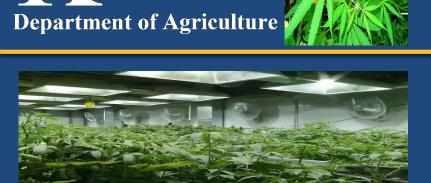


Industrial Hemp: The Road Ahead



Dana Ladner February 12, 2019

Industrial Hemp Working Group

• Current Members:

- Representative Willie Dove, 38th House District
- Kerri Ebert, K-State, Kansas Center for Sustainable Ag and Alternative Crops
- Representative Steven Johnson, 108th House District
- Jeff Ochampaugh, Agrilead, Inc.
- Kelly Rippel, Vice President, Kansans for Hemp
- Steve Schuler, Executive Director, Kansas Crop Improvement Association
- Dr. Andrew Tucker, Fort Hays State University, Agronomy
- Katie Whisman, Executive Office, Kansas Bureau of Investigation
- Representative Troy Waymaster, 109th House District
- Jeff Vogel, ex officio, Program Manager, Plant Protection, KDA

How We Got to the Law

- ✓ Passed by the Senate
- ✓ Passed by the House
- ✓ Signed by the Governor Officially became a law on April 20
- ✓ Published in the Kansas Register
 - Officially took effect on May 3
 - 2018 Kansas Session Laws Ch. 62
- ✓ Arranged and published as a statute by the Revisor of Statutes
 - K.S.A. 2-3901, K.S.A. 2-3902, K.S.A. 2-3903



What's in the Law

- Section 1 Definitions
- Section 2 The Meat of It All
 - The Department, alone or in coordination with a state educational institution, may cultivate industrial hemp grown from <u>certified</u> seed and promote the research and development of industrial hemp.
 - The Secretary will create an advisory board to review and recommend applications for pilot projects and research proposals.
 - The Department will oversee and license all individuals participating in the cultivation, growth, research, oversight, study, analysis, transportation, processing or distribution of certified seed or industrial hemp.

What's in the Law

- Section 2 The Meat of It All (continued)
 - The Department will require anyone seeking a license
 - To be fingerprinted
 - To submit to state and national criminal history record check
 - The Secretary will develop rules and regulations to carry out the provisions of the Alternative Crop Research Act.
 - The Department will submit a report to the legislature outlining the steps and timeline to implement a process that would allow individuals and businesses to grow and process industrial hemp in Kansas and to sell it in other states. (Submitted Jan. 2019)
 - Nothing in the Alternative Crop Research Act will allow anyone to violate any state or federal law.



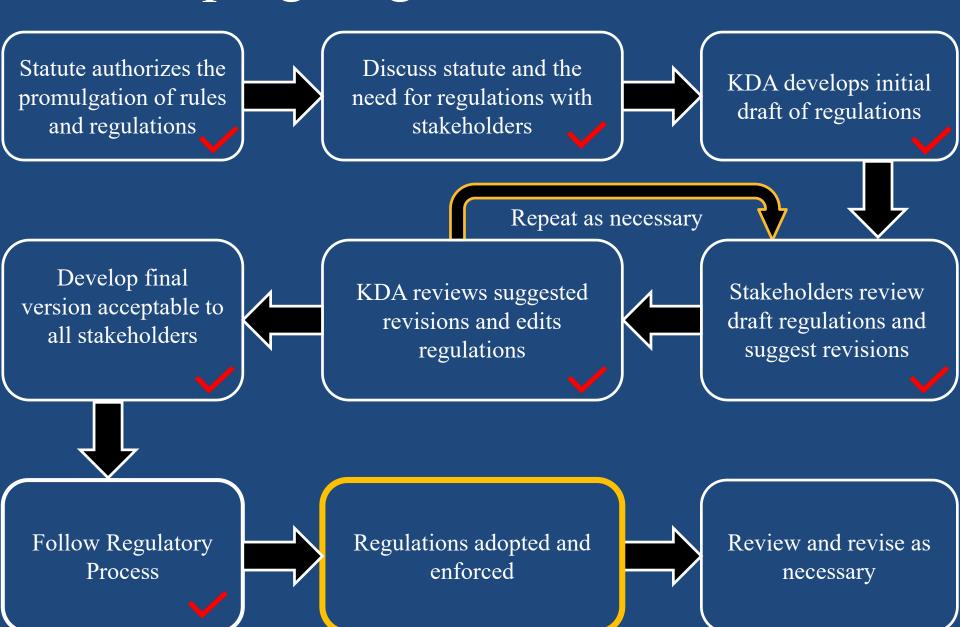
What's in the Law

- Section 3 Administrative
 - The state treasury has created the Alternative Crop
 Research Act Licensing Fee Fund to be administered by the
 Secretary.
 - Only the Secretary of Agriculture can spend money from the Alternative Crop Research Act Licensing Fee Fund.
 - The fees collected under the Alternative Crop Research Act will be deposited in the Alternative Crop Research Act Licensing Fee Fund.

