

Senate Bill (SB) 153
Summary of Changes

- Clarifies that the intent of the bill is not to limit local authorities from imposing local ordinances and regulations not in conflict with general laws.
- SB 153 amends various definitions:
 - Defines “industrial hemp” or hemp” to mean an agricultural product, whether growing or not, that is limited to types of the Cannabis Sativa L. and any part of that plant, including the seeds of the plant and all derivatives, extracts, the resin extracted from any part of the plant, the cannabinoids, isomers, acids, salts, and salts of isomers with a delta-9 tetrahydrocannabinol concentration of no more than 0.3 percent on a dry-weight basis.
 - Removes references to “seed” and defines “cultivar” and “hemp breeder” to reflect the common use of clonal propagation in hemp cultivation practices.
 - Defines “premises” to have the same meaning as defined Section 26001(ap) of the Business and Professions Code.
 - Defines “established agricultural research institution” to mean an institution of higher education, as defined in Section 101 of the federal Higher Education Act of 1965 (20 U.S.C. Sec. 1001), that grows, cultivates, or manufactures hemp for purposes of agricultural or academic research.*
 - Defines “research plan” to mean a strategy devised by an established agricultural research institution, or applicant established agricultural research institution that details the planned approach to cultivate industrial hemp for academic or agricultural research.*
- SB 153 amends the Industrial Hemp Advisory Board membership to increase board membership from 11 members to 13 members:
 - Increases grower representation from three members to five members,
 - Removes representation from processors or manufacturers of hemp products, and
 - Increases representation from businesses that sell hemp products from one member to two members.
- SB 153 amends registration requirements for growers, hemp breeders, and established agricultural research institutions:
 - Removes the term “for commercial purposes” to expand the purposes for which hemp may be cultivated.
 - Requires established agricultural research institutions to register and provide contact information, information on the land area to be used for hemp cultivation or storage, a

research plan that includes information on the varieties to be used, a testing plan, measures to destroy plants that test above the THC limit, measures to prevent unlawful use of the hemp plants, and a procedure to maintain records documenting the research. Registration for established agricultural research institutions would be valid for one year.*

- Requires the county agricultural commissioner (CAC) to determine that all requirements are met and the applicant is eligible to participate in the hemp program before issuing a registration to the applicant.
 - Anyone convicted of a felony relating to a controlled substance under state or federal law before, on, or after January 1, 2020 shall be ineligible for ten years to participate in the hemp program.
 - A person who materially falsifies any information in their application to participate in the hemp program shall be ineligible to participate.
 - Registrants who commit three negligent violations in a five-year period shall be ineligible to participate in the hemp program for five years, beginning on the date of the third violation.
- Requires the CAC to determine that all requirements are met before approving any amendments to registered land areas, approved seed cultivars, seed development plans, and research plans.
- Specifies that variety development plan of the registration application for hemp breeders, must include the name of the seed-certifying agency if the cultivar is to be certified, varieties of hemp to be used and how those varieties will be used in the development of the new cultivar, a plan for testing all plants grown and destroying any plants found to have THC concentrations more than 0.3%, a plan to prevent unlawful use of the hemp grown, and procedure for maintain records documenting the development of the new cultivar.
- Requires the CAC to transmit contact information for each registrant, a legal description of the land on which the registrant engages in hemp cultivation, and registration status of the grower, seed breeder, or established agricultural research institution to the Department.
- Requires the Department and CAC to retain registration information for at least three years after collection.
- SB 153 amends cultivation requirements:
 - Removes minimum acreage requirements for breeders to allow the development of new cultivars on a smaller scale.
 - Restricts hemp cultivation on premises licensed for cannabis cultivation or processing.
 - Requires all hemp cultivation to be sampled and tested for THC concentration prior to harvest, except when grown by registered established agricultural research institutions

and tested in accordance with an approved research plan, and registered hemp breeders and tested in accordance with an approved variety development plan.

