



Standard Operating Procedure

For

Performance Based Sampling



1. DEFINITIONS

- 1.1. **Certified Seed** means the progeny of Breeder, Foundation, or Registered seed handled to maintain satisfactory genetic purity and varietal identity, Certified to AOSCA (Association of Official Seed Certifying Agencies) standards, and having an official AOSCA seed label.
- 1.2. **Confidence level of 95%** means the minimum required likelihood that no more than 1% of the plants in each lot would contain above the acceptable hemp THC level of 0.3% on a dry weight basis.
- 1.3. **Department** means the Rhode Island Department of Business Regulation.
- 1.4. **Harvest** means the act of gathering an industrial hemp lot, collecting viable seed, or moving a lot from a licensed location. “Harvest” does not include gathering a lot for disposal or remediation; collecting official regulatory samples, collecting samples for compliance monitoring, and moving a lot to a licensed location owned, operated, or leased by the same grower for purposes of planting. Examples of harvesting include gathering, retting, hulling, crushing, sorting, sifting, threshing, and baling.
- 1.5. **Hemp Microgreens** mean immature hemp seedlings grown for human consumption that are harvested above the soil or substrate line, prior to flowering, and not more than 14 days after germination.
- 1.6. **Hemp Greens** mean hemp leaves from immature plants, grown for human consumption, and no more than ten (10) inches tall and are not flowering.
- 1.7. **Hemp Sprouts** mean germinated hemp seeds for human consumption that are harvested in their entirety (seed, root, and stem), have undeveloped or underdeveloped cotyledons, and true leaves have not begun to emerge. Sprouts harvested above the soil or substrate line are considered microgreens.
- 1.8. **Hemp Transplants** mean hemp seedlings, rooted cuttings, immature plants produced from tissue culture, or other means of reproduction, which are not harvested but transplanted into a large container or field to mature for harvest. The movement of transplants from their original location to the crop production location is not considered a harvest.
- 1.9. **Institution of Higher Education** shall have the same meaning as defined in 20 U.S.C. § 1001 and consistent with R.I. Gen. Laws § 2-26-9.
- 1.10. **Performance-based sampling** means methods for sampling and testing hemp which allows for less than 100% of all hemp lots planted in the state to be sampled and tested by the Department.
- 1.11. **Standard sampling** means, as described in 230-RICR-80-10-1.9(C)(10) the typical testing requirement for hemp licensees where every lot and every grower is sampled and tested by the Department.



2. PURPOSE

- 2.1. The purpose of performance-based sampling is to allow the Department to reduce the need for standard sampling under specific conditions. This not only reduces the burden on the Department of sampling typically compliant hemp but also lessens sampling and testing costs for registered hemp growers. The goal is to ensure at a confidence level of 95% that no more than 1% of the plants in each lot will exceed the acceptable hemp THC level and ensure that a sample is collected that represents a homogeneous composition of the lot.

3. SCOPE

- 3.1. Only the following categories of hemp crops are eligible to participate in the State of Rhode Island's Performance-Based Hemp Sampling Program:
 - 3.1.1. Clones and Transplants
 - 3.1.2. Mother Plants
 - 3.1.3. Sprouts, Greens, and Microgreens
 - 3.1.4. Certified Seed for Fiber and Grain Varieties
 - 3.1.5. Research by Institutions of Higher Education
- 3.2. Samples shall be collected only by a trained sampling agent. Sampling agents must be trained under applicable USDA or State of Rhode Island training procedures. Rhode Island will maintain information, available to producers, about trained sampling agents. Hemp producers may not act as sampling agents.
- 3.3. Sampling procedures must conform to the requirements of USDA's *Sampling Guidelines for Hemp*, published January 15, 2021, and 216-RICR-60-05-6 Licensing Analytical Laboratories for Sampling and Testing Cannabis.
- 3.4. It is the responsibility of the licensed producer to pay any fees associated with sampling.
- 3.5. It is the responsibility of the sampling agent to pay any fees associated with sampling agent training or testing.

4. BACKGROUND

- 4.1. The Department's preharvest sampling procedure requires standard sampling of every lot of hemp prior to harvest in accordance with USDA's Final Rule, 7 CFR Part 990.3, R.I. Gen. Laws § 2-26, the Hemp Growth Act, and 230-RICR-80-10-1. These allow for the Department to develop performance-based sampling approaches that ensure A) a confidence level of 95% that no more than 1% of the plants in each lot exceed the acceptable hemp THC concentration and B) a representative sample is collected that represents a homogenous composition of the lot. The performance-based methods herein meet the following criteria as described in Part 990.3(a)(2)(iii)(A) and (B):

(A) The alternative method must be part of the State or Tribe's hemp plan and is subject to USDA approval.



