



**STATE OF CONNECTICUT**  
**DEPARTMENT OF AGRICULTURE**  
**Office of the Commissioner**



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**Connecticut Department of Agriculture**  
**Hemp Sampling Procedures**  
(rev. 6/18//21)

**Definitions**

“Certificate of analysis” means a certificate from a laboratory describing the results of the laboratory’s testing of a sample.

“Commissioner” means the Commissioner of Agriculture, or the commissioner’s designated agent;

“Department” or “DOAG” means the Connecticut Department of Agriculture.

“Hemp” has the same meaning as provided in the federal act.

“Hemp Products” means all manufacturer hemp products and producer hemp products;

“Laboratory” means a laboratory that meets the requirements of 7 CFR 990.3 and that is accredited as a testing laboratory to International Organization for Standardization (ISO) 17025 by a third-party accrediting body such as the American Association for Laboratory Accreditation or the Assured Calibration and Laboratory Accreditation Select Services;

“Licensee” means an individual or entity that possesses a license to produce or manufacture hemp or hemp products in this state;

“Lot” means a contiguous area in a field, greenhouse or indoor growing structure containing the same variety or strain of hemp throughout the area;

“Post-harvest sample” means a representative sample of the form or hemp taken from the harvested hemp from a particular lot’s harvest collected in accordance with the procedures established by the commissioner;

“Pre-harvest sample” means a composite, representative portion from plants in a hemp lot, that is collected in accordance with the procedures established by the commissioner;

“Producer” means an individual or entity licensed by the commissioner to produce and market producer hemp products pursuant to the federal act, the state plan, the provisions of this section and the regulations adopted pursuant to this section;

“THC” means delta-9-tetrahydrocannabinol;

## **Sampling Timeline and Producer Responsibilities**

1. A completed Harvest Request Form in eLicense from the licensee shall be provided to DOAG within 30 days prior to the expected harvest date and include the date and time of sample collection.
2. The licensee will follow the sampling procedures below and submit a representative sample of the lot to be harvested within thirty (30) days prior to intended harvest date.
3. DOAG reserves the right to inspect, sample and test all hemp crop produced by any licensee at any time. Inspectors shall be provided with complete and unrestricted access to all hemp, whether growing or harvested, and all land, buildings, and other structures used for the cultivation and storage of all hemp.
4. The licensee shall not harvest hemp until DOAG authorizes the harvest in writing to the producer after DOAG receives the pre-harvest sample results from the laboratory.
5. Upon receipt of DOAG's authorization to harvest, the licensee shall harvest the crop not more than thirty (30) days following the date of sample collection by the producer, unless an extension of the thirty (30) day period is authorized in writing by DOAG. See the "Failure to Harvest with 30 days" section of this document.

BE ADVISED: The THC concentration of your crop may spike during the 30 day harvest window.

## **Equipment**

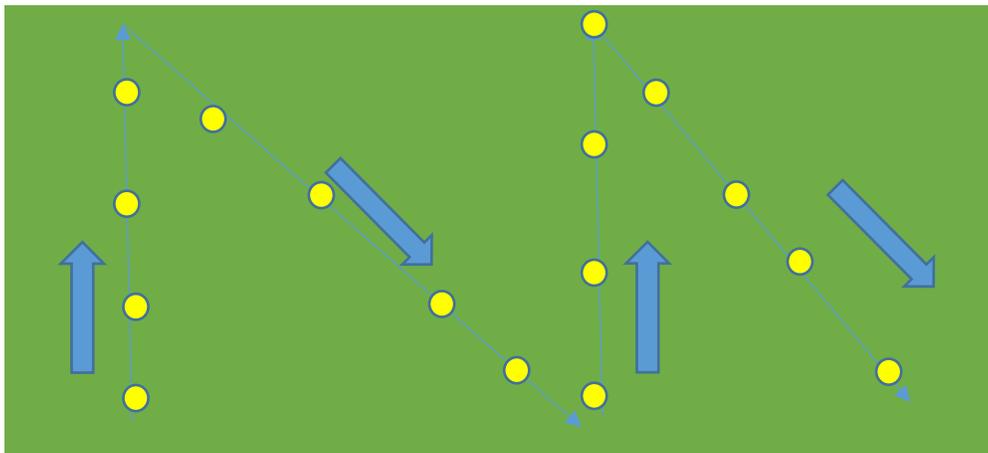
- Forms
- Pruning Shears
- Alcohol wipes to clean shears before each sample or bleach solution
- Paper sample bags
- Stapler
- Sharpie marker to write sample ID on bag
- Bucket to transport bagged samples
- Tamper Proof Seal

## **Before Pre- Harvest Sampling**

A licensed producer shall complete the Harvest Request Form in eLicense within (30) days prior to intended harvest date and include the date and time information of the scheduled sampling. DOAG inspectors may be present at the growing site during the producer's scheduled sample collection.

## Pre-Harvest Sampling Procedure

1. The sampler must be trained.
2. Material selected for Pre-Harvest Sampling must be a representative sample of the lot.
3. Sampling equipment (pruning shears, etc.) must be cleaned before and after sampling each lot with either alcohol wipes or a bleach solution (using the diluting instructions on the bleach package) to prevent cross contamination between lots.
4. The sampler must sample according to the pattern (Figure 1) to the extent possible but may deviate from the pattern as necessary to account for particular field conditions and to ensure that all parts of the field are adequately and proportionately sampled to produce a representative sample. When sampling from a known number of plants the Hypergeometric Table (Figure 2) shall be used.



