

West Virginia Department of Agriculture Proposed Industrial Hemp Plan

West Virginia Industrial Hemp Development Act
West Virginia Code §§19-12E-1 *et seq.*

West Virginia Legislative Rule for Industrial Hemp
West Virginia Code of State Rules 61-29

Date of Resubmission: October 8, 2021

Proposed Effective Date: January 1, 2022

Overview of program

In 2002, the West Virginia Legislature passed the Industrial Hemp Development Act, which created the framework for legalized industrial hemp in West Virginia and paved the way for the growth and cultivation of industrial hemp in the State. Following passage of the 2014 Farm Bill, which authorized states to establish pilot programs for industrial hemp research, the West Virginia Department of Agriculture (WVDA) acted swiftly to implement the pilot program, based on the authority already granted in state law.

Since the inception of this pilot program, interest and investment in industrial hemp in West Virginia has grown exponentially. From 2017 to 2020, the number of license-holders increased from 46 to 311. In 2020, although 2,760 acres were registered with the program, only 215 acres were harvested. For the 2021 growing season, WVDA received 232 applications to grow and/or process hemp.

WVDA's current regulations and practices under its pilot program are very similar to those required by the USDA Final Rule. This means that West Virginia is well positioned to make a smooth transition into operating under a USDA-approved hemp plan. This document is an outline of the West Virginia Department of Agriculture's Industrial Hemp Program and is WVDA's formal submission to the USDA for review and approval.

Application Process

WVDA will designate a time period for interested parties to apply for an industrial hemp license. Licenses will become effective, upon approval of the submitted application, for the calendar year for which the application is made and will expire on December 31 of that year. To participate in WVDA's industrial hemp program, the applicant must complete the most current WVDA hemp application, submit geospatial coordinates and other required information concerning land where hemp operations will be performed, provide state and federal background checks, and submit both an application and licensing fee.

Compliance Statement

By signing and submitting his or her industrial hemp application, each applicant understands and acknowledges that he or she is being licensed to grow hemp under the limited authority granted by the USDA Final Rule on Hemp, the West Virginia Industrial Hemp Development Act and the regulations promulgated pursuant thereto. The applicant acknowledges and agrees that the actions of all individuals employed by or contracting with the applicant to work as part of his or her hemp operation, and that the operations on all sites registered to the licensee, are the responsibility of the applicant and can be imputed to the applicant for purposes of regulation by WVDA. Furthermore, the applicant acknowledges and agrees to the following terms and conditions:

- Any information provided to WVDA, except criminal history records provided to WVDA, may be publicly disclosed and be provided to law enforcement agencies without further notice to the applicant;
- The applicant agrees to allow any inspection and sampling that WVDA considers necessary;
- The applicant agrees to pay for any sampling and analysis costs that WVDA considers necessary;
- The applicant agrees to submit all required reports by the applicable due dates specified by the Commissioner; and
- The applicant agrees to update information with WVDA as changes occur to the information submitted on applications.

Validation & Review of Applications

WVDA will review each application to ensure that all requested information has been provided. If the application is deemed incomplete, the applicant will be given an opportunity to provide the missing information before the application is rejected. Any applicant convicted of a felony for a controlled substance within the past 10 years will be ineligible for licensing. Any land owned by an individual with a felony conviction for a controlled substance within the past 10 years may be ineligible for inclusion on a license. Any other felonies of which an applicant has been convicted within the preceding 10 years will also be reviewed and may result in ineligibility.

License Process

All applicants who submit complete applications and otherwise satisfy all the requirements of the program will be issued a license. The license will be specific to, and will list, locations where the licensee is permitted to grow, cultivate, store, handle, or process raw industrial hemp. Licensees are responsible for both themselves and all individuals involved with planting, maintenance, harvesting, and processing of the industrial hemp grown under their license.

Information Maintenance & Reporting

WVDA maintains files for each licensee that contain contact information, application, license, geospatial location, legal descriptions of permitted lands, sampling invoices, sampling chain of custody, THC testing results, a record of all fees collected, key participants' names and titles, and the results of state and federal background checks for applicants (including key participants, where applicable). Key participants are defined as a sole proprietor, a partner in partnership, or a person with executive managerial control in a corporation. All records are kept on file for at least 5 years. While records are kept confidential in the ordinary course of operations, some or all of those records may be subject to the state's Freedom of Information Act, W. Va. Code §§29B-1-1- *et seq.*, and subject to disclosure upon request.

