



STATE OF WASHINGTON  
DEPARTMENT OF AGRICULTURE  
P.O. Box 42560 • Olympia, Washington 98504-2560 • (360) 902-1800

November 20, 2019

The Honorable Sonny Perdue  
United States Department of Agriculture  
1400 Independence Ave., S.W.  
Washington, DC 20250

RE: Washington State Hemp Plan

Dear Secretary Perdue:

For the past three years, the Washington State Department of Agriculture (WSDA) has administered an Industrial Hemp Research Pilot Program. As a result of the 2018 Farm Bill, Washington state law requires the WSDA to license hemp growers in the state and provides broad rulemaking authority to create a functional hemp regulatory plan. WSDA believes its plan will meet the requirements set forth in the 2018 Farm Bill and the correlating USDA interim rules. With this letter, I would like to submit Washington State's hemp regulatory plan for your consideration.

I am attaching a copy of Washington's proposed hemp program rules through the Washington Administrative Code (WAC), supporting documentation including our testing and sampling protocols, as well as a document referencing the required contents of a state plan as found in the 2018 Farm Bill and how each requirement will be satisfied in Washington.

*Additionally, I certify that Washington has the resources and personnel to carry out the practices and procedures described in clauses (i) through (vi) of Sec. 297B(2)(A) of the Agricultural Marketing Act of 1946 as amended in Sec. 10113 of the 2018 Farm Bill. I believe that we have the capability to build a hemp production program with the integrity and oversight that is needed.*

Sincerely,

Derek I. Sandison  
Director

cc: Jessica Allenton, Assistant Director, Commodity Inspection Division  
Sierra McWilliams, Assistant Attorney General



## **WSDA's Hemp Regulatory Plan outline**

### **1. How will the Department show a practice to maintain relevant information regarding land on which hemp is produced in the State or territory of the Indian tribe, including a legal description of the land, for a period of not less than 3 calendar years?**

Washington State law requires a license to grow hemp. Our application for both the pilot program and moving forward, requires the legal description of the land or the global positioning location coordinates from which the legal description can be obtained. WSDA's record retention policy requires information such as this to be maintained for seven years.

WAC 16-306-040- Hemp producer license application, states an applicant must provide the information required for a hemp license on a form provided by the department that, at a minimum, includes:

- The name and business address of the applicant;
- For businesses, the type of business entity (LLC, partnership, etc.), the state or country where the business is incorporated and the name and address of the entity's agent in Washington State;
- The legal description (section, township, and range) in which the proposed registered land area is located;
- Geospatial location coordinates of proposed fields, greenhouses, or other sites where hemp is produced.

WSDA rules also require applicants to consent to entrance of their property by the department to inspect their registered land area with or without prior notice, report hemp crop acreage to the USDA Farm Service Agency (FSA), and submit a criminal history report that is completed within 60 days of the application date.

Additionally, WAC 16-306-060-Records retention, states licensed producers are required to maintain copies of all records and reports necessary to demonstrate compliance with the program for a minimum of three years from the expiration date of the license.

### **2. Does the Department have a procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration levels of hemp produced in the State or territory of the Indian tribe?**

WSDA tests hemp for Total THC using High-Performance Liquid Chromatography (HPLC) for the determination of  $\Delta^9$ -Tetrahydrocannabinol (THC) and  $\Delta^9$ -Tetrahydrocannabinolic Acid (THC-A). Additionally, if necessary, WSDA will conduct moisture testing to determine total moisture.

WAC 16-306-090- Hemp THC testing criteria, states that hemp will be tested for THC concentration in a department-run or approved laboratory as determined by the department using post-decarboxylation or other testing methods approved by the department. The department will apply the measurement of uncertainty to the reported THC concentration to determine if hemp material is in compliance.

No hemp may leave a registered land area or be combined with hemp plant material from different registered land areas or lots until WSDA issues certification for each field, lot or registered land area.

WSDA has created a testing protocol (attached) that addresses general sample preparation and testing protocols, testing methods, test results exceeding 0.3% THC, retesting procedures, and information sharing with the department in order to ensure validity, consistency and accuracy of test results.

**3. Does the Department have a procedure for the effective disposal of plants, whether growing or not, that are produced in violation of this subtitle; and products derived from those plants?**

Under WAC 16-306-170- Hemp noncompliance for THC concentration, if a licensee's hemp tests higher than the acceptable hemp THC level, the licensee may be subject to suspension or revocation of their license. The lot must be destroyed or disposed of in a manner approved by the department. If determined to be appropriate, WSDA may give notice of noncompliance to the appropriate law enforcement agency and the Washington State Liquor and Cannabis Board which regulates marijuana, with a summary of the actions taken to destroy the noncompliant hemp.

Producers must document the destruction or disposal of all noncompliant hemp. This documentation must be submitted to WSDA following the completion of the destruction or disposal process. The destruction of any controlled substance shall be in accordance with USDA and DEA regulations. The method of destruction or disposal shall be consistent with the purpose of rendering all controlled substances to a non-retrievable state in order to prevent diversion of any such substance to illicit purposes and to protect the public health and safety.

While WSDA has legal authority over hemp and for manufactured products derived from hemp that fall within the definition of food, WSDA does not have legal authority over all manufactured products.

**4. Does the Department have a procedure to comply with the enforcement procedures under the 2018 amendments to the Agricultural Marketing Act of 1946 Section 297A subsection (e)?**

WSDA has included language in rule that will establish enforcement action procedures, specifically corrective action plans as well as WSDA's authority to suspend or revoke a license for violations of state law or for failing to comply with a corrective action plan. All enforcement actions will be conducted with proper due process as guaranteed by Washington law.

