

Hemp Production - Regulation and Economics

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Overview

The 2018 Farm Bill legitimized the commercial production of hemp by removing it from being a “controlled substance” under federal law. As a result, it becomes another possible crop for commercial production. But, many questions abound surrounding hemp production. What must a producer know to engage in the commercial production of hemp? Will there be a market for hemp that is produced? Are any special loans available to help start up the hemp growing operation? What about labeling and licensing requirements? How can risk best be managed? How should contracts for the production of hemp be structured?

As part of the requirements for my agricultural law course at the law school, Emily J. Young, devoted her research paper to the topic of hemp production. Emily will be graduating from Washburn Law School next month. Today’s post is the result of her research into the matter.

Questions surrounding hemp production - it’s the topic of today’s post.

2018 Farm Bill

Historically, federal law made no distinction between hemp and other cannabis plants. They were considered to be a Schedule I drug – a controlled substance under federal law. However, the Agriculture Improvement Act of 2018, P.L. 115-334 (also known as the 2018 Farm Bill), removed hemp from the Controlled Substances Act. [21 U.S.C. §§801 et seq.](#) While hemp is a plant from the cannabis family, the 2018 Farm Bill excludes *hemp* from the statutory definition of *marijuana* under the Controlled Substance Act if it contains a delta-9 tetrahydrocannabinol (THC, marijuana’s primary psychoactive chemical) concentration of not more than 0.3% on a dry weight basis. [7 USC § 1639o\(1\)](#).

In addition, the 2018 Farm Bill establishes a framework where the states and the federal government share regulatory authority over hemp production. See generally [7 U.S.C § 5940](#); [7 CFR Part 990](#). Section 10111 of the 2018 Farm Bill requires each state department of agriculture to consult with the state’s governor and attorney general to develop a plan for hemp licensing and regulation. The plan must be submitted to the United States Department of Agriculture (USDA). A state’s plan cannot be implemented until the USDA approves it. If a state does not develop its own regulatory program for hemp, the USDA will develop a system regulating hemp growers in that state.

Kansas enacted industrial hemp legislation in 2018 ([K.S.A. 2018 Supp. 2-3901 et seq.](#)) and experienced its first harvest in 2019. The Industrial Hemp Research Program is administered through the Kansas Department of Agriculture (KDA). The KDA anticipates making a Commercial Industrial Hemp Program available for the 2020 growing season, but the timeline and transition to a commercial program is presently unknown. The KDA submitted the state plan on January 23, 2020 for inclusion into the U.S. Domestic Hemp Production Program and is awaiting a response. Currently, the KDA lists 24 active processor licenses that may accept hemp during the 2020 growing season.



The 2018 Farm Bill also provides that farmers growing industrial hemp can receive banking services in the same manner available to farmers of other commodities. Indeed, the Board of Governors of the Federal Reserve System along with the Federal Deposit Insurance Corporation, Financial Crimes Enforcement Network, Office of the Comptroller of the Currency, and the Conference of State Bank Supervisors issued a joint press release on December 3, 2019 emphasizing that banks are no longer required to file a Suspicious Activity Report (SAR) for customers solely because they are engaged in the growth or cultivation of hemp in accordance with applicable laws and regulations. However, for hemp-related customers, the Board of Governors indicated that banks are expected to follow standard SAR procedures and file a SAR if indicia of suspicious activity is present.

While the 2018 Farm Bill legalizes hemp, the production of hemp is more heavily regulated than is the production of other crops due to the effect of the presence of Cannabidiol (CBD), the natural compound in the flower of the female cannabis plant, which is contained in both the hemp and marijuana varieties. While the CBD derived from hemp does not contain THC at illegal levels, the present uncertainty concerning hemp varieties and growing methods could, at least theoretically, potentially cause illegal levels of THC to be present in a harvested hemp crop. In addition, hemp has a similar appearance to marijuana that can make it more difficult for law enforcement officials to enforce drug laws governing marijuana.

Thus, while marijuana remains a Schedule I controlled substance (making illegal its cultivation and sale) CBD can legally be produced from hemp if it is produced by a licensed grower in accordance with federal and state regulations. In 2018, there were approximately 75,000 acres of hemp grown via permit in the U.S. It is estimated that permitted U.S. acres of hemp grown in 2019 was between 100,000 and 200,000.

