

# INDUSTRIAL HEMP

## Performance-Based Sampling Options for Hemp - *technical bulletin*

Michigan Department of Agriculture and Rural Development

Phone: 800-292-3939 Online: [www.Michigan.gov/HempGrowing](http://www.Michigan.gov/HempGrowing)

The Michigan Department of Agriculture and Rural Development (MDARD) Pesticide and Plant Pest Management Division's (PPPM) approved state plan for industrial hemp production calls for sampling and testing of every lot of hemp prior to harvest, in accordance with USDA's Final Rule on domestic hemp production, 7 CFR Part 990.3, and Public Act 220 of 2020, the Industrial Hemp Growers Act. Both the Final Rule and Act allow states to develop performance-based sampling (PBS) approaches that allow for less than 100% of planted hemp lots to be sampled while aiming to ensure that no more than one percent of the plants in a lot exceed the acceptable THC concentration. In essence, **reduced sampling and testing of hemp lots that are unlikely to have noncompliant THC levels will result in cost savings for hemp growers.**

USDA has approved an [updated hemp production plan](#) for Michigan that allows for PBS starting in 2022 based on types of crops, including:

- Sprouts, Microgreens, and Greens
- Clones and Transplants (immature plants)
- Mother Plants
- Certified Seed for Fiber and Grain Varieties
- College and University Hemp Research

At this time, the Department will continue to sample hemp lots grown for cannabinoid production unless the crop type applies to one of the above categories. In the future, MDARD may also look at incorporating grower history of compliance into the PBS criteria.

Most of the PBS options below require your hemp variety(ies) to be sampled and tested by MDARD in the first year, and then if found to be compliant, subsequent plantings of those same varieties that year (in the case of clones, microgreens, etc.) or the following year (for crops planted once per year) will not need to be tested.

Examples:

- I planted a hemp fiber variety "Bialobrzeskie" from certified seed in 2022 in 3 lots. MDARD sampled one lot (at a minimum), and testing found the lot was compliant. I can plant that same certified seed variety in 2023 and do not need testing of that variety by MDARD until 2024.
- I grow clones of the hemp floral variety "Matterhorn" and have batches ready every 24 days. I maintain my Certificate of Analysis for the mother plants. MDARD sampled my first batch in 2022

prior to sale and it was compliant, so I do not need additional batches of that same variety sampled and tested by MDARD in 2022. I will grow the same variety in 2023, so MDARD will need to sample my first lot (at a minimum) of this variety again in 2023.

- I am a college hemp researcher. I harvest research plots and conduct research on many hemp varieties. I submitted and received approval for an alternative sampling and testing plan, so I am responsible for sampling and testing for THC compliance of plants that will not be entering commerce.

## **Incorporating PBS Into Your Hemp Cultivation Program**

### **PBS for Sprouts, Microgreens, Greens, Clones, and Transplants**

MDARD: Samples and tests at a minimum, 1 lot of each variety per grower per year prior to harvest. Note “harvest” does include sale of flats, cutting of microgreens, and sale/movement of clones and transplants off the grower’s premises.

Grower: Ensures propagative material is obtained from *Cannabis* varieties that meet THC requirement for hemp. Maintains all paperwork and labeling from purchases and sales. Submits preharvest sampling request(s) online for first crop of each variety being grown each year and notifies inspector during first visit which varieties PBS is being requested for that year.

*For reference, MDARD distinguishes the above hemp plants as follows. **Sprouts** are 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 usually take less than one week to grow. Sprouts could also be harvested above the soil or substrate line, but in that case would be considered microgreens. **Microgreens** are 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. Microgreens typically are harvested at the first true leaf stage and sold with the stem, cotyledons (seed leaves), and first true leaves attached. Hemp microgreens are typically between two (2) and three (3) inches in height, but not taller than five (5) inches. **Hemp Greens** are leaves from immature plants, grown for human consumption, and no more than ten (10) inches tall and are not flowering. **Clones and Transplants** are immature hemp plants that are not flowering and will be offered for sale or planted at a location that is not the grower’s approved growing location.*

### **PBS for Mother Plants at Clone/Transplant Grower Locations**

MDARD: Reviews Certificate of Analysis (COA) of mother plants; may sample mother plants at any time and when cuttings produce noncompliant lot.

Grower: Maintains COA that clearly links document to mother plant or plants. Should the grower discover clones are noncompliant through seasonal monitoring, the grower must notify MDARD with a Notice of Intent to Dispose of the mother plants. The grower must supply a list of purchaser names, addresses, and purchase dates within 1 year of noncompliant test results and notify purchasers of those results.

### **PBS for Certified Seed – Fiber and Grain Varieties**

MDARD: Samples plants from fiber or grain varieties of certified hemp seed every other year.

Grower: Submits preharvest sampling request(s) online for each variety being grown the first year participating in PBS and notifies inspector during sampling visit of the varieties for which the grower would like PBS to be considered. Provides copies of seed labels for each fiber/grain lot planted, along with copies of invoices of purchased seed so that lot sizes can be verified.

## **PBS for College and University Hemp Research**

College and university researchers growing and harvesting hemp that will NOT be entering commerce can develop and submit an alternative sampling and testing plan for lots. MDARD will review the plan for conformance with the state's hemp production plan and performance-based sampling requirements for researchers. Details on plan requirements can be found in "College and University Hemp Researchers – Registration, Standard Sampling, and Performance-Based Sampling" posted at [www.Michigan.gov/HempLaws](http://www.Michigan.gov/HempLaws) under Compliance Assistance Materials.

College and university researchers growing hemp that will be entering commerce cannot utilize an alternative sampling and testing plan, but they can still take advantage of other PBS options listed in this document.

### **How to Request PBS**

If you are a private or commercial hemp grower interested in any of the PBS options above, [click HERE \(https://forms.office.com/g/1m0KPykAtG\)](https://forms.office.com/g/1m0KPykAtG) to complete a brief online "Request for Performance-Based Sampling of Hemp" form **and** notify your inspector during your first preharvest sampling visit this season.

For college and university researchers wishing to submit an alternative sampling and testing plan to MDARD for consideration, email the plan at least 3 weeks prior to your first anticipated harvest date of the season to [MDARD-IndustrialHemp@Michigan.gov](mailto:MDARD-IndustrialHemp@Michigan.gov). Researchers will be notified of plan approval via email within 10 business days.

### **More Information**

MDARD may collect preharvest hemp samples for any reason, at the grower's expense, even if the grower is participating in PBS. Likewise, MDARD may choose to sample more than 1 lot of the same variety for any reason.

Commercial growers participating in PBS that are found to have lots exceeding the approved THC limit will be moved to standard preharvest sampling, where every lot must be sampled and tested by MDARD for 2 growing seasons.

ALWAYS maintain purchase records, sales records, seed labels, and other documentation about your hemp varieties. If you cannot demonstrate that your lot is of the same variety and certified seed (if applicable) as a previously tested compliant lot, you will be required to have MDARD sample and test your lot prior to harvest, at your expense.

If you have any questions, please email [MDARD-IndustrialHemp@Michigan.gov](mailto:MDARD-IndustrialHemp@Michigan.gov), or phone 800-292-3939.