WAC 16-306-200- Corrective Action Plan, mirrors the language provided in the 2018 Farm Bill and the USDA interim rules by stating a licensee may be subject to a corrective action plan established by WSDA to correct negligent violations including, but not limited to:

- Failing to provide a legal description of land on which hemp is produced.
- Failing to obtain a license or other required authorization from the department.
- Producing Cannabis sativa L. with delta-9 tetrahydrocannabinol concentration of more than 0.3% on a dry weight basis.

WSDA is working on a corrective action template which will include a reasonable date by which the hemp producer will correct the negligent violation and the requirement that the licensee will periodically report to the department on their compliance with WSDA regulations for at least two calendar years. Additionally, licensees may be subject to license suspension or revocation for violations of WSDA rules or for failing to comply with a corrective action plan.

WSDA rules also include enforcement procedures for violations that are committed with a culpable mental state greater than negligence.

**5. Does the Department have a procedure for conducting annual inspection of, at a minimum, a random sample of hemp producers to verify that hemp is not produced in violation of the limits on THC found in the farm bill?**

WSDA inspectors will take hemp samples from registered land areas within 15 days prior to the anticipated harvest to test for THC concentration. Additionally, WSDA requires all registered land areas to be inspected at least once during each license period. The inspections include the following:

- Unauthorized plant growth;
- Hemp in any form on the registered land area;
- Rogue, volunteer, or off-type hemp plants;
- Audits of existing business data and reports related to hemp;
- Compliance with required signage; and
- Assessing compliance with other applicable license terms and conditions.

WSDA has created a testing protocol (attached) that provides procedures for entering a growing area and collecting the hemp sample as well as necessary equipment and supplies and

sampling guidelines which includes sample size based on estimate of plants as well as what part of the plant the sample must come from. Our sampling protocol is based directly off the USDA interim rules.

**6. Does the Department have a procedure for submitting the information described in the Agricultural Marketing Act of 1946 Section 297C(d)(2), as applicable, to the Secretary not more than 30 days after the date on which the information is received?**

WSDA already collects the information required as part of its state hemp program and is prepared to share the information with USDA in any required format. Additionally, the WSDA website will also have a list of licensees including contact information and registered land areas. WSDA has included a communication procedure which outlines WSDA's commitment to providing the required information to USDA and/or FSA.

**7. Can the Department certify that the State or Indian tribe has the resources and personnel to carry out the practices and procedures described in 1 through 6 above?**

WSDA's hemp program is a fee-for-service program. The department has the authority to raise fees as needed to pay for the costs incurred by the department. The department anticipates having two full-time employees along with seasonal inspection staff. The department certifies that it can and will perform all the duties outlined above and required in the 2018 Farm Bill. The program's current fees can be found in WAC 16-306-140 – WAC 16-306-160.

**8. Has the Department included any other practice or procedure established by a State or Indian tribe as applicable, to the extent that the practice or procedure is consistent with this subtitle?**

As part of WSDA's hemp regulatory plan, the department has included all portions of its current program in the attachments that follow. WSDA has included regulations for certifying hemp for human consumption that is not regulated as food. Those regulations can be found in WAC 16-306-100 and include testing hemp for non-approved pesticide or herbicide use, approved limits of mycotoxin and approved limits of heavy metals.

**9. Who is the Department's contact for this program?**

- Jessica Allenton  
Assistant Director- Commodity Inspection Division  
Washington State Department of Agriculture  
(360) 902-1828  
[Jallenton@agr.wa.gov](mailto:Jallenton@agr.wa.gov)



## **WSDA's Hemp Communication Procedure**

As part of WSDA's hemp regulatory plan, the following procedure outlines WSDA's commitment to providing USDA with the information required by USDA.

- 1. Provide contact information for each hemp producer covered under the plan including name, address, telephone number, and email address (if available). If the producer is a business entity, the information must include the full name of the business, address of the principal business location, full name and title of the key participants, an email address (if available), and Employer Identification Number (EIN) of the business entity. This information can be provided via mail, fax, or email.**

WSDA collects contact information for each hemp producer through WSDA's hemp producer license application including name, address, telephone number and email address. For business entities, WSDA also collects the full name of the business, address of the business location, key participant information, email and EIN. WSDA will provide this information, including hemp producer license numbers, to USDA.

- 2. Maintain and report to USDA status of licensed producers (and any changes) and license numbers of producers**

WSDA maintains all records in accordance with Washington record retention laws and will report to USDA the status of licensed producers, any changes made, and license numbers of producers to USDA in the format requested by USDA.

- 3. Procedure for submitting the information described in § 990.70 to the Secretary not more than 30 days after the date on which the information is received.**

WSDA will submit all necessary information in the format determined by USDA within the required timelines. WSDA's understanding is that in addition to an annual report, information will need to be sent to USDA monthly.

- 4. Procedure for producers licensed under state and tribal government plans to share information with USDA, Agricultural Marketing Service (AMS), or Farm Service Agency (FSA):**

While WSDA regulations require producers to report hemp crop acreage to FSA, WSDA is prepared to submit any additional information to USDA or directly to FSA to fulfil this

requirement including total acreage of hemp planted, harvested and disposed, license numbers, addresses, geospatial locations, and green house acreage.

**5. Reporting culpable violations:**

As required by the Interim Final Rule and state rule WAC 16-306-210, if WSDA determines a licensee committed a violation with a culpable mental state greater than negligence they will notify the U.S. Attorney General and USDA as well as the appropriate law enforcement agency as applicable.

**Chapter 16-306 WAC  
HEMP PROGRAM**

NEW SECTION

**WAC 16-306-010 Purpose of chapter.** Under the authority of chapter 15.140 RCW, the department adopts rules to establish a hemp program in accordance with the Agricultural Improvement Act of 2018. These rules include licensing requirements. Licensing is required for persons to produce hemp as provided under this chapter and chapter 15.140 RCW.