- Removes the requirement for a copy of the seed certification documentation and Tetrahydrocannabinol (THC) testing report to accompany the sample collected for THC testing.
- Specifies testing for THC will be a “post decarboxylation or similarly reliable methods for determining THC concentration levels. The laboratory test report shall indicate the percentage concentration of THC on a dry-weight basis.”
- Allows the secretary to authorize a registered established agricultural research institution or registered hemp breeder to cultivate or possess hemp found to have a THC concentration of more than 0.3% in accordance with its approved research plan or approved variety development plan if the cultivation or possession will contribute to the development of a cultivar that will comply with the THC limit.
- Establishes consequences for negligent violation as determined by the Secretary to include:
 - If the violation is not a repeat violation, the registrant shall comply with corrective action by a reasonable date.
 - The registrant shall periodically report to the Secretary for at least two calendar years.
 - Three negligent violations in a five-year period shall result in ineligibility to participate in the hemp program for five years, beginning on the date of the third violation.
 - For violations committed intentionally, or with recklessness or gross negligence, the Secretary shall immediately report the registrant to the United States Attorney General and the California Attorney General, as applicable.
- Specifies that the Secretary of the Department, in consultation with the Governor and the Attorney General shall develop and submit a state plan for hemp to the United States Secretary of Agriculture on or before May 1, 2020.
- Removes FAC Section 81006(e), which is a remnant of previous legislation and is no longer relevant.

* Specifies that this amendment will become effective on the date on which a state plan pursuant to Section 297B of the federal Agricultural Marketing Act of 1946 is approved for California.

**Industrial Hemp Program
Registration Summary
As of November 1, 2019**

County	Registrants			Registered Sites			Registered Acreage		
	Grower	Seed Breeder	Total	Grower	Seed Breeder	Total	Grower	Seed Breeder	Total
Alameda	6	1	7	8	2	10	495.0	0.1	495.1
Butte	15	8	23	27	17	44	400.1	43.6	443.7
Colusa	1	0	1	2	0	2	0.7	0.0	0.7
Contra Costa	4	0	4	5	0	5	442.5	0.0	442.5
El Dorado	3	0	3	9	0	9	292.6	0.0	292.6
Fresno	43	2	45	108	5	113	3,527.6	74.0	3,601.6
Humboldt	2	1	3	5	1	6	2.2	0.1	2.3
Imperial	15	2	17	48	3	51	3,290.2	18.0	3,308.2
Kern	37	6	43	84	13	97	7,740.3	410.0	8,150.3
Kings	17	1	18	22	1	23	806.1	10.0	816.1
Lake	35	9	44	60	41	101	504.8	87.1	591.9
Lassen	1	0	1	1	0	1	20.1	0.0	20.1
Los Angeles	10	0	10	28	0	28	910.7	0.0	910.7
Madera	11	1	12	14	1	15	1,196.5	50.0	1,246.5
Merced	1	0	1	9	0	9	100.3	0.0	100.3
Monterey	6	2	8	3	1	4	296.0	5.0	301.0
Plumas	7	1	8	6	1	7	41.1	5.0	46.1
Riverside	60	9	69	116	11	127	6,799.4	469.0	7,268.4
Sacramento	1	1	2	1	1	2	0.9	0.9	1.8
San Benito	12	4	16	20	4	24	159.1	44.0	203.1
San Bernardino	19	8	27	63	18	81	1,038.3	250.6	1,288.9
San Diego	52	11	63	90	14	104	1,229.9	31.3	1,261.2
San Francisco	0	1	1	0	1	1	0.0	0.1	0.1
San Joaquin	3	0	3	5	0	5	351.1	0.0	351.1
San Luis Obispo	18	0	18	62	0	62	438.6	0.0	438.6
San Mateo	0	1	1	0	4	4	0.0	6.7	6.7
Santa Cruz	16	3	19	64	14	78	121.2	37.2	158.4
Shasta	2	0	2	3	0	3	156.0	0.0	156.0
Solano	2	1	3	3	6	9	166.0	310.0	476.0
Stanislaus	27	4	31	42	16	58	228.6	35.6	264.2
Sutter	18	1	19	32	1	33	1,084.9	10.4	1,095.3
Ventura	21	7	28	39	9	48	1,477.3	103.3	1,580.6
Total	465	85	550	979	185	1164	33,318.1	2,002.0	35,320.1