(B) The alternative method must have the potential to ensure, at a confidence level of 95 percent, that the Cannabis plant species Cannabis sativa L. that will be subject to the alternative method will not test above the acceptable hemp total THC level. The alternative method may consider one or more of the following factors:

- (1) Seed certification process or process that identifies varieties that have consistently demonstrated to result in compliant hemp plants in that State or territory of the Indian Tribe;*
- (2) Whether the producer is conducting research on hemp;*
- (3) Whether a producer has consistently produced compliant hemp plants over an extended period of time; and*
- (4) Factors similar to those in this paragraph (a)(2)(iii)(B)*

5. SUMMARY

5.1. This plan provides conditions under which a hemp grower may participate in the Rhode Island Performance-Based Hemp Sampling program whereby qualifying lots of hemp may be tested at less frequent intervals than are required under the standard sampling requirements. All sampling conducted as part of this plan must be done in accordance with the USDA's *Sampling Guidelines for Hemp*, published January 15, 2021, as well as 216-RICR-60-05-6 Licensing Analytical Laboratories for Sampling and Testing Cannabis.

6. STANDARD SAMPLING

- 6.1. Performance-based sampling does not preclude the Department from conducting sampling inspections at any hemp grower lot or lots. The Department maintains authorities as described in R.I. Gen. Laws § 2-26, as amended, to inspect facilities, collect records and samples, and test samples to ensure compliance with the acceptable total THC level.
- 6.2. Any lot of hemp that is produced from seeds saved from a previous year's crop (not specifically bred for reproduction) shall be sampled and tested.
- 6.3. Any lot shall only be eligible for performance-based sampling consideration if the registered grower maintains records documenting the variety's compliance with the acceptable total THC concentration.

7. RESEARCH AND DEVELOPMENT AT INSTITUTIONS OF HIGHER EDUCATION

- 7.1. The Institution of Higher Education must be certified in accordance with 230-RICR-80-10-1.14 with the Department.
- 7.2. The Department will not collect fees for certifications issued to an Institution of Higher Education so long as the project is for research only and the hemp does not enter commerce.
- 7.3. Institutions of Higher Education performing industrial hemp research shall be required to obtain a Hemp Grower or Handler license and shall allow for the collection of official



hemp samples and total THC testing by the Department for any hemp that will be entering the stream of commerce. If harvesting activities are not performed, then preharvest sampling is not required. However, the hemp lot must be disposed of within 15 days of the conclusion of its use as research plants.

- 7.4. If the hemp will be harvested and the Institution of Higher Education would like approval for an alternative sampling method where the Department does not collect preharvest samples, the following requirements apply:
 - 7.4.1. The Institution of Higher Education must apply to the Department by providing a research plan that, in addition to the required of 230-RICR-80-10-1.14(A) includes the scope of the research and proposed standard operating procedures for cultivation, harvesting, sampling, testing, and disposal. Timeframe for the research must be stated.
 - 7.4.2. The plan must include a statement acknowledging that the hemp cannot enter the stream of commerce.
 - 7.4.3. The plan must include a statement acknowledging that the Department may conduct inspections, investigations, and sampling to ensure compliance.
 - 7.4.4. The plan must include procedures to ensure the researcher disposes of all noncompliant hemp in accordance with R.I. Gen. Laws § 2-26 and 230-RICR-80-10-1.15(A)(5).
 - 7.4.5. The plan must confirm that compliant hemp must be disposed of within 15 days of the conclusion of its use as research plants and that a disposal record must be maintained.
 - 7.4.6. The plan must state the researcher will follow all requirements for recordkeeping and retention.
 - 7.4.7. The plan must state that the researcher will follow USDA Farm Service Agency reporting requirements for crop acreage reporting. Per the FSA, crops not entering the stream of commerce are not required to be broken down by lot (variety) on the acreage report (a campus could be considered one lot), and the planting date can be reported as the average planting date if lots were planted over multiple dates. Find more information [here](#).
 - 7.4.8. The plan must state that the researcher will allow THC test results to be reviewed by the Department upon request, consistent with statutory authority.

8. SPROUTS AND MICROGREEN SAMPLING

- 8.1. Due to low levels of cannabinoids in very immature plants such as sprouts and microgreens, sampling and testing of every harvest of every lot is not practical or necessary.
- 8.2. The Department collects information of grower registration applications as to whether a grower intends to grow hemp for microgreen production. The Department will sample and test at least one lot of each variety grown in a season per hemp grower. For example,



if a microgreens grower produces lots of Variety X ready for sale at intervals of every 14 days, the Department will sample at least one lot of Variety X each year.