NEW SECTION

**WAC 16-306-020 Activities outside the scope of the hemp program.** The following activities are not subject to regulatory sanctions or penalties under this chapter, except for the limitation of THC content under chapter 15.140 RCW:

(1) Possessing, transporting, marketing or exchanging legally obtained hemp and hemp products;

(2) Growing, producing, possessing, processing, marketing or exchanging marijuana as defined in RCW 69.50.101.

NEW SECTION

**WAC 16-306-030 Definitions.** "Acceptable hemp THC level" means the application of the measurement of uncertainty to the reported THC concentration level on a dry weight basis producing a distribution or range that includes 0.3 percent or less.

"Agricultural Improvement Act of 2018" means sections 7605, 10113, 10114, and 12619 of the Agricultural Improvement Act of 2018, P.L. 115-334.

"Applicant" means a person who submits an application for a license to participate in the hemp program as required under this chapter.

"Contiguous land area" means a specific field with designated boundaries that is planted with hemp. Separate parcels connected only by thin or narrow plantings of hemp or separated by physical barriers such as ditches or roads are not considered contiguous for the purposes of this rule.

"Continuous licensing" means the licensee renews their license annually prior to expiration, such that the licensee is continuously operating under a valid license.

"Corrective action plan" means a plan by the department for a licensed hemp producer to correct a negligent violation of, or noncompliance with, a hemp production plan, its terms, or any other regulation set forth under this chapter.



"Department" means the Washington state department of agriculture.

"Destroyed" means incinerated, tilled under the soil, made into compost, or rendered nonretrievable in another manner approved by the department.

"Disposal" means the material is collected for destruction by a person authorized to handle marijuana such as a DEA-registered reverse distributor, or in another manner approved by the department.

"Hemp" means the plant *Cannabis sativa* L. and any part of the plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.

"Key participant" means a person or persons who have a direct or indirect financial interest in the entity producing hemp, such as an owner or partner in a partnership. A key participant also includes persons in a corporate entity at executive levels including chief executive officer, chief operating officer and chief financial officer. This does not include such management as farm, field, or shift managers.

"Legal description" means a method of locating or describing land in relation to the public land survey system such as section, township, and range.

"Licensee" means any person who holds a license from the department to grow or produce hemp in Washington state.

"Lot" refers to a contiguous area in a field, greenhouse, or indoor growing structure containing the same variety or strain of cannabis throughout. In addition, "lot" is a common term in agriculture that refers to the batch or contiguous, homogeneous whole of a product being sold to a single buyer at a single time. Under the terms of this chapter, "lot" is to be defined by the producer in terms of farm location, field acreage, and variety.

"Measurement of uncertainty" means the parameter, associated with the result of a measurement that characterizes the dispersion of the values that could reasonably be attributed to the particular quantity subject to measurement. The measurement of uncertainty is similar to a margin of error. When the measurement of uncertainty, normally expressed as a +/- with a number, (e.g., +/- 0.05) is combined with the reported measurement, it produces a range and the actual measurement has a known probability of falling within that range.

"Process" means the processing, compounding, or conversion of hemp into hemp commodities or products.

"Produce" or "production" means the planting, cultivation, growing, or harvesting of hemp, including hemp seed.

"Registered land area" means a contiguous land area, including greenhouses and storage areas registered with the department as a condition of licensing, on which a licensee will conduct licensed activities. A registered land area may include more than one field, greenhouse, or storage area so long as those fields, greenhouses, or storage areas are at the same physical address.

"Storage area" means any area, building, plant or facility registered with the department in which a licensee plans to store hemp.

"THC concentration" means the percent of total delta-9 tetrahydrocannabinol, which is the conversion of delta-9 tetrahydrocannabinolic acid into THC.

NEW SECTION

**WAC 16-306-040 Hemp producer license application.** (1) An applicant for a hemp producer license must:

(a) Provide the information required for a hemp producer license on a form provided by the department that at a minimum includes the following:

(i) The name and business address of the applicant;

(ii) For corporate applicants, the type of business entity, such as corporation, LLC, or partnership, the state or country where the business is incorporated, and the name and address of the entity's agent in Washington state;

(iii) The legal description (section, township, and range) in which any proposed registered land area is located; and

(iv) Geospatial location coordinates of any proposed field, greenhouse, or other site where hemp is produced.

(b) Apply to the department for participation in the program between January 1st and March 31st. Applications may be received after March 31st but are subject to a late license fee;

(c) Pay fees as required under this chapter;

(d) Consent to entrance of their property by the department to inspect their registered land area with or without prior notice; and

(e) Report hemp crop acreage to USDA Farm Service Agency (FSA). A link to FSA information on how to report hemp crop acreage to FSA is available on the USDA hemp production program website.

(2) Licenses will expire on the last day of April following the year the license is issued.

(3) All applications must be accompanied by a criminal history report completed within sixty days of the application date. If the application is for a business entity, a completed criminal history report must be provided for each key participant.

(a) The criminal history report must indicate the applicant has not been convicted of a state or federal felony related to a controlled substance for the ten years prior to the date of when the report was completed. An exception applies to a person who was lawfully growing hemp under the 2014 Farm Bill before December 20, 2018, and whose conviction also occurred before that date.

(b) A person with a prior felony related to controlled substances within ten years of applying for a producer license is not eligible for the license. Key participants of associations, corporations, and other business entities with a prior felony related to a controlled substance within ten years of applying for a producer license are not eligible for the license under this felony drug conviction limitation. Business entities may still be eligible if the key participant with a prior felony is discharged.

(4) Any person who materially falsifies information in the application shall be ineligible to participate in the program.

NEW SECTION

**WAC 16-306-050 Hemp producer license.** (1) A person must obtain a hemp producer license prior to planting or growing hemp in this state, including growing hemp seed crop.

(2) A licensed producer may sell or exchange hemp produced under the license once the department has issued documentation declaring the hemp to meet the THC concentration requirements.