WVDA will provide USDA with contact information for each licensee covered under the plan, including the licensee's name, address, telephone number, and email address. If the licensee is a business entity, WVDA will provide USDA with the full name of the business, address of the principal business location, full name and title of the key participants, an email address, and the business entity's FEIN number. WVDA will also provide USDA with a legal description for all land licensed for the production, storage, growing, processing, or handling of raw industrial hemp, including a geospatial location for each site. WVDA will further provide USDA, upon request, updates on the status of each license, including any status changes. All information reported to USDA will be submitted in accordance with its reporting requirements. WVDA will also report hemp crop acreage planted, destroyed, and remediated to the USDA. All licensees will be required to contact their local Farm Service Agency office and provide their street address, state license authorization number, report hemp crop acreage planted, harvested, and disposed of on each specific "lot".

Site Monitoring

Site inspections will be performed at the same time as pre-harvest samples are collected for THC compliance testing. Authorized WVDA staff or designees will perform site inspections to ensure compliance with State and Federal rules for hemp production in West Virginia. For the 2018, 2019 and 2020 growing seasons, WVDA successfully sampled and tested all licensed locations within West Virginia and intend to continue to do so. Site inspections may also be performed for other purposes, including research, education, collection of information, and compliance verification.

Field Sampling & Training

Each licensee must contact WVDA at least 30 days prior to harvest of his or her licensed crop to schedule a time for sample collection. This timeframe allows adequate time to arrange for sample collection and delivery to the WVDA laboratory, or an equivalently accredited USDA approved laboratory for testing. Each lot will be sampled and tested to ensure that the post-decarboxylated tetrahydrocannabinol concentration level ("total THC") does not exceed 0.3%, plus or minus the measurement of uncertainty. A "lot" is defined as a contiguous area in a field, greenhouse or indoor structure containing the same variety of hemp. Harvesting cannot occur until WVDA has inspected and sampled that specific lot. Harvest must be completed no more than 30 days after WVDA has taken a sample. Samples of hemp plant material from one lot shall not be commingled with hemp plant material from other lots until compliant sample results have been received from the WVDA laboratory. If samples are commingled, however, the entire biomass will be required to be destroyed in the event of a violative test of one or more of the commingled varieties. Each licensee is responsible for the costs associated with sampling and testing. Once a lot has been tested by WVDA and found to be compliant, it can enter the market.

During sampling, WVDA will collect hemp flower material from each lot. The licensee or a designated employee shall accompany the WVDA inspector throughout the sampling process

and must allow WVDA inspectors unrestricted access to the grow locations. The WVDA inspector shall verify the GPS coordinates of the growing area and compare them with the ones submitted by the licensee to ensure that the location was properly registered. The WVDA inspector shall estimate the average height, appearance, density, plant condition, and degree of maturity of the inflorescences—or flowering buds. The WVDA inspector shall visually establish the homogeneity of the stand to confirm that the lot is of like variety. The WVDA will perform sampling pursuant to Standard Sampling Protocols which require all licensed lots to be sampled and tested each year. All samples will be collected from the flowering tops of the plant (or highest branches that can be reached) by cutting the top five to eight inches from the main stem, terminal bud, or central cola of the flowering top of the plant. The sample size must be of adequate volume to accommodate laboratory tests and to ensure that the sample is representative of the lot. The WVDA inspector will utilize a paper bag and a hand pruner for collecting sample cuttings, securely seal each bag, and record the sample number. The WVDA inspector will fill out a chain of custody form and sampling invoice for hemp samples taken at each location. WVDA conducts annual hemp sample training for WVDA inspectors and maintains records of each training and attendance.

Lab Testing

The WVDA is the reference laboratory in the US for various bioterrorism contaminants in foods, designated by the USDA Food Emergency Response Network. WVDA laboratory scientists are internationally recognized for their research and method development activities. All WVDA regulatory laboratories follow ISO Quality System Management Procedures, Technical Standard Operating Procedures, and Quality Procedures, and maintain a consultant pharmacist regarding all matters related to schedule 1 drugs used for controls. WVDA currently has twenty-four methods that are ISO17025:2017 accredited, including a method of measuring total THC. Perry Johnson Laboratory Accreditation (PJLA) performed the laboratory audit in July 2021. The WVDA laboratory is a DEA schedule 1 laboratory.

The WVDA laboratory follows sample preparation procedures to ensure that the entire sample received by the laboratory is adequately prepared and homogenized prior to analysis (*see* Attachment 1). Once the sample is received and adequately dried, it is passed through a sieve to remove large non-grindable materials before being ground into a fine powder (*see* Attachment 2). Analysis of the homogenized sample's total THC is performed using an Ultra-High-Performance Liquid Chromatography machine to chromatographically separate and quantitate both Δ^9 -THC and THC-A. The formula [%total THC = % Δ^9 -THC + (% Δ^9 -THCA \times 0.877)] accounts for the loss of carbon dioxide from the THC-A that results from decarboxylation (*see* Attachment 3). All samples are initially tested with several controls per batch to ensure that results are precise and accurate. If the calculated results are above 0.3%, taking into account the measurement of uncertainty, the samples are retested for confirmation.

