid sampling field edges.
- Avoid sampling male plants.
- Any abnormal plants should be sampled individually.
- Place sample in brown paper bag (or other breathable bag), properly labeled and sealed in a manner to show evidence of tampering.
- Both registrant and sampler shall sign a chain-of-custody form.
- Samples shall be kept in cool storage, between 45-95°F.
- Samples shall be delivered to the lab in same day sampling occurs.
- The registrant or any representatives shall not assist the laboratory employee nor touch the sampled materials or the testing equipment during delivery, processing, or testing of the sample.
- Registrants shall submit a harvest/destruction report to the commissioner within 7 days completing harvest or destruction. The commissioner may confirm the harvest or destruction of the crop by inspection.

Italics = requirement from SB 1409, effective 1/1/19

Industrial Hemp Advisory Board (IHAB)

Recommendations on Testing

- Department-approved laboratory: ISO/IEC 17025 accredited.
- Department-approved testing method:
 - Gas chromatography with flame ionization detector
 - Gas chromatography coupled to mass spectrometry
 - Liquid chromatography coupled to mass spectrometry
 - Liquid chromatography with ultraviolet detector
- The laboratory shall develop and implement a chain-of-custody protocol to ensure accurate documentation of the transport, handling, storage, and destruction of samples.
- Each sample shall be maintained and tested separately.
- All plant parts submitted within the sample shall be processed and tested as a single sample. No plant parts shall be removed during sample preparation and testing.
- Samples shall be dried to a constant weight before analysis.
- Samples shall be milled to a homogenous powder-like consistency using a 1 mm screen and combined.
- If THC content is passing, sample should be retained by lab for 30 days.
- If THC content is between 0.3% and 1%, sample should be retained for 60 days.
- Registrant and commissioner shall be notified of test results within 10 days of sampling.
- Results report shall include date of sampling.

Italics = recommendations from CDFA Center for Analytical Chemistry

From: Lisa B.
To: CDFA PHPPS Industrial Hemp Program@CDFA
Subject: Fwd: Hemp testing protocol
Date: Wednesday, December 5, 2018 10:46:17 AM
Attachments: Oregon protocol for hemp

Hi there. I am re-sending this letter as I felt it wasn't understood by the committee what I was asking them to consider.

Hemp samples are taken wet and provided to the testing lab as wet samples as per law. The lab therefore has to dry the sample prior to testing and there are numerous ways to do this. We think it is important for the committee to develop a protocol for drying the wet sample. Different drying methods can result in wildly different results.

I hope that this information can be relayed to the committee.

Thank you for your attention. Lisa

------ Forwarded Message ------Subject:Hemp testing protocol Date:Mon, 15 Oct 2018 20:39:55 -0700 From:Lisa B. To:industrialhemp@cdfa.ca.gov

Hi. Could you please forward the following comments and attachment to the Hemp Advisory Committee, including the Testing and Sampling Task Force? I assume that comments are entered into the public record. Thank you.

Dear Committee members,

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

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

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

Thank you for your attention. Lisa Brown and Kevin Johnson



Analysis Report

George Bianchini

George@medi-cone.com

Sample 103-121018-221

7 Generations Producers Val X

Sample Submitted: 12-10-2018; Report Date: 12-11-2018

7 Generations Producers Val X

Plant Material: Flower

Sample



Cannabinoid Profile by HPLC



Calculated CBD Yield

17.61% Total Cannabinoids Cannabinoid % wt mg/g CBDA 16.04 160.4 CBGA 0.71 7.1 CBD 0.29 2.9 THCA 0.57 5.7 **Total Cannabinoids** 17.61 176.1 **Calculated THC Yield** 0.50 5.00 **Calculated CBD Yield** 14.36 143.57 Calculated Maximum THC Yield = THC + 0.877 * THCA Calculated Maximum CBD Yield = CBD + 0.877 * CBDA

CBDA CBGA

0.71

16.04

CBD

0.29

THCA

0.57

Marin Analytics, LLC 1281 Andersen Drive, Suite D San Rafael, CA 94901

415-936-6477 / Support@MarinAnalytics.com

masimca Sara Biancalana

Chief Scientist

This sample has been tested by Marin Analytics, LLC using valid testing methodologies and a quality system. Values reported relate only to the sample tested. Marin Analytics, LLC makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected levels of any compounds reported herein. This Certificate shall not be reproduced except in full, without the written approval of Marin Analytics, LLC.

Cannabinoid Profile

Industrial Hemp Advisory Board (IHAB)

Agricultural Pilot Program Outline

- The Department establishes an agricultural pilot program to study the growth, cultivation, and marketing of industrial hemp.
- The agricultural pilot program includes the following participants:
 - Registered growers of industrial hemp for commercial purposes
 - Registered industrial hemp seed breeders
 - Established agricultural research institutions and institutions of higher education that register with the commissioner as either a grower of industrial hemp for commercial purposes or an industrial hemp seed breeder
- A participant in the agricultural pilot program shall:
 - Submit an registration application and other required information
 - Pay all applicable fees
 - Perform sampling and testing for THC content in accordance with Department regulations
 - Provide records pertaining to planting materials, sampling, testing, harvest, or crop destruction upon request
 - Comply with all applicable federal, state, and local provisions pertaining to the growth and cultivation of industrial hemp
- The commissioner shall transmit the following data to the Department:
 - Application and other information
 - Laboratory test results for THC content for all registered plantings
 - Laboratory test results for all service, confirmatory, or enforcement samples collected by the commissioner
 - A summary of enforcement actions taken, including acreage and/or quantity of noncompliant industrial hemp destroyed
- The Department shall produce an annual report, and shall present the report at a regular meeting of the IHAB and publish the report on its website.

From SB 1409, effective 1/1/19:

81007. As part of the registration program established pursuant to this division, the department may establish and carry out, by regulation, an agricultural pilot program pursuant to Section 7606 of the federal Agricultural Act of 2014 (7 U.S.C. Sec. 5940) in accordance with the purposes of that section.