(3) The department may inspect and sample a producer's licensed operations. The producer must permit unrestricted access to all hemp plants, plant parts, grain and seeds within a registered land area whether growing or not, and all land and facilities used by the producer for the growing and storage of hemp, pesticide storage or housing, and all documents and records pertaining to the licensee's hemp business operations during business hours.

(4) The licensee must pay all applicable fees adopted under this chapter for any required inspections and testing. Samples may be taken at the department's discretion for testing.

(5) No registered land area may contain cannabis plants or parts thereof that the licensee knows or has reason to know are of a variety that will produce a plant that when tested will produce more than 0.3 percent THC concentration on a dry weight basis. No licensee shall use any such variety for any purpose associated with the growing of hemp.

(6) Licenses will expire on the last day of April following the year the license is issued. This date is not tied to the harvest and planting season. Rather it is tied to the window for applications (January 1st - March 31st) and the thirty days for the department to make a decision. For example, if a producer applies for a license February 1, 2020, and is granted a license on March 1, 2020, the license would expire April 30, 2021.

(7) Unless the license is renewed, any plant material that is not harvested prior to expiration of the license must be destroyed.

(8) Upon any change to the registered land area(s) after issuance of the license, the licensee must submit to the department for approval an updated legal description, geospatial location, and a description of the changes to the registered land area(s) and required fees.

(9) At a minimum, licensees are required to post a sign on each side of every registered land area listed on the application including the following information:

- (a) The department-issued license number;
- (b) Crop type; and
- (c) The department contact phone number.

(10) Licensees growing hemp for seed certification must also follow the requirements in chapter 16-302 WAC.

#### NEW SECTION

**WAC 16-306-060 Records retention.** Licensed producers are required to maintain copies of all records and reports necessary to demonstrate compliance with the program. These records include those that support, document, or verify the information in the forms the licensee submitted to the department. Licensees must keep records and reports for a minimum of three years from the expiration date of the license that was in effect at the time the records were generated.

NEW SECTION

**WAC 16-306-070 Hemp seed and propagules.** (1) A licensee must notify the department of the source of the hemp seed or clones solely for the purpose of maintaining a record of the sources of seeds and clones being used or having been used for hemp production in this state.

(2) The department is not responsible for obtaining seeds on behalf of the licensee.

(3) The department is not liable for and does not warrant that the seed is fit for any purpose.

NEW SECTION

**WAC 16-306-080 Hemp inspection and sampling criteria.** (1) All licensees are subject to inspection by the department. The department shall inspect registered land areas under a producer license at least once during each license period. The department's inspections of the registered land area may include the following:

(a) Inspections for unauthorized plant growth;

(b) Inspections for hemp in any form on the registered land area;

(c) Inspections for rogue, volunteer, or off-type hemp plants;

(d) Audits of existing business data and reports related to hemp;

(e) Identifying compliance with required signage as specified in WAC 16-306-050; and

(f) Assessing compliance with other applicable licensing terms and conditions.

(2) The department shall take hemp samples from registered land areas licensed under a producer license within fifteen days prior to the anticipated harvest of cannabis plants to test for THC concentration.

(3) The licensee or designated employee shall accompany the sampling agent throughout the sampling process.

(4) Registered land areas may be inspected by the department for a period of three hundred sixty-five days from the end of the license period to check for unauthorized plant growth such as, but not limited to, volunteer plants.

NEW SECTION

**WAC 16-306-090 Hemp THC testing criteria.** (1) Hemp will be tested for THC concentration in a department-run or approved laboratory as determined by the department using post-decarboxylation or other testing methods approved by the department.

(2) Hemp testing will take place at times and on dates determined by the department.

(3) The department will apply the measurement of uncertainty to the reported THC concentration to determine if hemp material is in compliance under this chapter.

NEW SECTION

**WAC 16-306-100 Voluntary certification for hemp intended for human consumption.**

(1) In addition to testing required under WAC 16-306-090, producers may obtain certification that hemp meets the department's standards for human consumption if tested for the following:

(a) Nonapproved pesticide or herbicide use. The list of approved pesticides and herbicides is available on the department website; and

(b) Approved limits of mycotoxin. The sample and related lot fail testing for mycotoxin if the results exceed the following limits:

(i) Total of Aflatoxin B1, B2, G1, G2: 20 µg/kg of substance;

(ii) Ochratoxin A: 20 µg/kg of substance.

(c) Approved limits for heavy metals. The sample and related lot fail testing for heavy metals if the results exceed the following limits:

<b>Metal</b>	<b>µ/daily dose (5 grams)</b>
Inorganic arsenic	10.0
Cadmium	4.1
Lead	6.0
Mercury	2.0

(2) The producer must inform the department if they wish to participate in the voluntary certification for human consumption at the time of sampling as specified under WAC 16-306-080.

(3) The licensee will be required to reimburse the department or the approved laboratory for the actual costs incurred for conducting such tests.

NEW SECTION

**WAC 16-306-110 Hemp for human consumption as food.** The whole hemp plant may be used as food for human consumption. The department shall regulate the processing of the hemp for food products allowable under federal law, in the same manner as other food processing under chapters 15.130, 69.07, and 69.22 RCW.

NEW SECTION

**WAC 16-306-120 THC certification.** (1) If the hemp meets THC concentration requirements in this chapter, the department will issue a document of certification attesting that hemp has been tested for THC concentration and is in compliance with this chapter.

(2) No hemp may leave a registered land area identified on a license without being issued THC certification by the department.

(3) Hemp plant material from different registered land areas or lots may not be combined until the department issues certification for each field, lot, or registered land area. Hemp seeds and grain are excluded from this restriction.

NEW SECTION

**WAC 16-306-130 Transporting hemp.** (1) Hemp produced under this chapter may not be transported from a registered land area as identified on the license until THC certification by the department as specified in WAC 16-306-120 is obtained by the applicable licensee prior to transport. During transport of hemp off a producer's registered land area, including to a processor, the person in possession of the hemp during transport must have in his or her possession either:

(a) Copies of the hemp producer license and department-issued THC certification, as required by this chapter; or

(b) A bill of lading or other proper documentation demonstrating that the hemp was legally imported or is otherwise legally present in the state of Washington under applicable state and federal laws relating to hemp.