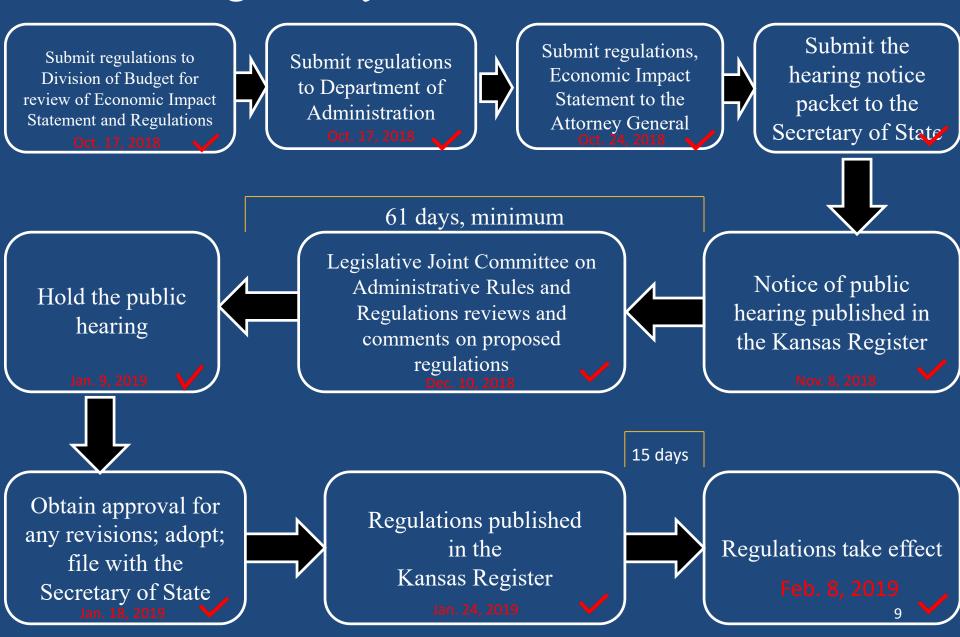
Research as Outlined by K.S.A. 2-3901, K.S.A. 2-3902, K.S.A. 2-3903

- Oversight and analysis of industrial hemp (IH) research and analysis of soils, growing conditions and harvest methods for the production of varieties of IH suitable for commercial hemp products.
- Analysis on the economic feasibility of developing an IH market in various types of IH that can be grown in Kansas.
- Analysis on the value-added benefits, including environmental, that the state would reap by having Kansas-grown IH varieties.
- A study on the worldwide agronomy research relating to IH varieties, production and utilization.
- A study on the feasibility of attracting funding for IH research.
- Pilot programs for economic development, research, cultivation, market analysis, manufacturing and transportation of IH and IH products.

