Sampling and Testing of Hemp in Vermont
Frequently Asked Questions

1. What hemp testing does the Vermont Hemp Program Require?

The Vermont Hemp Program requires sampling and testing of all hemp crop harvest lots for compliance. All growers must have their samples meet Hemp Potency and Contaminant Action Parameters and Limits. Growers must test, report, and record hemp samples to meet the Vermont Hemp Program’s Hemp Potency and Contaminant Testing limits.

2. When and where will there be a list of certified laboratories?

The Hemp Program will certify laboratories annually. As of late August 2020, the List of laboratories that have expressed interest in becoming certified when the program is established can be downloaded from the bottom of this Hemp Potency and Contaminant Testing page.

3. Are there enough testing labs for the number of growers?

The Vermont Hemp Program is accepting applications from laboratories interested in becoming certified. As the Program reviews applications to certify laboratories, growers are welcome to use a laboratory they choose, as long as the laboratory can test and report out on the following criteria:

- Delta 9 THC
- Total THC
- THCA
- Total CBD
- Pesticide residues if a crop is certified organic there is no need to test for pesticides.

There are multiple laboratories that have expressed interest in becoming certified. These laboratories are aware of the anticipated sample volume. Once laboratories are certified, the program will make that list available, and growers must use a certified laboratory for all testing for purposes of compliance with the Hemp Program.

4. Is stapling allowed as a method to seal the hemp sample bag?

The Vermont Hemp Program requires that all harvest lot samples be placed in a bag or container and sealed using a tamper evident method at the time of sampling. Stapling a bag is an acceptable tamper evident method.
5. If after a compliance test, we decide to wait more than 28 days to harvest, can we do a subsequent compliance test and wait 28 days after that new test, essentially substituting the earlier report for the later one for compliance purposes?

Yes, a grower registrant may choose to take a second pre-harvest sample after the 28-day harvest window passes. Those new results will be their harvest lot potency compliance analysis. The Hemp Program requires that harvest lots be harvested no more than 28 days after a sampling agent takes pre-harvest samples following the Vermont Hemp Program’s Pre-harvest Sampling Protocol. This means that a pre-harvest test result is no longer valid 29 days after taking the pre-harvest sample.

6. Does your starting point need to be marked on the aerial photo of each harvest, as well as the path taken?

Sampling agents must illustrate the path taken on an aerial image of each harvest lot during pre-harvest sampling. Any deviations in the field due to field conditions must also be illustrated on the aerial image. Illustrating the sampling starting point is not a specific requirement. Field deviations during pre-harvest sampling must also be described in the written description section on the Hemp Pre-Harvest Sampling Form.

7. For sampling, does “cuts” or “cutting” mean a leaf or something else?

The Hemp Pre-Harvest Sampling Protocol requires growers to take a certain number of “cuttings” or “cuts” per sample, depending on the size of a harvest lot. For example, if a harvest lot is one acre or larger, growers are required to take 29 “cuts”, using the prescribed X pattern, to ensure that the sample is representative of the entire harvest lot.

The Pre-Harvest Sampling Protocol also requires that each “cutting” needs to be from the top two inches of floral material, from side arm flowers. Included in each “cut” will be floral material, leaf, and stem. There is no requirement to remove leaves and stems from each cutting.

**Difference between a “sample” and a “cut”:**

- A harvest lot sample is the total collection of “cuttings” a grower is required to take, per harvest lot. This sample is what needs to be submitted to a certified laboratory for testing. Cuttings will be homogenized at the laboratory, to make one uniform sample destined for analysis.

- A “cut” is one two-inch piece of floral material from side arm flowers including flower, leaves, and stems, that gets added to the total harvest lot sample. Cuts are not tested individually.
8. Is the Agency going to take samples of every field in 2020?

No, the Vermont Hemp Program is not taking samples of harvest lots in 2020. Program registrants can act as their own sampling agent and take pre-harvest samples of harvest lots in 2020. All sampling agents must follow the pre-harvest sampling protocol and document their sampling process and maintain records of their pre-harvest sampling process for at least three years. Vermont Hemp Program staff could conduct an inspection at any time, including taking a composite sample of harvested material, inspecting documentation such as sampling records and certificates of analysis.

9. Are customers or labs required to dry samples before testing?

No. Hemp growers are required to submit fresh samples to laboratories, keeping the chain of custody unbroken. The Hemp Pre-Harvest Sampling Form acts as a chain of custody, which tracks each sample from field to laboratory. Laboratories will dry samples in accordance with their validated method for drying.

10. At least some of the pesticides, that are being tested, are not allowable in hemp, are you assuming that those materials may be drifting into hemp from other crops?

The Hemp Program’s goal is to ensure consumer protection and confidence in Vermont hemp products. We are accounting for the possibility of pesticide drift from other crops being sprayed nearby, and for the potential misuse of unapproved pesticides on hemp crops. Refer to the VT Hemp Program’s Pesticide Use in Vermont.

11. What sampling forms do Testing labs keep? And what forms do growers keep?

Growers are required to submit a copy of their completed Hemp Pre-Harvest Sampling Form for each harvest lot, along with their harvest lot samples to a laboratory. The Preharvest sample form informs the laboratory that the test is for Hemp Program compliance purposes. Growers must keep a copy of the completed Hemp Pre-Harvest Sampling Form for each harvest lot for their own records. Certified laboratories have record keeping requirements, as well.

These answers were provided by Michael DiTomasso, Robert Shipman, and Stephanie Smith with Vermont Hemp Program as part of the UVM Extension hemp webinar series 2020. To watch the presentations and questions answered live, listen to the YouTube videos, Hemp Testing webinar recording from September 10, 2020 and the Hemp Sampling webinar recording from August 13, 2020.

Any further questions? Please contact program at: AGR.HempLabCertification@vermont.gov

Note: This information contained in these answers may be subject to change. This update is accurate as of December 9, 2020. Please see the Hemp Program, Vermont Agency of Agriculture, Food, and Markets for further information. This fact sheet is provided for educational purposes only and is not intended as legal advice.

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