(2) Any hemp from a licensed Washington producer that is found in Washington state at any location off the premises of a registered land area of a licensee without department-issued THC certification as specified in WAC 16-306-120 is deemed to be contraband and subject to seizure by the Washington state patrol or any law enforcement officer. Any such contraband material is subject to destruction at the licensee's expense, and may result in suspension or revocation of the hemp license.

NEW SECTION

**WAC 16-306-140 Hemp producer license fees.** (1) Effective January 1, 2020, license fees are as follows:

Annual License Fee	License Modification Fee
\$750	\$200/1

(2) Effective June 1, 2020, license fees are as follows:

Annual License Fee	License Modification Fee	Late License Fee (After March 31)
\$1200	\$200/1	\$200/2

/1 See WAC 16-306-050(8).

/2 In addition to license fee.

NEW SECTION

**WAC 16-306-150 Hemp inspection fees.** (1) Fees for hemp inspections are paid by the licensee.

(2) No renewal licenses will be issued until all fees due to the department are paid in full.

(3) Hemp inspection fees are:

(a) \$200.00 per inspection; plus

(b) Time and mileage per inspection. All time will be charged at a rate of forty dollars per hour. Mileage will be charged at the rate established by the Washington state office of financial management.

NEW SECTION

**WAC 16-306-160 Hemp THC testing fees.** (1) Hemp will be tested for THC concentration in a department-run or approved laboratory as determined by the department using testing methods approved by the department.

(2) Hemp testing will take place at times and on dates determined by the department.

(3) Fees for hemp THC tests are paid by the licensee.

(4) No renewal licenses will be issued until all fees due to the department are paid in full.

(5) THC concentration testing fees for hemp when tested at the department's laboratory are established on a sliding rate scale. THC concentration testing will be scheduled by the department based on the availability of laboratory resources. Individual samples may be batched with samples from the same or different licensees in order to reduce the overall cost of the testing. For the purposes of this section, "batch" means a group of samples that are tested by the department on the same day, using the same equipment calibration and testing supplies to test each sample independently from other samples in the batch. The department will bill each licensee for the samples that licensee provides, based on batch size at the time of testing as shown in the following table:

Batch Size	Testing Fee Per Sample
Batch of 1 sample	\$1,000
Batch of 2 samples	\$500
Batch of 3 samples	\$334
Batch of 4 samples	\$250
Batch of 5 samples	\$200

(6) When THC concentration testing is performed at department-approved laboratories, testing fees will be subject to actual laboratory costs, including sample transportation.

NEW SECTION

**WAC 16-306-170 Hemp noncompliance for THC concentration.** (1) (a) If a licensee's hemp tests higher than the acceptable hemp THC level, the licensee may be subject to suspension or revocation of their license. The lot must be destroyed or disposed of in a manner approved by the department. If determined to be appropriate, the department may give notice of noncompliance to appropriate law enforcement agencies and the Washington state liquor and cannabis board, with a summary of the actions taken to destroy the noncompliant hemp.

(b) Producers must document the destruction or disposal of all noncompliant hemp. This documentation must be submitted to the department following the completion of the destruction or disposal process.

(2) If a licensee's hemp tests higher than 0.3 percent but less than 0.5 percent THC concentration, the licensee may either request a THC retest within thirty days or resampling of the same lot, at their own expense.

(3) If at any time a licensee's hemp tests higher than the acceptable hemp THC level, the licensee may be subject to revocation or suspension of their license.

#### NEW SECTION

**WAC 16-306-180 License denial, suspension or revocation, and right to adjudicative proceeding.** Upon notice of intent by the department to an applicant to deny a license, notice of intent to a licensee to suspend or revoke a license, or notice of intent for destruction of a hemp material or crop, a person may request an adjudicative proceeding under chapter 34.05 RCW, the Administrative Procedure Act, and chapter 16-08 WAC.

#### NEW SECTION

**WAC 16-306-190 Suspension of hemp license for noncompliance with a child support order.** (1) If the department receives notice under RCW 74.20A.320 that a licensee is not in compliance with a child support order, the department will suspend or not renew the licensee's hemp license(s) until the department of social and health services provides the department with a release stating that the licensee is in compliance with the child support order. If a licensee's license is suspended, all hemp crops and products in the licensee's possession must remain on the licensee's registered land area until the suspension is lifted.

(2) The department may renew, reinstate, or otherwise extend the licensee's hemp license(s) upon receipt of a copy of the release specified in subsection (1) of this section.

#### NEW SECTION

**WAC 16-306-200 Corrective action plan.** (1) A hemp licensee may be subject to a corrective action plan established by the department to correct negligent violations of this chapter including, but not limited to:

(a) Failing to provide a legal description of land on which the producer produces hemp;

(b) Failing to obtain a license or other required authorization from the department; or



(c) Producing Cannabis sativa L. with delta-9 tetrahydrocannabinol concentration of more than 0.3 percent on a dry weight basis.

(2) A hemp licensee shall comply with a corrective action plan established by the department to correct the negligent violation, including:

(a) A reasonable date by which the hemp producer shall correct the negligent violation;

(b) A requirement that the hemp producer shall periodically report to the department, as applicable, on the compliance of the hemp producer with the regulations under this chapter for a period of at least two calendar years.

(3) Licensees may be subject to license suspension or revocation for violations of chapter 15.140 RCW or this chapter for failing to comply with a corrective action plan.

(4) A hemp licensee that negligently fails to comply with the regulations under this chapter three times in a five-year period shall be ineligible to produce hemp for a period of five years beginning on the date of the third violation.