INDUSTRIAL HEMP PROGRAM REVENUE AND BUDGET UPDATE

Industrial Hemp Advisory Board

November 6, 2019

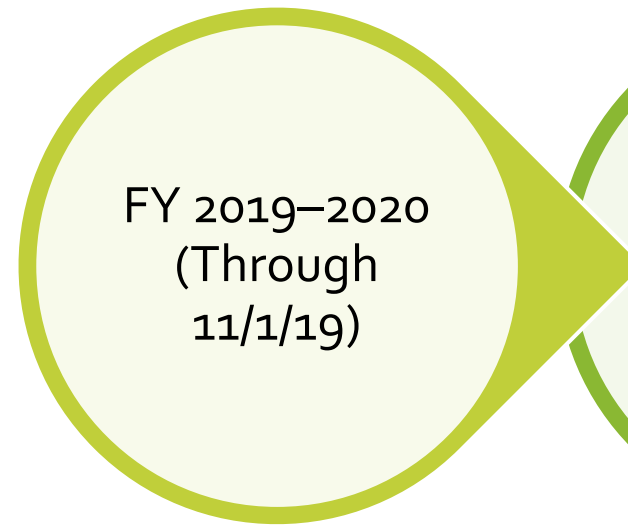
Fiscal Year	Registration Fees Collected
2018/2019	\$238,500
2019/2020	\$271,800
Total	\$510,300

Revenue Update

Registration Activities Summary



- 266 registrations
- 64 amendments



- 284 registrations
- 147 amendments



- 600 registrations
- 250 renewals
- 425 amendments

	PPPY FY 2016/17	PPY FY 2017/18	PY FY 2018/19
TOTAL PERSONAL SERVICES	18,519	88,548	199,802
TOTAL OPERATING EXPENSES & EQUIPMENT	2,283	15,309	39,865
COUNTY AGREEMENTS	0	0	244,765
TOTAL COST RECOVERY	0	0	-500
TOTAL BUDGET	20,802	103,857	483,932

Budget for Previous Years

As of 10/14/19

	CY FY 2019/20
TOTAL PERSONAL SERVICES	654,110
TOTAL OPERATING EXPENSES & EQUIPMENT	177,743
COUNTY AGREEMENTS	2,000,000
TOTAL COST RECOVERY	-2,155
TOTAL BUDGET	2,829,699

FY 2019/2020 Projections

County Agreements – Reimbursable Activities

- Registration issuance
- Enforcement activities of non-registered cultivation
- Public outreach activities
- Training
- Reporting/invoicing

County Agreements – Projections

- Requested invoices from April 30 – Sept 30
- Out of 50 counties, we received approximately 60% of the invoices

Status	Counties
Pending	6
Executed	44
Cancelled	6
Total	56

Time Period	Total Invoiced To Date	Projected Cost
FY 18/19 (Apr 30 – Jun 30)	174,832	244,765
FY 19/20 (Jul 1 – Sep 30)	349,689	489,564
April 30 – Sept 30	524,521	734,329

- Total projected annual cost for 50 counties- \$2,000,000

Current Fund Condition

	PPY 2016/17 Actual	PPY 2017/18 Actual	PY 2018/19 Actual	CY 2019/20 Projection	Projection for 2020/21	Projection for 2021/22
BEGINNING RESERVE BALANCE	\$0	(\$20,802)	(\$124,658)	(\$370,091)	(\$2,434,789)	(\$4,692,137)
REVENUE CATEGORIES						
Registration Fees	0	0	238,500	765,000	765,000	765,000
Interest & Miscellaneous Income	0	0	0	0	0	0
TOTAL REVENUE	\$0	\$0	\$238,500	\$765,000	\$765,000	\$765,000
EXPENDITURES						
Personnel Services	18,519	88,548	199,802	654,110	836,759	836,759
Operating Exp & Equipment	2,283	15,309	39,865	177,743	187,743	187,743
County Agreements	0	0	244,765	2,000,000	2,000,000	2,000,000
COST RECOVERY						
Reimbursement 224c - Admin	0	0	(500)	(2,155)	(2,155)	(2,155)
TOTAL EXPENDITURES	\$20,802	\$103,857	\$483,932	\$2,829,699	\$3,022,347	\$3,022,347
ENDING RESERVE BALANCE	(\$20,802)	(\$124,658)	(\$370,091)	(\$2,434,789)	(\$4,692,137)	(\$6,949,484)

The Department recommends that programs maintain a reserve of between 1/3 and 1/2 of its annual expenditures

INDUSTRIAL HEMP PROGRAM REGISTRATION FEE PROPOSAL

Industrial Hemp Advisory Board

November 6, 2019

Current Structure (CCR 4900)