Production Methods and Economics

Farmers grow hemp for grain, fiber, and floral material. Hemp is usually planted between May and June and harvested in September or October. It is either cultivated as a row crop or via a horticultural method. Row crop cultivation is generally cheaper and less risky compared to horticultural cultivation and is typically used to grow grain and fiber. The horticultural method involves hemp growing in a manner similar to marijuana. The grower typically uses clone plants (cuts from the mother plant) instead of seeds to have a more uniform crop and higher CBD content. January 2020 pricing indicates that a prospective grower would pay an average of \$4.25/plant for clone plants. Plant spacing under the horticultural method is approximately of 1,000 to 2,200 plants per acre. If the crop is grown for CBD extraction, the current market price is anywhere between \$63 and \$675 per pound for the hemp flower and approximately \$1.00 per percent of CBD per pound for biomass (the organic material of the hemp plant remaining after the flower is harvested and processed). Each plant yield approximately one pound of flower. CBD content varies based on the variety planted and the growing conditions.

The January 2020 industrial seed price average ranged from \$3.72 to \$8.00 per pound, with an average price of \$4.57. Viable seeding density is 25 to 35 pounds per acre. Hemp grain can sell for an amount between \$0.60 to \$1.70 per pound, and on average, a farmer can harvest 1,100 pounds of grain per acre. This “traditional” hemp is grown for the manufacture of such items as textiles and bioplastics, and is drilled in a manner comparable to wheat at an approximate rate of 100 plants per square yard. The plant grows tall with the tops harvested for seed production. It is the stalks that are used for industrial purposes.

After input and harvest costs, farmers can net approximately \$250-300 per acre on grain (traditional hemp). Hemp fiber is presently selling for approximately \$275 per ton, and crops can yield between

4 and 5 tons of hemp fiber per acre. These returns are presently higher than returns on corn, soybeans and wheat. According to data from the Department of Agricultural Economics at Kansas State University, a Kansas farmer in the North Central region of the state can expect net revenue of \$46.20 per acre on corn; \$48.12 per acre on soybeans and a net loss of \$62.93 per acre on wheat. <https://agmanager.info/farm-mgmt-guides/2020-farm-management-guides-non-irrigated-crops>.

Funding the operation

The 2020 growing season is the first-time hemp producers are eligible to apply for operating, ownership, beginning farmer, and farm storage facility loans through the Farm Service Agency (FSA). A complete loan application requires proof of crop insurance (unless ineligible); a farm operating plan with income history; and a contract for the sale of the crop. New growers are likely unable to secure a purchase contract before the season starts. As a result, most hemp producers in Kansas are either using private funding or local credit unions.

Initial license requirements

As of March 2020, the Industrial Hemp Research Program is the only program available to growers in Kansas. Anyone interested in a license for 2021 growing season should review the application checklists to determine the requirements and fees associated with the type of license being sought. See <https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/industrial-hemp-applications>.

A license is required for the listing and use of an approved variety of industrial hemp. *K.A.R. 4-34-5(e)(1)* https://agriculture.ks.gov/docs/default-source/pp-industrial-hemp/approved-varieties-final.pdf?sfvrsn=9faf85c1_4. Only authorized seeds or clone plants are permitted to be grown at this time unless otherwise approved by the KDA during the application process. *K.A.R. 4-34-2; 2018 Supp. K.S.A. 2-3901(b)(11)*. Authorized seeds include properly imported seeds or clones from another state and accompanied with a proper certification label or seeds from local Kansas distributors that have been tested and the certificate of analysis (COA) meets KDA standards. *2018 Supp. K.S.A. §2-3901(b)(11)*. These labels will need to be retained until the pre-harvest inspection (and for 5 years after) to prove that the hemp inspected was grown from the seeds or clones as shown on the label. §§*K.A.R. 4-34-17; K.A.R. 4-34-21*.

Risk Management

Several private insurance companies offer small hail policies and limited coverage for hemp growers. The USDA presently offers two programs to help with loss of a hemp crop. Producers may apply now through their local FSA office, and the deadline to sign up for both programs was March 16, 2020. However, these programs do not cover loss of 'hot' crops (THC in excess of 0.3%).

Multi-Peril Crop Insurance Pilot Insurance Program. This program provides coverage against loss of yield because of insurable causes (natural causes such as weather, insects and disease) of loss for hemp grown for fiber, grain or Cannabidiol (CBD) oil. There are minimum acreage requirements - 5 acres for CBD and 20 acres for grain and fiber. To be eligible for MPCPI, a hemp producer must also have at least a one-year history of production and have a contract for the sale of the insured hemp. The program is available in 21 states, including Kansas.