(5) The department will not consider hemp producers as committing a negligent violation by producing plants exceeding the acceptable hemp THC level if they use reasonable efforts to grow hemp and the plant does not have a THC concentration of more than 0.5 percent on a dry weight basis. For sampling and testing violations, the department will consider the entire harvest from a distinct lot in determining whether a violation occurred. This means that if testing determines that each sample of five plants from distinct lots has a THC concentration exceeding the acceptable hemp THC level (or 0.5 percent if the hemp producer has made reasonable efforts to grow hemp), USDA considers this as one negligent violation. If an individual produces hemp without a license, this will be considered one violation.

(6) Negligent violations are not subject to criminal enforcement. However, the department will report the production of hemp without a license issued by the department to the United States Department of Agriculture (USDA) and the Attorney General.

(7) Hemp found to be produced in violation of this chapter such as hemp produced on a property not disclosed by the licensed producer, or without a license, would be subject to the same disposal or destruction as for hemp above the acceptable hemp THC level.

#### NEW SECTION

**WAC 16-306-210 Culpable violations.** If it is determined a violation was committed with a culpable mental state greater than negligence, meaning, acts made intentionally, knowingly or with recklessness, WSDA will report the violation to USDA, the attorney general, and the local law enforcement officer as applicable.

#### NEW SECTION

**WAC 16-306-220 Venue for legal action.** The venue for any legal action under this chapter shall be Thurston County, Washington.



Washington  
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# Sampling Protocol

Sampling Protocol.

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# WSDA Hemp Production Pre-Harvest Sampling Protocol

## **Purpose:**

1. Standard sampling guidelines are specified for field and greenhouse sampling of hemp.
2. Samples are taken to obtain specimens for the measurement of tetrahydrocannabinol (THC) content, which determine whether the specimens are hemp or marijuana. The measurements are intended to be representative of the 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 and tested for THC concentration. Testing procedures are provided in a separate document.

## **Scope:**

1. Samples collected under this procedure are acceptable for submission to a qualified, DEA-registered laboratory for determination of THC in hemp.
2. Since the THC content of hemp generally peaks as the plant ripens, the timing of when sampling occurs is important to accurately measure THC concentration and monitor compliance with the WSDA hemp production program.
3. Samples must be collected by a WSDA inspector. It is the responsibility of the licensed producer to pay any fees associated with sampling.

## **Summary of Practice:**

1. This practice provides procedures for entering a growing area and collecting the minimum number of plant specimens necessary to represent a homogeneous composition of the “lot” that is to be sampled. An authorized representative enters a growing area, strategically examines the growing area, establishes an approach for navigating the growing area, and collects individual specimens of plants in order to obtain a representative sample of hemp in the designated lot.
2. Cuttings from each “lot” of hemp crop acreage, as identified by the producer, shall be organized as composite samples. For the purposes of these procedures, a “lot” is a contiguous area in a field, greenhouse, or indoor growing structure containing the same variety or strain of cannabis throughout. In addition, “lot” refers to the batch of contiguous, homogeneous whole of a product being sold to a single buyer at a single time. “Lot” is to be defined by the producer in terms of farm location or field acreage.

## **Equipment and Supplies:**

1. Garden pruners/shears (Cleaned prior to and following each composite sample. Some examples of appropriate cleaning agents and supplies to use on garden pruners/shears are bleach, rubbing alcohol, steel wool, and/or sandpaper.)
2. Sample bags, paper.
  - 2.1. The size of the bags will depend upon the number of clippings collected per lot.
  - 2.2. The bags should be made from material known to be free from THC.
3. Security tape
4. Permanent markers
5. Sample collection forms
6. GPS Unit
7. Disposable gloves – Nitrile

## **Sampling Guidelines:**

1. The licensee or designated employee shall accompany the sampling agent throughout the sampling process.
2. Surveillance of the growing area.
  - 2.1. The inspector shall verify the GPS coordinates of the growing area as compared with the GPS coordinates submitted by the licensee to WSDA.
  - 2.2. The inspector shall estimate the average height, appearance, approximate density, condition of the plants, and degree of maturity of the flowering material, meaning inflorescences (flowers/buds).
  - 2.3. The inspector shall visually establish the homogeneity of the stand to establish that the growing area is of like variety.
3. Time of Sampling:
  - 3.1. Within 15 days prior to the anticipated harvest of cannabis plants, a WSDA inspector shall collect representative samples from such cannabis plants for THC concentration level testing.
4. Field Sampling:
  - 4.1. For purposes of determining the number of individual plants to select for sampling, the size of the growing area shall be considered. For sampling purposes, samples from separate “lots” must be kept separate and not be comingled.
  - 4.2. For lots of less than one acre, including greenhouses, select a minimum of 1 plant, then take a cutting from the plant to form a sample. For lots of 2 to 10 acres, including greenhouses, select a minimum of one plant per acre, then take cuttings of each plant, then combine to form a composite sample.
  - 4.3. For growing areas larger than ten (10) acres, including greenhouses, the number of plants that will be selected to form a composite sample is based upon the Codex Alimentarius Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLS CAC/GL 33-1999.
    - 4.3.1. The sample size is estimated in a two-step process. The first step is to estimate the number of primary plants to be sampled. The second step is to adjust the estimate of primary plants by the acreage under cultivation.

### Sampling Protocol.

4.3.2. The initial number of primary plants is estimated using

$$n_0 = \frac{\ln(1 - p)}{\ln(1 - i)}$$

where p is the confidence level to detect hemp plants having THC content greater than the acceptable hemp THC level and i is the proportion of hemp plants having THC content greater than the acceptable hemp THC level. The values for i are based on past experience in the same or similar growing areas.

4.3.3. The initial primary plants estimate is adjusted by the number of acres to calculate the minimum number of primary plants for composting as follows:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

where n is the minimum number of primary plants to be selected for forming a composite sample,  $n_0$  is the initial number of primary plants, and N is the number of acres under cultivation.