WVDA follows a strict procedure on the calculation of measurement uncertainty for THC analysis in hemp. WVDA's method is based on ISO Guidance for Estimation of Measurement in Testing. Reference materials are used to calculate the standard deviation. The expanded measurement of uncertainty calculation is attached (*see* Attachment 4). The calculated measurement of uncertainty is indicated on each final report in a +/- format. The acceptable hemp

THC level is based on the application of the measurement of uncertainty to the reported total THC content concentration level on a dry-weight basis, producing a distribution of 0.3% or less. Test results for each lot will be reported to USDA according to USDA guidelines.

Violations and Enforcement

If a sample is determined to be above the acceptable limit of total THC (0.3% +/- MU), the licensee will be notified by certified mail, the contents of which will direct the embargo of the lot in violation, until such time as destruction or remediation of the crop can be completed. Possible methods of crop destruction are based on scale, available equipment, and effectively rendering the crop irrecoverable. All crop destruction is witnessed by WVDA employees and report forms for all non-compliant plants will be submitted to the USDA. Methods of remediation are limited to the USDA approved remediation options. One option will allow the licensee to remove all hemp flower from the plant, destroy the flower material with a WVDA inspector as witness, and submit the remaining plant material for sampling and testing by WVDA for total THC compliance at the licensee's expense. Alternatively, a licensee may shred and blend the flower and plant material into a homogenized biomass, which must then be resampled and tested by WVDA at the expense of the licensee. If the remediated sample results are at or below the acceptable limit of total THC (0.3% +/- MU) the embargo will be lifted, and the crop will be allowed to enter the stream of commerce.

WVDA will conclude that a licensee has negligently violated the state plan if it fails to provide a legal description of the land on which the licensee produces hemp or conducts hemp operations, fails to obtain a license or other required authorization from the West Virginia Department of Agriculture, or produces cannabis containing 1% total THC or above.

A licensee will be required to comply with requirements established by WVDA to correct any negligent violation, including: (1) a reasonable date by which the licensee shall correct the negligent violation; (2) any requirement stipulating that the licensee shall periodically report to WVDA the licensee's compliance with the state plan for at least two calendar years from the date of the negligent violation (depending on the Commissioner's discretion); and (3) any other requirement deemed appropriate to address the negligent violation. A licensee who negligently violates the rules of the WVDA industrial hemp plan three times within a five-year period will be ruled ineligible to produce hemp in West Virginia for a period of five years beginning on the date of the third violation. A licensee shall not be assessed more than one negligent violation per calendar year. WVDA shall conduct inspections to determine that the corrective action plan and any other stated requirements have been implemented by the licensee.

If WVDA determines that a licensee has intentionally violated the provisions of its industrial hemp plan, the violation and licensee will be reported to the USDA, United States Attorney General for the district in which the violation occurred, West Virginia Attorney General, the sheriff of the county in which the violation occurred, and the local detachment of the West Virginia State Police. The determination of when an intentional violation has occurred will be

made on a case-by-case basis, and WVDA shall evaluate the situation holistically, and may include consideration of other information, such as the surrounding circumstances and a licensee's state of mind or other related conduct., and other actions may be considered negligent or intentional based on additional factors, such as the licensee's state of mind. Material falsification of information by any program participant will result in a minimum of 1 year suspension from the WVDA hemp program.

Appeal Process

Once a licensee has been notified of a violation based on a non-compliant crop or other issue, he or she has the right to appeal the determination within ten (10) days of the date the notification is received. The licensee may request a hearing, at which time testimony, evidence, and arguments may be presented. The appeal process is guided by the West Virginia Administrative Procedures Act, W. Va. Code §§29A-5-1 *et seq.*, and the issues, once argued and briefed, are decided by the WVDA Commissioner.

Program Financing

WVDA operates as an interdisciplinary department, and many employees are cross-trained to assist with various programs; the industrial hemp program is no exception. Aside from WVDA's full-time Hemp Program Coordinator, the following employees and divisions contribute to the operation and management of the WVDA Industrial Hemp Program:

- Executive Division, including the Commissioner, Deputy Commissioner, Chief of Staff, and General Counsel;
- Plant Industries Division, including plant regulatory officers;
- Regulatory and Environmental Affairs Division, including chemists, research chemists, hemp chemists, compliance officers, laboratory technical leaders, laboratory quality managers, and others;
- Business Development Division;
- Communications Division;
- Information Technology Division; and
- Administrative Services Division.

Due to the interdisciplinary structure of the Department, WVDA is confident that it has adequate personnel to properly implement this Plan. Further, the West Virginia Legislature has provided additional appropriations, both one-time and ongoing, to fund the program, thus indicating a commitment to support the industry.