- NEW REGISTRATION: \$900 registration fee per applicant in each county applicant intends to cultivate hemp
- RENEWAL: \$900 registration fee per applicant in each county applicant intends to continue to cultivate hemp

Registration Fee Proposals

- Option 1 – flat fee
- Option 2 – flat fee + acreage (tiered)
- Option 3 – flat fee + acreage
- Additional Options Considered

Option 1 – Flat Fee

- NEW REGISTRATION: \$4,500 registration fee per applicant in each county applicant intends to cultivate hemp
- RENEWAL: \$4,500 registration fee per applicant in each county applicant intends to continue to cultivate hemp

Total projected annual revenue - \$3,825,000

Option 1 – Fund Condition

	PPPY 2016/17 Actual	PPY 2017/18 Actual	PY 2018/19 Actual	CY 2019/20 Projection	Projection for 2020/21	Projection for 2021/22
BEGINNING RESERVE BALANCE	\$0	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,518,589)	(\$715,937)
REVENUE CATEGORIES						
Registration Fees	0	0	238,500	1,681,200	3,825,000	3,825,000
Interest & Miscellaneous Income	0	0	0	0	0	0
TOTAL REVENUE	\$0	\$0	\$238,500	\$1,681,200	\$3,825,000	\$3,825,000
EXPENDITURES						
Personnel Services	18,519	88,548	199,802	654,110	836,759	836,759
Operating Exp & Equipment	2,283	15,309	39,865	177,743	187,743	187,743
County Agreements	0	0	244,765	2,000,000	2,000,000	2,000,000
COST RECOVERY						
Reimbursement 224c - Admin	0	0	(500)	(2,155)	(2,155)	(2,155)
TOTAL EXPENDITURES	\$20,802	\$103,857	\$483,932	\$2,829,699	\$3,022,347	\$3,022,347
ENDING RESERVE BALANCE	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,518,589)	(\$715,937)	\$86,716

Option 2 – Flat Fee + Tiered Acreage Fee

- NEW REGISTRATION: \$2,000 plus additional cost based on acreage per applicant in each county applicant intends to cultivate hemp
- RENEWAL: \$2,000 plus additional cost based on acreage per applicant in each county applicant intends to cultivate hemp
- Amendments to registration may require additional payments

Total projected annual revenue - \$3,903,045

Acres	Add'l Cost
0 - 1	0
1 - 5	500
5 - 10	1000
10 - 20	1500
20 - 50	2000
50 - 100	2500
100 - 200	3000
200 - 500	3500
More than 500	4000

Fund Condition for Option 2

	PPPY 2016/17 Actual	PPY 2017/18 Actual	PY 2018/19 Actual	CY 2019/20 Projection	Projection for 2020/21	Projection for 2021/22
BEGINNING RESERVE BALANCE	\$0	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,816,607)	(\$935,909)
REVENUE CATEGORIES						
Registration Fees	0	0	238,500	1,383,182	3,903,045	3,903,045
Interest & Miscellaneous Income	0	0	0	0	0	0
TOTAL REVENUE	\$0	\$0	\$238,500	\$1,383,182	\$3,903,045	\$3,903,045
EXPENDITURES						
Personnel Services	18,519	88,548	199,802	654,110	836,759	836,759
Operating Exp & Equipment	2,283	15,309	39,865	177,743	187,743	187,743
County Agreements	0	0	244,765	2,000,000	2,000,000	2,000,000
COST RECOVERY						
Reimbursement 224c - Admin	0	0	(500)	(2,155)	(2,155)	(2,155)
TOTAL EXPENDITURES	\$20,802	\$103,857	\$483,932	\$2,829,699	\$3,022,347	\$3,022,347
ENDING RESERVE BALANCE	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,816,607)	(\$935,909)	(\$55,211)

Option 3 – Flat Fee + Acreage Fee

- NEW REGISTRATION: \$1,250 plus additional \$50 per acre per applicant in each county applicant intends to cultivate hemp
- RENEWAL: \$1,250 plus additional \$50 per acre per applicant in each county applicant intends to cultivate hemp
- Amendments to registration may require additional payments