- 8.3. Growers will ensure seeds used to cultivate hemp microgreens are certified through the AOSCA and maintain records evidencing this certification.
- 8.4. Microgreen growers will be subject to random inspections and sampling.
- 8.5. All cultivation of hemp sprouts and microgreens for human consumption must be in accordance with the Food Safety Modernization Act and 21 CFR Parts 11, 16, and 112.

9. HEMP GREENS SAMPLING

- 9.1. Leaves from hemp plants less than 10 inches tall typically have low levels of cannabinoids, making it unnecessary to sample and test every lot grown for hemp greens.
- 9.2. The Department collects information of grower registration applications as to whether a grower intends to grow hemp for microgreen production. The Department will sample and test at least one lot of each variety grown in a season per hemp grower. For example, if a greens grower produces lots of Variety Y ready for sale at intervals of every 25 days, the Department will sample at least one lot of Variety Y each year.
- 9.3. Growers will ensure seeds or plants used to cultivate hemp greens are certified through the AOSCA and maintain records evidencing this certification.
- 9.4. Hemp greens growers are subject to random inspections and sampling.

10. ALL CULTIVATION OF HEMP GREENS FOR HUMAN CONSUMPTION MUST BE IN ACCORDANCE WITH THE FOOD SAFETY MODERNIZATION ACT AND 21 CFR PARTS 11, 16, AND 112. IMMATURE CLONES AND TRANSPLANT SAMPLING

- 10.1. Sampling is not required for immature plants when they are not harvested but transplanted into a larger container or field to mature prior to harvesting. The movement of transplants from their original location to another location owned or leased by the same registered grower and identified on their Grower or Handler Application is not considered a harvest.
- 10.2. If possession of clones/transplants/immature plants is moved to another individual or business, the action is considered a harvest and preharvest sampling is required by the Department.
- 10.3. The Department will sample and test at least one lot of each variety grown in a season per hemp grower. For example, if a clone grower produces lots of Variety Z ready for sale at intervals of every 25 days, the Department will sample at least one lot of Variety Z each year. This is reduced because the mature plant will be subject to sampling and testing prior to harvest.
- 10.4. Hemp clone/transplant/immature plant growers are subject to random inspections and sampling.

10.5. Mother Plants at Clones/Transplant Grower Locations



- 10.5.1. Hemp Mother Plants typically have an acceptable THC level that can be demonstrated via a Certificate of Analysis from floral material sampled at plant maturity. Hemp Mother Plants are used for cloning purposes.
- 10.5.2. Hemp Mother Plans may be sampled by the Department at any time and may not be subject to future testing if results show total THC compliance.
- 10.5.3. Mother plants with compliant total THC lab results are not expected to yield noncompliant clones. However, should the grower discover clones are noncompliant through seasonal monitoring, the grower must contact the Department to provide a Notice of Disposal of the lot or request remediation sampling once a remediation option has been selected. At the Department's request, the grower must supply a list of clone purchaser names, addresses, and purchase dates within one year of the noncompliant test results and notify purchasers of those results. The Department will sample the mother plants at the grower's expense and proceed with the same disposal or remediation options should the mother plants test noncompliant. The grower will be placed on a yearly inspection schedule for the noncompliant mother plant variety for 2 subsequent growth cycles. The variety will be moved back to every other year if testing of the variety is compliant for 2 growth cycles.
- 10.5.4. The grower must maintain lab testing results that provide total THC results of the mother plant and documentation that positively links the clone lot to the mother plant.
- 10.5.5. Growers must maintain a copy of the record of sale; a record of the person from whom the grower purchased the viable industrial hemp; and the variety purchased.

11. CERTIFIED SEED – FIBER AND GRAIN HEMP VARIETIES SAMPLING

- 11.1. To qualify for performance-based sampling for certified seed, the hemp grower must be growing hemp varieties for fiber or grain production using certified seed. Hemp varieties grown for fiber or grain typically test below the acceptable THC maximum and are usually planted as annual crops. Hemp growers cultivating only fiber or grain varieties will be sampled every other year as opposed to yearly.
- 11.2. If testing shows a noncompliant THC level, the grower will be placed on a yearly inspection schedule for that variety for 2 subsequent growth cycles. The variety will be moved back to every other year if testing of the variety is compliant for 2 growth cycles.
- 11.3. The grower must provide the Department with the following:
 - 11.3.1. Copies of certified seed labels for each fiber/grain lot planted.
 - 11.3.2. Copies of all invoices of purchased seed to verify size of certified lots and that the lot has not been supplemented with non-certified seed.
- 11.4. A list of approved fiber and grain varieties for sampling every 2 years will be updated yearly and published by the Department.



12. CANNABINOID VARIETIES

- 12.1. At this time, the Department will continue to sample all hemp lots grown for cannabinoid production except in relation to the categories above (Institutes of Higher Education, immature plants, mother plants, certified seed for fiber/grain crops).