



INDUSTRIAL HEMP CULTIVATION

Sampling, Testing & Other Related
Topics

August 27, 2019



The County of San Diego Department of Agriculture,
Weights & Measures

OVERVIEW

- Industrial Hemp
 - Laws and Regulations
 - Registration
 - Approved Cultivars
 - Sampling and Testing
 - Harvest
 - Destruction
 - Zoning/Land Use
- Import/Export of Plant Material
- Pesticide Use
- Stormwater Regulations



LAWS AND REGULATIONS

- **California Industrial Hemp Farming Act**
 - Food and Agricultural Code, Division 24 §81000-81011
- **California Code of Regulations, Title 3**
 - §4900 Registration Fees
 - §4920 Approved Cultivars
 - §4940 – §4950 Sampling, Testing, Harvest, Destruction
- **2018 Federal Agriculture Improvement Act (Farm Bill)**
 - Formally removed hemp-derived products from Schedule 1 status under the Controlled Substances Act

REGISTRATION

- Must register with County Agricultural Commissioner prior to cultivation
 - \$900 fee payable to CDFA Cashier
- Register as grower or seed breeder
- Requires review and approval of:
 - Site(s)
 - Map(s)
 - Cultivar(s) intended to be grown
- Must request amendment and receive approval **prior to changing**
 - Site(s)
 - Map(s)
 - Cultivar(s) intended to be grown

APPROVED CULTIVARS

- No exhaustive “list” – only requirements as to what can be approved and how
- Certified Seed – California Crop Improvement Association
 - Difficult to obtain
 - Grain and fiber only
- Seed or planting material from another grower
 - Provide **valid** Certificate of Analysis (COA) showing crop was tested $\leq 0.3\%$ THC
 - Should list variety name and grower’s name
 - Provide grower’s proof of registration
 - Registration dates should correspond to date on COA

We approve the seed/planting material from that particular **grower** and **crop**
It is not a blanket approval of that variety

APPROVED CULTIVARS

- Why is this important?
 - 1. It's what the laws and regulations require**
 - 2. The level of risk involved**

Your crop will be tested prior to harvest and subject to destruction if THC content exceeds the legal limit.

Original documents associated with the cultivar will not be considered.

SAMPLING & TESTING

- All industrial hemp crops must be tested within 30 days of harvest to verify the THC content $\leq 0.3\%$
- **Labs**
 - You select the lab
 - No official list
 - Bureau of Cannabis Control Licensees
 - We'll verify they meet the requirements
 - Accreditation
 - Analytical methods and instrumentation
 - Sample collection and handling methods, if applicable

SAMPLING & TESTING

- **Pre-Harvest Report**

- Submit to our office at least 30 days prior to intended harvest
- One form per cultivation site
- List cultivar(s) and acreage to be harvested
- Indicate lab you have selected and provide Chain of Custody/Sample Analysis Form
- Any changes must be submitted ≥ 5 days prior to sampling, or may cause delays

SAMPLING & TESTING

- **Sample Collection**

- Select lab staff vs. our department's staff (AWM)
 - AWM - \$126/hour
 - Lab - You determine cost
- If lab staff selected:
 - Must be qualified as determined by AWM
 - AWM staff will observe (no fee)
- We schedule sample collection
- Registrant must be present
- Must allow access to all industrial hemp cultivation areas

SAMPLING & TESTING

- **Sample Collection**

- Collect 1 composite sample per cultivar, per planting date, in a contiguous field
 - Important to document what was planted, where, when
- Composite sample =
 - At least 5 primary samples from 5 different plants
 - Avoid plants 10' from field edges if possible

SAMPLING & TESTING

- **Sample Collection**
 - Primary Sample Composition
 - Include all plant parts (stems, stalks, flowers, leaves, seed and buds)
 - ✓ If 2+ lateral branches are present:
 - Collect terminal 18" of the top lateral branch and terminal 18" of one lateral branch from the lower third of the plant
 - Any branch <18", collect entire branch
 - ✓ If 2 lateral branches are not present:
 - Collect terminal 18" from terminal bud at top of plant
 - If plant <18", collect entire plant

SAMPLING & TESTING

• **Sample Collection**

- Change gloves and clean equipment between composite samples
- Place samples in permeable bag, seal, sample collector and registrant sign
- Bag labeled and accompanied by required documentation
 - ✓ Registrant's proof of registration (POR)
 - ✓ Pre-harvest report
 - ✓ Original COA and associated documents for the cultivar
 - ✓ Sample analysis request form with chain of custody
- **Must be delivered to lab within 24 hours**

