

## Hemp Sampling Protocol

### Sampling Supplies

GPS capable device	Marker and Pen
Camera	Clear Packing Tape
Paper (or lab-specified) sample bags	Disposable gloves
Scissors or pruners	Disinfectant (bleach, rubbing alcohol, etc.)
Required Forms	

1. Meet with permitted producer or their designated representative and show PDA issued credentials
  - 1.1. This inspection will have been scheduled between the permitted producer and sampling agent ahead of time
  - 1.2. It is recommended that fees and payment are discussed and arranged beforehand, and are at the discretion of the sampling agent and permitted producer
  - 1.3. Identify yourself as a certified hemp sampling agent trained by PDA and show your credentials
  - 1.4. Explain the sampling process and indicate that the permitted producer/designated representative is to be present throughout the entire sampling process
2. Verify Lots
  - 2.1. Confirm lot location, delineation and size – will be verified with permit records submitted to PDA
  - 2.2. Record GPS coordinates of each lot location – will be verified with permit records submitted to PDA
  - 2.3. Take a picture of growing situation of each lot – will be sent to the Hemp Program at PDA with Receipt for Sample and Chain of Custody/Sample Shipping Form
  - 2.4. Record any notes you may feel are important on growing conditions, issues, concerns, etc. for each lot – may be sent to PDA with forms and pictures
3. Collect Sample
  - 3.1. Collect a representative sample of each lot
    - 3.1.1. Sampling agent will collect a representative sample of no less than 5 cuttings from 5 individual plants in the lot. Sample size determined as noted below in 3.2 and 3.3
    - 3.1.2. The sample will be a composite of female flower material collected from random plants chosen from representative quadrants of each lot
    - 3.1.3. Field quadrants will be determined by dividing the lot into sections of similar size
    - 3.1.4. Effort should be made to collect a similar sized representative sample of material from each quadrant.
    - 3.1.5. Efforts should be made to collect phenotypically similar varieties and avoid off-type sampling
    - 3.1.6. Sampling agents should walk at right angles to the rows of plants if possible, beginning at one point of the lot and walking towards another point on the opposite side of the lot. If the lot is too dense for this to be possible, the sampling agent should take all reasonable

steps to ensure that a sample is collected that represents a homogeneous composition of the lot by avoiding edges and thoroughfares.

3.1.7. While walking through the growing area, the sampling agent should take cuttings based on the acreage of the growing area, at random but convenient distances. Avoid collecting sample specimens from the borders of the field/greenhouse.

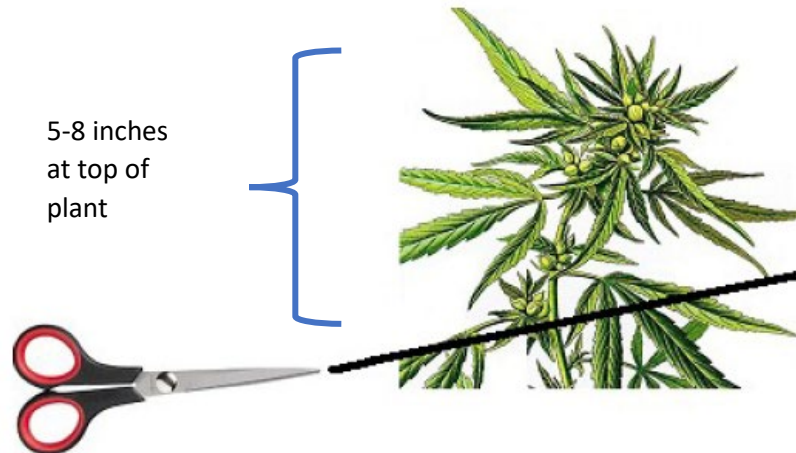
3.2. For lots up to 4.99 acres the sampling agent will collect 5 cuttings from 5 individual plants. For up to 10 acre lots, sample according to the following chart:

Number of Acres	less than 1	1	2	3	4	5	6	7	8	9	10
Sample Size	5	5	5	5	5	5	6	7	8	9	10