**Figure 1.** This is a typical sawtooth survey pattern starting in the lower “left” corner of the field. The yellow dots indicate the approximate locations to collect samples (number of samples depends on the number of plants – see chart below)

Total number of plants:	Select this number of plants to sample:
1-13	5 or all if less than 5
14-15	13
16-17	14
18-19	15
20-22	16
23-25	17
26-28	18
29-32	19
33-38	20
39-44	21
45-53	22
54-65	23
66-82	24
83-108	25
109-157	26
158-271	27
272-885	28
886-200,000	29

**Figure 2.** Hypergeometric Table for Random Sampling. Sampler shall employ sawtooth sample patterns. **Note: A total composite sample must be at least four (4) ounces (0.25lbs).**

5. All samples must be collected from the flowering tops of the plant by cutting the top five to eight (5-8) inches from the “main stem” (that includes the leaves and flowers), or “terminal bud” (that occurs at the end of a stem), or “central cola” (cut stem that could develop into a bud) of the flowering top of the plant. Samplers should avoid sampling dead, diseased, or mechanically injured plants.
6. Place each clipping in a paper sample bag. Since the samples are a measure of the entire harvest lot, all sample clippings from the harvest lot must be collected in a single bag.
7. Seal the bag by folding over the top at least once and stapling the bag shut to ensure a tamper evident seal.
8. The sample shall be labeled, at a minimum:
  - the date and time the sample was collected
  - licensee name
  - license number
  - lot ID and location where the sample originated
  - sample identification number or laboratory accession number.

Example: #1 Hemp Farm 1 Main St Anytown, USA License# .....  
Sample Date June 1, 2019 10am, Sample# 01, Lot# 00000
9. Samples shall be kept in a secure, dry place until and during transportation to the lab. The sample must be delivered to the laboratory within 24 hours of taking the sample.
10. A chain of custody form shall be completed.

### **Transporting Sample to Laboratory**

1. During transportation of the sample, the sample must be sealed with a tamper evident seal, labeled with all the required information, a copy of the producer’s license and a completed chain of custody form must be with the sample at all times.
2. The laboratory chosen by the licensed producer shall comply with the CGS 22-611.
3. Licensee shall submit the pre-harvest sample to the laboratory within twenty-four (24) hours of sample collection.

### **Sample Results**

The testing laboratory must be directed by the producer to report the results electronically to the licensee and to DOAG by email to [AGR.Hemp@ct.gov](mailto:AGR.Hemp@ct.gov) within 24 hours upon the completion of the analysis.

Pass:

1. The licensee shall not harvest the crop until DOAG receives and approves the pre-harvest sample test results and notifies the licensed producer in writing to proceed with the harvest.
2. The licensee shall harvest the crop not more than 30 days following the date of sample collection unless specifically authorized in writing by DOAG.
3. If the hemp crop is not harvested within thirty (30) days of the date of the pre-harvest sample see the “Failure to Harvest within 30 days” section of this document below.

Fail:

1. A sample fails THC testing if the test report indicates that the sample contains an average THC concentration greater than 0.3 percent on a dry weight basis, accounting for the measurement uncertainty. Specifically, if 0.3% or less is within the distribution or range based on the measurement uncertainty, then the sample will be considered to be hemp.
2. The licensee may voluntarily destroy the lot represented by the sample, at the licensee’s expense. Contact DOAG before destruction. A Destruction Report must be submitted.
3. The licensee may request permission from DOAG to harvest and for DOAG to conduct a post-harvest sample, provided the producer maintains control of the harvested crop represented by the sample and pays the fifty (\$50.00) dollar resampling inspection fee.
4. If the licensed producer fails to request a retest or to pay the resampling fee within thirty (30) days of post-harvest results by DOAG, then the pre-harvest sample test results shall stand, and DOAG order the licensed producer to destroy all hemp from the lot.
5. If the licensee fails to destroy all hemp from the lot within the specified time, the licensee shall be subject to sanctions pursuant to the CGS 22-611.

**Records**

It is the licensee’s obligation to keep records for a minimum of 3 years after harvest/ destruction of a crop which demonstrate that each harvested lot was sampled and tested.

**Failure to Harvest within the 30 days**

If the licensee fails to complete the harvest within thirty (30) days of the date of the pre-harvest sample, the producer shall immediately report such fact to DOAG by email to [AGR.Hemp@ct.gov](mailto:AGR.Hemp@ct.gov) . Include the reason for failure to timely harvest such hemp and their intentions from that crop.

The licensee may choose to either voluntarily destroy the crop or request a retest of the crop by DOAG. See below for further details.

1. The licensee may voluntarily destroy such lot which was not timely harvested, at the licensee's expense. The licensee shall submit the Destruction Report prior to destroying the lot. DOAG will review the destruction report and if acceptable, DOAG will give the producer authorization to destroy the crop.
2. The licensee may request permission from DOAG to harvest.
  - I. Another pre-harvest sample will be taken by the producer, and if the THC is below 0.3% then the producer may request permission to harvest; or
  - II. The producer may request DOAG conduct a post-harvest sample inspection and test, provided the producer maintains control of the harvested crop and pays a fifty (\$50) dollar resampling inspection fee plus the cost of the test. The sample results from the sample taken by DOAG will be final.
3. If a producer fails to request permission to harvest then DOAG shall order the producer to destroy all hemp from the unharvested lot. The producer shall submit the Destruction Report and authorization from DOAG prior to destroying the lot.
4. In the event the licensee fails to destroy all hemp from the lot within the specified time, such license shall be suspended and the producer shall not offer any hemp or hemp product for sale.

### **Harvested Hemp**

Harvested hemp may be commingled with other hemp harvests from other lots, provided the lot ID for each location is maintained in the licensed producer's records.