SAMPLING & TESTING

- **Sample Testing and Results**

- Lab dries, homogenizes, and tests entire sample
 - Gas chromatography with flame ionization detector or coupled with mass spectrometry
 - Liquid chromatography coupled with mass spectrometry or UV detector
- Lab shall provide report to registrant and AWM within 10 days of sample collection
- Report indicates THC content and if sample passed/failed as industrial hemp

TESTING RESULTS

“PASS”

- **THC \leq 0.3%**
 - Crop must be harvested within 30 days of sample collection, or additional testing required
 - Must submit Harvest Report within 72 hours after completing
 - AWM may verify harvest with inspection
 - Lab shall provide \geq 10 original copies of lab report with wet signature to registrant
 - Registrant shall retain a copy of the lab report for at least two years
 - Registrant shall provide an original copy of the lab report to each person purchasing, transporting, or otherwise obtaining the crop

TESTING RESULTS

“RE-TEST”

- **$0.3\% < \text{THC} \leq 1\%$**
 - Re-sampling and testing required
 - **AWM staff will collect sample(s)**
 - Second sample, $\text{THC} \leq 0.3\%$:
 - See previous slide
 - Second sample, $0.3\% < \text{THC} \leq 1\%$:
 - Crop destruction required
 - Shall take place as soon as practicable, within 45 days or receipt of test report
 - Must submit a destruction plan at least 24 hours before the anticipated destruction date
 - AWM will verify that destruction has taken place within the allotted time frame
 - Second sample, $\text{THC} > 1\%$:
 - See next slide

TESTING RESULTS

“FAIL”

- **THC > 1%**
 - Crop destruction required
 - Shall begin within 48 hours and complete within 7 days of receipt of test report
 - Must submit a destruction plan at least 24 hours before the anticipated destruction date
 - AWM will verify that destruction has taken place within the allotted time frame

DESTRUCTION

- Submit Destruction Plan at least 24 hours prior to intended destruction
- AWM approval required prior to proceeding
- Plan includes:
 - Anticipated destruction start and end dates
 - Size of the cultivation site to be destroyed (acres or square feet)
 - Description of site sufficient to describe, locate, and identify the boundaries of the site
 - List the name of each cultivar along with the corresponding sample ID number and percentage content of THC, if applicable.
 - Proposed destruction method
- Commissioner shall confirm destruction with inspection
- Also applies to other types of non-compliant crop, and voluntary destruction

ZONING/LAND USE

- **Unincorporated areas**
 - No current restrictions on where industrial hemp may be grown
 - Same requirements as any type of agriculture
 - **Clearing for any type of agriculture** requires an administrative clearing permit from:
 - Planning & Development Services, Zoning Division
 - 5510 Overland Ave, Suite 110, San Diego, CA 92123
 - (858) 565-5981 (Mon. - Fri. from 8:00 am - 11:45 am)
 - Email: dag.bunnemeyer@sdcounty.ca.gov
- **Incorporated Cities**
 - Contact the city's planning department

INDUSTRIAL HEMP CULTIVATION

CONTACT INFORMATION

County of San Diego Department of Agriculture, Weights & Measures (AWM) –
Office Locations:

EXECUTIVE OFFICE

9325 Hazard Way, Suite 100
San Diego, CA 92123

SAN MARCOS OFFICE

151 E. Carmel Street
San Marcos, 92078

CONTACT

AWM – Industrial Hemp Cultivation Program

Phone: (858) 614-7786

Email: AgStandards.AWM@sdcounty.ca.gov

Webpage: <https://www.sandiegocounty.gov/awm/industrialhemp.html>

CDFA – California Industrial Hemp Program

Phone: (916) 654-0435

Email: industrialhemp@cdfa.ca.gov

Webpage: <https://www.cdfa.ca.gov/plant/industrialhemp/>

IMPORT AND EXPORT REQUIREMENTS

CONTACT

AWM – Pest Exclusion Program

Phone: (760) 752-4713

Webpage: <https://www.sandiegocounty.gov/content/sdc/awm/ppq.html>



PESTICIDE USE REQUIREMENTS

CONTACT

AWM – Pesticide Regulation Program

Phone: (858) 694-8980

Webpage: <https://www.sandiegocounty.gov/content/sdc/awm/pesticides.html>

STORMWATER REQUIREMENTS

CONTACT

AWM – Agricultural Water Quality Program

Phone: (858) 614-7786

Email: AgStandards.AWM@sdcounty.ca.gov

Webpage: https://www.sandiegocounty.gov/content/sdc/awm/ag_water.html