Total projected annual revenue - \$3,791,773

Fund Condition for Option 3

	PPPY 2016/17 Actual	PPY 2017/18 Actual	PY 2018/19 Actual	CY 2019/20 Projection	Projection for 2020/21	Projection for 2021/22
BEGINNING RESERVE BALANCE	\$0	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,544,562)	(\$775,137)
REVENUE CATEGORIES						
Registration Fees	0	0	238,500	1,655,227	3,791,773	3,791,773
Interest & Miscellaneous Income	0	0	0	0	0	0
TOTAL REVENUE	\$0	\$0	\$238,500	\$1,655,227	\$3,791,773	\$3,791,773
EXPENDITURES						
Personnel Services	18,519	88,548	199,802	654,110	836,759	836,759
Operating Exp & Equipment	2,283	15,309	39,865	177,743	187,743	187,743
County Agreements	0	0	244,765	2,000,000	2,000,000	2,000,000
COST RECOVERY						
Reimbursement 224c - Admin	0	0	(500)	(2,155)	(2,155)	(2,155)
TOTAL EXPENDITURES	\$20,802	\$103,857	\$483,932	\$2,829,699	\$3,022,347	\$3,022,347
ENDING RESERVE BALANCE	(\$20,802)	(\$124,658)	(\$370,091)	(\$1,544,562)	(\$775,137)	(\$5,711)

Additional Proposals Considered

- Flat fee + cultivation site
- Different registration fees for growers and breeders
- Different registration and renewal fees
- Registration fee for amendments

Industrial Hemp Program Budget Summary

	PPPY FY 2016/17 As of 10/14/19	PPY FY 2017/18 As of 10/14/19	PY FY 2018/19 As of 10/14/19	*CY FY 2019/20 As of 10/14/19
Staff Salary	12,363	58,550	133,229	447,559
Staff Benefits	6,156	29,998	66,573	206,552
TOTAL PERSONAL SERVICES	18,519	88,548	199,802	654,110
General Expenses	0	663	1	500
Printing	0	0	0	500
Communications	0	0	0	500
Postage	0	14	74	250
Insurance	0	0	0	5,000
Travel: In-State	2,283	8,678	9,549	15,000
Travel: Out-State	0	1,976	4,024	5,000
Training	0	0	420	0
Facilities	0	0	0	30,000
Cons/Profs	0	-13	210	500
Attorney General	0	0	0	1,000
Indirect Costs - Exec/Admin	0	2,577	15,453	17,990
Indirect Costs - Division	0	1,401	8,221	9,914
Indirect Costs - IT	0	0	0	60,000
Pro Rata & SB 84	0	0	1,661	13,989
Information Technology	0	12	252	0
Equipment	0	0	0	15,000
Auto Inspection	0	0	0	2,500
Field/Agricultural Supplies	0	0	0	100
Other Misc. Charges	0	0	0	0
Subtotal Operating Exp/Equip	2,283	15,309	39,865	177,743
County Agreements	0	0	244,765	2,000,000
TOTAL OPER EXP/EQUIP	2,283	15,309	284,630	2,177,743
Reimbursement 224c - Admin	0	0	-500	-2,155
TOTAL COST RECOVERY	0	0	-500	-2,155
TOTAL BUDGET w/ PERSONNEL & BENEFITS	20,802	103,857	483,932	2,829,699

Overview of Indirect Charges

Industrial Hemp Advisory Board – November 6, 2019

Interdepartmental Charges

Division – Indirect Costs

- Division Infrastructure – Director, Asst. Director, Permits & Regulations, etc.
- Data Management

Departmental Indirect Costs

Internal departmental indirect costs include such items as:

- Personal services costs of the department's administrative, supervisory, and executive staff incurred at the unit, bureau, or division level.
- Personal services costs of support units, including accounting, human resources, contracts, internal audits, legal, information technology, clerical support, etc.
- Operating expenses and equipment costs not incurred to directly support a specific cost objective.

Departmental indirect costs are accumulated and distributed through a cost allocation process to the various units (Programs) in the department.