4.3.4. Example 1 : The initial primary plant sample size is 299 with a confidence level of 95% to detect hemp plants having THC content greater than the acceptable hemp THC level and a proportion of hemp plants having THC content of greater than the acceptable hemp THC level equal to 0.01 is considered appropriate. The adjusted primary plant sample sizes for fields from 11 to 173 acres in size are shown in the following table:

Number of acres	Sample Size "n"
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18-19	18
20	19
21	20
22	21
23	22
24	23
25-26	24
27	25
28	26
29	27
30	28
31-32	29
33	30
34	31
35	32
36	33
37-38	34
39	35

Number of acres	Sample Size "n"
40	36
41-42	37
43	38
44	39
45-46	40
47	41
48	42
49-50	43
51	44
52	45
53-54	46
55	47
56	48
57-58	49
59	50
60-61	51
62	52
63-64	53
65	54
66-67	55
68	56
69-70	57
71	58
72-73	59
74	60

Number of acres	Sample Size "n"
75-76	61
77	62
78-79	63
80-81	64
82	65
83-84	66
85-86	67
87	68
88-89	69
90-91	70
92	71
93-94	72
95-96	73
97-98	74
99	75
100-101	76
102-103	77
104-105	78
106-107	79
108	80
109-110	81
111-112	82
113-114	83
115-116	84
117-118	85

Number of acres	Sample Size "n"
119-120	86
121-122	87
123-124	88
125-126	89
127-128	90
129-130	91
131-132	92
133-134	93
135-136	94
137-138	95
139-140	96
141-143	97
144-145	98
146-147	99
148-149	100
150-152	101
153-154	102
155-156	103
157-157	104
159-161	105
162-163	106
164-166	107
167-168	108
169-170	109
171-173	110

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Example 2: The adjusted primary plant sample sizes for fields from less than 1 to 10 acres in size are shown in the following table:

Number of Acres "N"	Sample Size "n"
Less than 1	1
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

6. Collecting Samples from each lot:

6.1. Sampling agents shall always walk at right angles to the rows of plants, beginning at one point of the lot and walking towards another point on the opposite side of the lot.

6.2. While walking through the growing area, the inspector shall cut at least "n" flowering material, meaning inflorescences (the flower or bud of a plant) at random but convenient distances. Avoid collecting too many specimens from the borders of the field/greenhouse.

6.3. The cut shall be made just underneath a flowering material, meaning inflorescence (the flower or bud of a plant), located at the top one-third { 1/3 } of the plant. (See figure below.) The sample size must be of adequate volume to accommodate laboratory tests.



Sampling Protocol.

6.4. Utilize a paper sample bag for collecting sample cuttings. Ensure that each bag has the minimum number of cuttings, n, as calculated by 4.3.3, or in the Example Tables 1 and 2.

6.5. Seal each bag and record the sample number.

7. Sample identification:

7.1. The inspector shall seal each bag and record the sample identification number. The sample shall also be identified with the following information:

(1) The sample ID shall include: Sampling agent contact information; name and contact information of the producer; producer hemp license or authorization number; date of sample; and “lot” ID as provided by the USDA Farm Service Agency; any other information that may be required by States, Tribes, Law Enforcement Authorities, mail delivery services, customers or groups of customers.





Washington  
State Department of  
Agriculture

# Testing Protocol

Testing Protocol.

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# **WSDA Testing Protocol for Identifying Delta-9 Tetrahydrocannabinol (THC) Concentration in Hemp**

## **Purpose:**

1. Standard testing procedures are specified for samples taken in accordance with the Sampling Procedures for the WSDA Hemp Program to measure the delta-9 tetrahydrocannabinol (THC) concentration levels of those samples on a dry weight basis. Hemp testing laboratories are not required to be ISO accredited, although WSDA strongly encourages adherence to the ISO 17025 standard.
2. The results are intended to measure the THC content of composite hemp samples collected from a designated “lot” of hemp crop acreage designated by a hemp producer. The purpose of the measurements are to determine whether the THC concentration of the tested material is within the acceptable hemp THC level.
3. As required under the WSDA hemp program regulation, laboratories conducting testing of hemp must conduct analytical testing for purposes of detecting the concentration levels of delta-9 tetrahydrocannabinol THC and shall meet the following standards:
  - (a) Laboratory quality assurance must ensure the validity and reliability of test results;
  - (b) Analytical method selection, validation, and verification must ensure that the testing method used is appropriate (fit for purpose) and that the laboratory can successfully perform the testing;
  - (c) The demonstration of testing validity must ensure consistent, accurate analytical performance; and
  - (d) Method performance specifications must ensure analytical tests are sufficiently sensitive for the purposes of the detectability requirements of this part.
  - (e) At a minimum, analytical testing of samples for delta-9 tetrahydrocannabinol concentration levels must use High-Performance Liquid Chromatography (HPLC) or (LC). The testing methodology must consider the potential conversion of delta-9 tetrahydrocannabinolic acid (THCA) in hemp into delta-9 tetrahydrocannabinol (THC) and the test result reflect the total available THC derived from the sum of the THC and THCA content.

(f) The total delta-9 tetrahydrocannabinol concentration level shall be determined and reported on a dry weight basis.

(g) Any sample test result showing with at least 95% confidence that the THC content of the sample is higher than the acceptable hemp THC level shall be conclusive evidence that the lot represented by the sample is not in compliance with this part.

4. Laboratories approved for THC testing must also be registered with DEA to handle controlled substances under the Controlled Substances Act (CSA), 21 CFR part 1301.13.