3.3. For lots growing on 11 to 173 acres, follow the USDA Sampling Table to determine number of plants to sample:

Number of acres	Sample Size	Number of acres	Sample Size	Number of acres	Sample Size	Number of acres	Sample Size
11	11	40	36	75-76	61	119-120	86
12	12	41-42	37	77	62	121-122	87
13	13	43	38	78-79	63	123-124	88
14	14	44	39	80-81	64	125-126	89
15	15	45-46	40	82	65	127-128	90
16	16	47	41	83-84	66	129-130	91
17	17	48	42	85-86	67	131-132	92
18-19	18	49-50	43	87	68	133-134	93
20	19	51	44	88-89	69	135-136	94
21	20	52	45	90-91	70	137-138	95
22	21	53-54	46	92	71	139-140	96
23	22	55	47	93-94	72	141-143	97
24	23	56	48	95-96	73	144-145	98
25-26	24	57-58	49	97-98	74	146-147	99
27	25	59	50	99	75	148-149	100
28	26	60-61	51	100-101	76	150-152	101
29	27	62	52	102-103	77	153-154	102
30	28	63-64	53	104-105	78	155-156	103
31-32	29	65	54	106-107	79	157-157	104
33	30	66-67	55	108	80	159-161	105
34	31	68	56	109-110	81	162-163	106
35	32	69-70	57	111-112	82	164-166	107
36	33	71	58	113-114	83	167-168	108
37-38	34	72-73	59	115-116	84	169-170	109
39	35	74	60	117-118	85	171-173	110

- 3.4. Samples will consist of cuttings from the top 5-8 inches of female plants.
- 3.4.1. The cut should be obtained from the flowering tops of plants when flowering tops are present, and shall be approximately five to eight inches in length. It should be taken from the “main stem” (that includes the leaves and flowers), “terminal bud” (that occurs at the end of a stem), or “central cola” (cut stem that develops into a bud) of the flowering top of the plant.



- 3.5. Samples will be placed directly into a new Kraft paper sample bag (or other type of bag if specified by the testing laboratory). All the cuttings from one lot are placed together into one sample bag
- 3.6. Sample bags will be closed and sealed by the following process:
- 3.6.1. Folding down the top of the bag with at least two folds
- 3.6.2. Write sampling agent’s initials (first middle last) and sampling date on the last fold and tape bag closed with clear packing tape (the tape should cover the written initials and date), securing the entire folded edge to the bag
- 3.6.3. Sampling agent will also label the sample bag with the sample number, using the following format: **PDA Permit# (8 digits) - Sampling Agent Unique Identifier (issued by PDA) - Sample Number**
- 3.6.3.1. Example sample number: **42-000024-PDARJM-01**
4. Sample Shipment and Supporting Documents
- 4.1. Collected hemp samples must be shipped or hand-delivered to a lab to test for total THC levels. Sampling agents must not hold samples and must make it a priority to send samples within 2 business days unless directed otherwise by the licensed grower.
- 4.2. Lab utilized is at the discretion of the permitted producer, but must be approved by PDA and must test using post-decarboxylation testing or total THC testing
- 4.3. Shipping method utilized is at the discretion of the permitted producer and sampling agent
- 4.3.1. PDA highly recommends the following:
- 4.3.1.1. Shipment of sample ASAP. Sampling agents should not hold samples longer than 2 business days.
- 4.3.1.2. Trackable shipping methods and those that take 1-2 days for delivery
- 4.3.1.3. Package sample before arriving at shipment facility. To avoid condensation within sample bag, do not use cold packs or place sample bag inside of another plastic bag.

4.3.1.4. To save time, arrange to have the shipping label printed prior to arrival at shipment facility.

4.4. Forms and Supporting Documents.

4.4.1. *Receipt for Sample*: sampling agent gives one copy of completed *Receipt for Sample* to permitted producer/designated representative; and sends one copy to PDA within 5 business days.

4.4.2. *Chain of Custody/Sample Shipment Form*: sampling agent encloses one copy of completed *Chain of Custody/Sample Shipment Form* in shipping container with samples (or hand-delivers a copy of form along with samples); and sends one copy to PDA within 5 business days

4.4.3. *Photographs*: send copies of photographs taken of each lot to PDA along with Receipt for Sample and Chain of Custody forms.

4.4.4. *Notes*: any notes you recorded that you feel are important (i.e. growing conditions, issues, concerns, etc. for each lot) may be sent to PDA

4.4.4.1. Mailing address: PDA – Hemp Program, 2301 N Cameron St, Harrisburg, PA 17110

4.4.4.2. Email: RA-AGPLHEMP@pa.gov

4.4.4.3. For questions regarding law enforcement or special circumstances not outlined in this document, please call the PDA Hemp Program at 223-666-2561