Statewide Indirect Costs

There are more than 500 state agencies in California. Statewide indirect costs are non-reimbursed (General Fund) central service agency costs. Central service costs are those amounts expended by central service departments and the Legislature for **overall administration of state government and for providing centralized services to state departments**. These functions are necessary for state operations and are centralized to provide efficient and consistent statewide policy and services. Examples are:

- | | | |
|-------------------------------------|--|---|
| • Dept. of Finance (Finance) | • California Victim Compensation and Government Claims Board | • State Agencies Secretaries: |
| • Dept. of Information Technology | • Office of Administrative Law | – Health and Human Services |
| • Dept. of General Services for: | • California State Library | – Youth and Adult Correctional |
| • State Controller's Office | • Health Benefits for Retired Annuitants | – State and Consumer Services |
| • State Treasurer's Office | • Dept. of Justice | – Business, Transportation, and Housing |
| • State Personnel Board | • Bureau of State Audits | – Resources |
| • Dept. of Personnel Administration | • Legislature | |

SWCAP & Pro Rata

Central service agencies provide services benefiting all State departments. Statewide indirect costs may be charged as either Pro Rata or SWCAP. SWCAP costs are used for federal reimbursement purposes. Pro Rata costs are used for special funds and other reimbursements. Only continuously appropriated (CA) funded programs are charged Pro Rata.

CDFA is sent a Pro Rata charge, which is spread across programs based on factors and formulas that consider workload data, billable and non-billable fund categories, and budget data.

Pro Rata is a process that:

- recovers for the General Fund, costs incurred by central administrative service agencies that provided central administrative services to departments
- allocates the costs of each central administrative service agency to operating departments using the departments' workload
- allocates central administrative service agency's costs to a departments' funding sources (i.e., industry-funded programs that use those services)

What is the Ag Trust Fund?

FAC § 233. (a) The trust fund consists of moneys transferred by the director from the Department of Food and Agriculture Fund, including all income therefrom. The amount of funds, excluding interest earned thereon, contained in the trust fund shall be determined by the director, and shall be the same percentage for all agricultural programs, but shall not exceed 10 percent of the annual operating budgets of each agricultural program. Funds in excess of 10 percent of the annual operating budgets of each agricultural program that are in the trust fund, or such other lesser percentage as the director may determine, may be returned to the Department of Food and Agriculture Fund.

(b) The director shall establish separate accounts in the trust fund for the money transferred to the fund from each of the agricultural program accounts in the Department of Food and Agriculture Fund. The trust accounts shall be used by the Department of Food and Agriculture Fund for expenditure when necessary for the exclusive purpose of implementing and continuing any of the agriculture programs with money contained in the trust fund.

FAC § 240. The moneys in the trust fund shall be disbursed only to pay for costs arising from unanticipated occurrences associated with administering self-funded programs. These costs shall include, but are not limited to: attorney costs related to litigation; workers' compensation costs; unemployment costs; phaseout costs of existing programs; and temporary funding for programs that are implementing a fee increase. Any program using the moneys from the trust fund shall repay the trust fund based on a schedule approved by the director.

Pamela
Cassar,

Nov, 5, 2019

Deputy Agricultural Commissioner/Sealer
Department of Agriculture
County of Santa Cruz

Dear Pamela,

It was a pleasure meeting with you and County Ag Staff Thursday at the Hemp farm. As we discussed, the protocols for THC testing is confusing. While I have been involved with California's evolving Industrial Hemp rules and regulations by attending and contributing my 20 years experience in Cannabis cultivation at every board meeting of the Hemp Advisory Board, we are now tasked with the merger of both the State Hemp laws as defined in Prop 64, sb1409 and Ca Code 4940 as well as the USDA Hemp rules as defined in the 2018 Farm Act. The intention of this letter is to seek guidance to statewide rules in an effort to avoid any crop failures due to confusing or misunderstood rules and regulations.

The State in an effort to allow farmers access to permits to cultivate hemp this season, rushed temporary rules that would allow Ca. Counties to license farmers. The Hemp board has and continues to work very diligently in completing these regulations. These temporary rules have now created a situation of some, not understanding the testing/sampling protocols. In the field today, with a copy of the rules, we seemed to be understanding different meanings of the same written rules.

Next week is the next Hemp Board meeting. I will at public comment time, bring this issue as well as this letter to the board. I will copy the Hemp Board on this letter

At this weekend's World CBD Expo in San Jose, I discussed this situation with several testing facilities at the show. They agreed that while the rules are straight forward, some Ag Commissioners are being told different sampling protocols.

At the farm on Thursday 10/30 a sample was taken from plants in each section, as was proper and compliant. The issue we had was a difference of opinion involving the definition of what the top 18 inches of a lateral branch is. County staff took about a four to five inch flower off the top branch, and then took a full 18 inch branch off the bottom 1/3 of the plant. These were tall plants with many lateral branching.