**General Sample Preparation and Testing Procedures are as follows:**

1. Laboratory receives sample.
2. Dry sample to remove the majority of water.
3. Mill and “manicure” sample through a wire screen no larger than 1.5 x 1.5mm to discard mature seeds and larger twigs and stems.
4. Separate sample into a test and retain specimens.
  - a. Test specimen: go to step 5
  - b. Retain specimen: package and store until needed. When needed go to step 5.
5. Determine moisture content or dry to a consistent weight (meeting criteria).
6. Perform chemical analysis.
7. Calculate total THC on a dry weight basis. Test results should be determined and reported on a dry weight basis.

(A) Samples shall be received and prepared for testing in a WSDA approved, DEA registered laboratory as follows:

(1) Once the composite sample is received by the laboratory, the laboratory shall dry all of the leaf and flower (not obvious stem and seeds) of the composite sample until brittle in a manner that maintains the THC level of sample. Samples are to be dried to a consistent loss (typically 5-12% moisture content) so that the test can be performed on a dry weight basis, meaning the percentage of THC, by weight, in a cannabis sample, after excluding moisture from the sample. The moisture content is expressed as the ratio of the amount of moisture in the sample to the amount of dry solid in the sample.

(2) The laboratory shall mill and manicure samples through a wire screen no larger than 1.5 x 1.5mm to discard mature seeds and larger twigs and stems.

(3) The laboratory shall form sieve a “Test Specimen” and a “Retain Specimen.” One sample part shall be selected for analysis and labeled "Test Specimen". The other sample part shall be marked "Retain Specimen" and shall be packaged and stored in a secured place.

(4) The laboratory shall then determine moisture content or dry to a consistent weight.

(5) The laboratory will then perform chemical analysis on the sample using

High-Performance Liquid Chromatography (HPLC) or (LC) which is a scientific method (specifically, a type of chromatography) used in analytical chemistry used to separate, identify, and quantify each component in a mixture. It relies on pumps to pass a pressurized liquid solvent containing the sample mixture through a column filled with a solid adsorbent material to separate and analyze compounds. Under the terms of this part, HPLC is one of the valid methods by which laboratories may test for THC concentration levels.

(6) The laboratory will then calculate total THC on a dry weight basis.

References:

E. Small and H. D. Beckstead. 1973. Common Cannabinoid Phenotypes in 350 stocks of Cannabis. *J. of Natural Products*. 36(2): 144-165.  
*United Nations Office on Drugs and Crime: Recommended Methods for the Identification and Analysis of Cannabis and Cannabis Products. ISBN 978-92-1-148242-3.*

**(B) Testing Methods** The total available THC, derived from the sum of the THC and THCA content, shall be determined and reported on a dry weight basis.

Laboratories shall use appropriate, validated methods and procedures for all testing activities and evaluate measurement of uncertainty. Laboratories shall meet the AOAC International standard method performance requirements (SMPR) for selecting an appropriate method. The range of estimated uncertainty is reported as a  $\pm$  value and is the same unit as the hemp THC threshold (0.3% THC), following best practices for significant figures and rounding.

There are resources available for defining, guiding, and calculating measurement uncertainty. They include the GUM, ISO, and Eurachem. It is necessary for the laboratory to determine the uncertainty of accuracy ( $u_{bias}$ ), repeatability ( $u_r$ ), and reproducibility ( $u_R$ ) for each validated method. Once the expanded measurement uncertainty ( $U$ ) is determined, then the confidence interval can be calculated around a designated threshold such as the hemp THC threshold (0.3% THC).

Based on the aforementioned resources, the following equation is recommended:

Equation:

$$U = k \times u_c$$

Where,

$$u_c = \sqrt{u_r^2 + u_r^2 + u_{bias}^2}$$

And:

$u$  = standard uncertainty (standard deviation)

$u_r$  = uncertainty due to repeatability

$u_R$  = uncertainty due to reproducibility

$u_{bias}$  = uncertainty due to accuracy (bias)

$u_c$  = combined standard uncertainty

$U$  = Expanded uncertainty =  $\frac{u}{Mean} * k_{95\% \text{ confidence level}}, k = 2$

$k$  = coverage factor, use 2 for a 95% confidence level

#### References:

ISO 17025. General requirements for the complete testing and calibration laboratories.

Food and Drug Administration, Office of Regulatory Affairs, *ORA Laboratory Manual Volume III Section 4*, Basic Statistics and Data Presentation (current version).

AOAC Standard Method Performance Requirements (draft) AOAC SMPR 2019.XXX;

Title: Quantitation of cannabinoids in plant materials of hemp (low THC varieties 4 *Cannabis* spp.).

JCGM 100:2008, Evaluation of measurement data – Guide to the expression of uncertainty in measurement (GUM).

ISO/IEC Guide 98, Expression of Uncertainty in Measurement.

EURACHEM/CITAC Guide “Quantifying Uncertainty in Analytical Measurement”

Second edition (2000). A Williams, S L R Ellison, M Roeslein (eds.) ISBN 0 948926 15 5. Available from the Eurachem Secretariate.

**(C) Test results exceeding 0.3% THC.** Any sample test result showing with at least 95% confidence that the THC content of the sample is higher than the acceptable hemp THC level shall be conclusive evidence that one or more cannabis plants or plant products from the lot represented by the sample contain a THC concentration in excess of that allowed under the Act. If the results of a test conclude that the THC levels of a sample are conclusively higher than the acceptable hemp THC level, the laboratory will promptly notify the WSDA.

**(D) Retest Procedures.** Any hemp program licensee may request that the laboratory retest samples if it is believed the original THC concentration level test results were in error. If this occurs, the laboratory shall follow the same procedures as described in paragraphs (A)-(C) above that were followed to conduct the initial test. The licensee requesting the retest of the second sample will pay the cost of the test. The retest results shall be issued to the licensee requesting the retest and a copy shall be provided to WSDA.

**(E) Information Sharing with WSDA.** Laboratories performing THC testing for hemp produced under this program are required to share test results with WSDA. WSDA will provide instructions to all approved labs on how to electronically submit test results to WSDA.