Noninsured Crop Disaster Assistance Program. This program protects against losses associated with lower yields, destroyed crops or prevented planting where no permanent federal crop insurance program is available. In general, assistance is available for losses that exceed 50

percent of the crop or for prevented plantings that exceed 35 percent of the intended crop acres. The amount paid is 55 percent of the average market price for crop losses.

Contractual Issues

Types of contracts. A purchase contract is typically entered into after a grower has completed harvest or immediately before harvest once quantity and grade of the crop is known. The buyer then makes a purchase offer for the crop with the price reflecting market demands and crop quality.

A production contract is an agreement entered into between the grower and buyer for the crop before planting. The contract denotes the obligations of the parties and specifies the quantity, quality, and price or a method to determine price of the crop. Under a production contract, a processor usually supplies the seed and inputs and the grower provides the labor and the land. The harvested crop is then delivered to the processor who pays the agreed upon price adjusted for certain contract specifications. Typically, under a production contract, the grower has no ownership rights in the seed or the harvested crop. As such, the grower cannot legally sell the crop to a third party or pledge it as collateral.

Under a split processing agreement, the processor extracts the CBD and returns a portion of the finished product to the grower. Under a typical agreement, the processor retains 40 percent of the extract as the processing fee and returns 60 percent to the grower either in kind or in accordance with market value.

Quantity. A contract may require production from a set number of acres or the delivery of pounds of biomass. If production from an acreage is specified, the grower is obligated to deliver all the crop produced on the identified acres in accordance with a “best efforts” or “best farming practices” measure of performance. Thus, if there is complete crop failure and the grower has utilized “best efforts” or utilized “best farming practices,” the grower is not liable for the shortfall and the buyer is not obligated to pay. Currently, litigation in Oregon involves claims surrounding a “best farming practices” clause. See <https://hempindustrydaily.com/oregon-hemp-production-lawsuits-may-offer-lessons-for-farmers/>.

Alternatively, a contract may contain a “passed acreage clause.” This clause allows the buyer to refuse acceptance of the entire crop produced from the designated acreage. This clause is common in vegetable contracts and may could be utilized in hemp contracts.

A contract could also be structured as an output contract where no quantity is specified, and the grower sells the entire output to the buyer.

Quality and crop conditions. A contract will likely set forth quality standards for the crop and how those quality standards are to be established. Related provisions will denote acts that can give rise to contract termination, the grower’s right to cure and whether the grower retains the right to sell the crop if a processor (buyer) rejects it.

A contract will likely contain language specifying the condition of the crop on delivery and the buyer’s right of inspection. A processor may require a sample from each load a grower brings in before accepting the crop. They may also want to specify the timeframe they have to inspect the crop to account for changes in the crop. For example, contract language may address the issue of crop rejection as well as applicable discounts if a delivered crop’s CBD content falls below the contract-specified percentage after delivery but before processing. This clause could also address any related pricing issues associated with the change in CBD or THC content from time of delivery to time of processing.

Force majeure events/cancellation provision. A force majeure provision allows a party to suspend or terminate its obligations when certain events happen beyond their control. Such a clause may be present in a contract involving hemp production with thought given to triggering events.

Other provisions. Additional contract clauses may address such matters as choice of law and dispute resolution.

Tax Issues

[I.R.C. §280E](#) limits income tax deductions for businesses that traffic in controlled substances to cost-of-goods-sold (COGS) as an adjustment to gross receipts. See also *C.C.A. 201504011 (Dec. 12, 2014)*. Because hemp is no longer a Schedule I controlled substance, the [I.R.C. §280E](#) limitations don't apply. While hemp producers and resellers must follow the inventory costing methods of Treas. Reg. §1.471, they are not subject to the uniform capitalization rules if average gross receipts are \$25 million or less (inflation-adjusted for years beginning after 2017) for the three preceding tax years and the business does not fall within the definition of a "tax shelter." Likewise, if these tests are met, the business need not calculate an [I.R.C. §263A](#) adjustment.

Conclusion

The removal of hemp as a federally controlled substance provides another crop growing option for growers to consider. However, the regulatory system governing hemp production is complex and involves both state and federal regulatory bodies. Contracts for hemp production also present unique issues. Economically, hemp production can be an addition to a farmer's common crop production routine or may serve as an alternative depending on anticipated net revenues. Is hemp the present-day equivalent of the Jerusalem Artichoke of the 1980s? Only time will tell.

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