Conclusion

In accordance with federal and state laws, WVDA does not discriminate in its programs and services on the basis of race, color, religion, sex, age, national origin or ancestry, disability (including blindness), medical condition, marital status, veteran status, or political affiliation.

WVDA retains the right to update this plan in accordance with West Virginia statutes, legislative rules, and USDA guidelines.

Hemp Sample Guidelines 2022

Samples are taken to obtain specimens for the measurement of total tetrahydrocannabinol (THC) content, which determine whether the specimens are hemp or marijuana. The measurements are intended to be representative of the total THC content in a “lot” of hemp crop acreage as identified by the producer. Hemp producers may not harvest hemp prior to the hemp being sampled for THC concentration. All licensed lots are sampled each year.

1. Date, time and location of each sampled lot will be determined by Mike Arnold
 - a. Grower notification of estimated harvest date
 - b. Region supervisor will assign WVDA sampler
 - c. Sampler will contact license holder and setup date, time and location for sampling prior to harvest
2. How to fill out the sample invoice form
 - a. Travel and Sample time calculation
 - i. all driving time calculated from Guthrie
 - b. Each sampled lot
 - i. alias, variety, county, acres, sample number
 - ii. Sample # format “WV-04/06/20-License#-Sample#”
 - iii. calculate sample fee \$150 per sample taken
 - c. Back side of original
 - i. How to sketch field perimeter with acreage, number rows and length of rows
 - ii. Draw where sample line transect was taken and number of cuttings
 - iii. Take and record GPS coordinate at each growing location
 - d. IF NECESSARY: Take pictures of each field
 - i. Enough pictures to tell where each variety was grown and sample taken
 - ii. Send pictures in email including Sample ID they will printed and added to file
 - Name pictures with sample # plus pic1, pic2 etc.
 - iii. Send each set of pictures to Mike Arnold in separate emails for each License holder
 - e. Licensee or representative signature
 - f. Provide signed copy to
 - i. Original white page go to Mike’s mailbox, scanned front and back

- ii. Grower pink copy
- iii. Grower yellow copy to be mailed with payment, blue envelope provided by WVDA, inform to send payment within 30 days

3. How to take sample per lot

- a. Randomly select “row” or transect of lot to sample of a single hemp variety **within single field**
- b. Take a representative sample of each variety (at least one cutting per acre) atleast 5 cuttings per lot sampled
- c. Each plant sampled cut top 3-6 inches of apical branch target flower material
- d. Ensure sufficient amount of plant material for laboratory sampling
 - i. sufficient sample = brown bag 1/3rd to ½ full of hemp
- e. Create label and seal bag
 - i. Label includes sample #, print and sign name
 - ii. Fold top of brown bag down 2-3 times
 - iii. Staple Label to the top of bag sealing the bag and ensure the label acts as a seal
- f. Repeat A-E for each variety of hemp per separate growing location
- g. IF NECCESARY: Take picture of all samples, email Mike Arnold with field pictures, label sample# plus bags
- h. Coordinate transporting sample/s to WVDA READ laboratory or designated WVDA employee for transport

4. Chain of custody form

- a. Sampler will fill out sample #, date of sample taken
- b. Sampler Initials and signs
- c. Deliver to laboratory or designated WVDA employee for transport to lab
 - i. Each WVDA employee in possession must sign, date for WVDA READ laboratory must sign, date and provide time sampled

5. Sanitize between locations

- a. pruners

6. Summary of Process

1. Grower needs to email hemp@wvda.us with name, contact information, license # and harvest date
2. Mike Arnold will email responsible supervisor
 - a. Included with email will be information listed above
 - b. Copy of first page of grower's application
 - c. Copy of Grower's License
 - d. Copy of Locations (Attachment A)
3. Collector contacts grower and sets up time for sample before the harvest date
4. Sample Day
 - a. print and bring: Copy of license, first page of application, (optional: google map)
 - b. Must bring and fill out Sampling Invoice and Chain of Custody
 - c. All required equipment for sample
 - d. Fill out KOBO form on-site
5. Turn into READ Lab, Guthrie WV
 - a. All hemp samples
 - b. Chain of custody (get copy for Plant Industry's records)
6. Turn into Plant Industries, Guthrie WV
 - a. Put in Mike's mailbox in building 6
 1. Sampling Invoice (White page)
 2. Copy of chain of custody
 3. Any additional information collected

7. Equipment Checklist

Pruners

Stapler

Cooler

Hemp Sample Bags

Hemp Sample Tags

Hemp Sample Invoice

Envelope

Copy of License, first page of grower application, location info (attachment A), map

KOBO (tablet or phone)

Device for pictures

GPS Unit

Disinfectant