Based on our difference of opinion the results will vary substantially. This was a topic of discussion at two board meetings. The (temporary) rules are the results of this effort in the rule making process, most of what was voted on by the board made it through the 45 day review process. We tested our grow at week 4, 5, 6 and our results were derived by using the formula as described in California Code 4941. The results of these COA's, all passed as this variety has done so in three other Counties this season.

In a discussion with other County staff at the farm, was that the CDFA was holding weekly phone conferences to educate County Ag Commissioners how to take samples. I was told that they were instructed by the "state" to just take the top flower. And the bottom 18 inch lateral branch.

Hopefully the board can provide guidance on these and any other new sampling protocol developments.

The other issue is the moisture content of the sample. Our pre R&D COA's , contained moisture content that had a spread of almost 300%. In week 5 we had the sample tested at Steep Hill labs and SC labs, one was at .4% and one at 1.17%. Both of these moisture contents had rendered the product useless. Cannabis is a viable product at 8-10%. The board at open meetings had discussed a moisture level for testing at those numbers. I assume that item did not get voted on or pass the comment period.

My concern is whether the testing labs are complying with the "**Measurement of Uncertainty**" as required with ISO certification. Below is an overview of that SOP.

At this Wednesday's Hemp Board meeting I will focus on two issues.

§ 4941 Sampling Procedures for Testing Industrial Hemp for THC Content

On sampling, the concern is about some of the language. I will list code 4941 below.

(b) Sample Volume and Composition (1) Each primary sample shall include all parts of the plant, including stems, stalks, flowers, leaves, seeds, and buds from: (A) If two or more lateral branches are present,

If any branch is less than 18 inches, the whole branch shall be taken.

(B) If two lateral branches are not present, the terminal 18 inches from the terminal bud at the top of the plant. If the plant is less than 18 inches tall, the whole plant shall be taken.

Moisture content of samples.

Sections 297B(a)(2)(A)(iii) and 297C(a)(2)(C)

This interim rule defines "measurement of uncertainty" as "the parameter, associated with the result of a measurement, that characterizes the dispersion of the values that could reasonably be attributed to the particular quantity subject to measurement." This definition is based on the definition of "uncertainty (of measurement)" in section 2.2.3 of the Joint Committee for Guides in Metrology [6] 100:800, Evaluation of measurement data—Guide to the expression of uncertainty in measurement (JCGM Guide). NIST Technical Note 1297, Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results (TN 1297), is based on the JCGM Guide. USDA also relied on the Eurachem/Co-Operation on International Traceability in Analytical Chemistry's "Guide on Use of Uncertainty Information in Compliance Start Printed Page 58525 Assessment, First Edition 2007". Colloquially, the measurement of uncertainty is similar to a margin

of error. When the measurement of uncertainty, normally expressed as a +/- with a number, (*e.g.*, +/- 0.05) is combined with the reported measurement, it produces a range and the actual measurement has a known probability of falling within that range (typically 95%).

The definition of “acceptable hemp THC level” explains how to interpret test results with the measurement of uncertainty with an example. The application of the measurement of uncertainty to the reported delta-9 tetrahydrocannabinol content concentration level on a dry weight basis produces a distribution, or range. If 0.3% or less is within the distribution or range, then the sample will be considered to be hemp for the purpose of compliance with the requirements of State, Tribal, or USDA hemp plans. For example, if a laboratory reports a result as 0.35% with a measurement of uncertainty of +/-0.06, the distribution or range is 0.29% to 0.41%. Because 0.3% is within that distribution or range, the sample, and the lot it represents, is considered hemp for the purpose of compliance with the requirements of State, Tribal, or USDA hemp plans.

These two issues, unresolved could lead to the same chaos we are seeing with the BCC regulatory system. Many farmers could lose their farms, leading to unnecessary litigation and a rise of black market operations. We are seeing this already in a massive way with California’s marihuana program.

I offer my help in any way to assist with a compliant Industrial Hemp program. One project our research company is planning is a one acre research grow in Northern, Central and Southern California Counties. The project will grow as many certified seeds from as many seed companies as we can source. We will cultivate in a controlled fashion using standard growing methods. The results of this research will be provided to all Cdfa Commissioners.

We hope that this research will assist farmers in making the right choices when it comes to genetics, fertilizers and soil types.

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