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
LAW 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 ≤ 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 $\geq$ 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 ≤ 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 ≥ 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% < THC ≤ 1%**
  - Re-sampling and testing required
    - AWM staff will collect sample(s)
  - Second sample, THC ≤ 0.3%:
    - See previous slide
  - Second sample, 0.3% < THC ≤ 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, 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:

<table>
<thead>
<tr>
<th>Office Location</th>
<th>Address</th>
<th>City, Zip Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE OFFICE</td>
<td>9325 Hazard Way, Suite 100</td>
<td>San Diego, 92123</td>
</tr>
<tr>
<td>SAN MARCOS OFFICE</td>
<td>151 E. Carmel Street</td>
<td>San Marcos, 92078</td>
</tr>
</tbody>
</table>

### CONTACT

**AWM – Industrial Hemp Cultivation Program**
- Phone: (858) 614-7786
- Email: AgStandards.AWM@sdcounty.ca.gov
- Webpage: [https://www.sandiegocounty.gov/awm/industrialhemp.html](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/](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@sdccounty.ca.gov
Webpage: https://www.sandiegocounty.gov/content/sdc/awm/ag_water.html