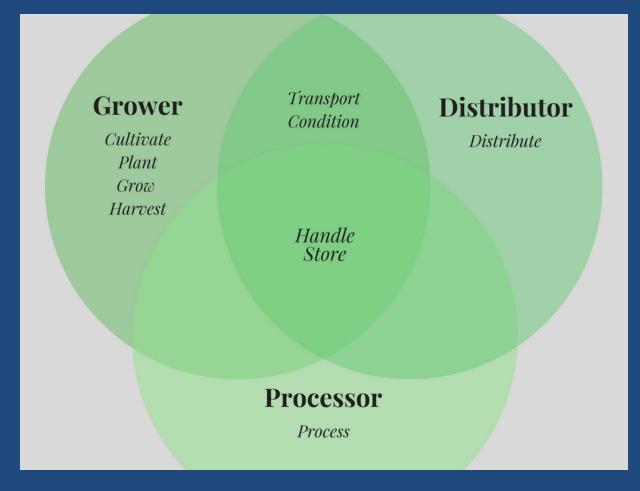
Developing Regulations



Kansas Regulatory Process

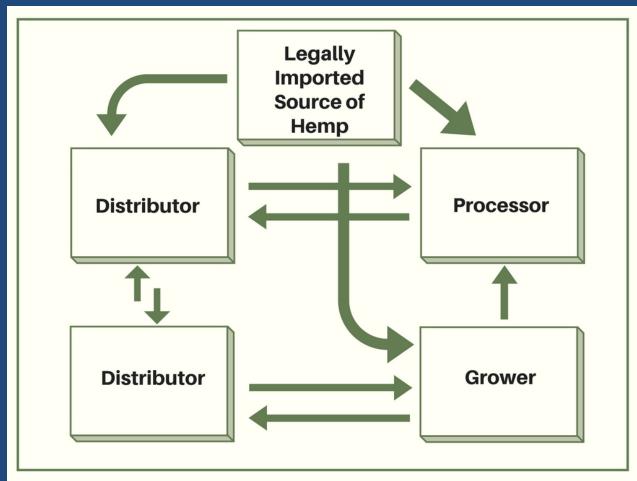


Activities Conducted by Licensees





Relationships Between Licensees



Regulations

- As determined by the Secretary with input from stakeholders including a
 working group committee May 11 public meeting, 5 working group
 meetings, an informal public comment period and public hearing.
 - License Approval Process
 - State Advisory Board
 - Requirements for Licensees
 - Grower, Distributor, Processor, Administrative License, State Education Institutions
 - Fee Schedule
 - Pre-and Post-Harvest Inspection, Sample Collection, Testing and Post-Testing Actions
 - Reports



Research License Application Approval Process

- Submit completed research license application, including research proposal
 - All individuals participating
 - Maps identifying location
 - Acknowledgments of restrictions
 - SARE Technical Bulletin, How to Conduct Research on Your Farm
- Submit to and pass the state and national criminal history record check
- Submit application fees
- Research license applications are reviewed by State Advisory
 Board and Secretary and are either denied or conditionally
 approved

Research License Application Approval Process

- If conditionally approved, applicant has 15 days to remit applicable license fees.
- Once license fees are received, the research license application shall be officially approved and the Department shall issue the appropriate licenses.
- Copies of each license issued will be forwarded to appropriate law enforcement agencies.
- Application are required to be submitted on an annual basis.
 - For the 2019 growing season, the deadline is March 1
 - For other growing seasons, the deadline is November 30



Ag Innovations Series

TECHNICAL BULLETIN

Peer-reviewed research findings and practical strategies for advancing sustainable agriculture systems



CONTENTS

Introduction
How to Develop an On-Farm Research Project
Basics of Experimental Design
Basic Statistical Analysis for On-Farm Research16
On-Farm Research for Pasture/ Livestock Systems
Other Types of Research Farmers Can Do

Available at: www.sare.org/research or order free hard copies at (301) 779-1007.



How to Conduct Research on Your Farm or Ranch

2^{NO} EDITION

Introduction

hen Rich Bennett returned to the family farm in the 1970s to help his father, he faced some significant challenges. Poor soils and increasing fertilizer costs were straining the farm's bottom line. As a result, he began looking into new ways of farming that could improve his land and also improve the profitability of the business. Eventually, he succeeded: After experimenting with lower commercial fertilizer rates and incorporating cover crops into his grain rotation, Bennett decided to frost-seed red clover into his wheat every winter to supply crop nutrients and enhance soil quality. In the process, he reduced his fertilizer costs by more than half.

When starting out, Bennett had his own ideas, and he gathered information from other sources, but in the end, what dictated the changes he eventually decided to make?

"Through on-farm research," Bennett said, "farmers gain insights into their own production system and how to produce for maximum profit, not yields." The value in on-farm research is that it provides reliable information you know will make a difference.

"Until you do research, you're really only guessing," said Vicki Stamback, an Oklahoma cutflower producer who received a grant from USDA's Sustainable Agriculture Research and EduInformation can be found at www.SARE.org



January 2017

State Advisory Board

- Members appointed by the Secretary of Agriculture
- Consists of no fewer than five and no more than nine members
- Reflects different geographic areas of the state equally, to the greatest extent possible
- Each member shall be recognized for knowledge and leadership in at least one of the following: crop research, industrial hemp production/processing, law enforcement, seed certification, or any other sector deemed important by the Secretary
- Each member is issued an administrative license



State Advisory Board

• Terms:

- Secretary will designate four members whose terms expire June 30, 2021, and the remaining on June 30, 2023.
- Limited to serving two terms.
- State board will advise the Secretary regarding pilot projects and research proposals.
- Other duties may include review of rules and regulations and recommended changes.



State Educational Institution

- State educational institution research license required for those volunteers, students or employees wishing to conduct industrial hemp research.
- Each individual with access to any research area must be listed on the research license application and pass the state and national criminal history record check.
- Applications, including research proposals, are reviewed solely by the Secretary.
- No fees imposed.
- Cannot subcontract with an individual for land use.



Administrative License

- Will be issued to
 - Employees of the designated certifying agency
 - KDA employees
 - Members of the State Advisory Board
- No application or license fees required
- Prior to licenses being issued, each individual shall undergo and pass the state and national criminal history record check.



Fees Schedule

Foo Type	Program Fees	Fee Due Date
Fee Type Application Fee	\$200 (nonrefundable)	At time application is submitted
License Fee – GROWER	\$1,000 License Fee (per licensed research section)	Within 15 days of receipt of notice of conditional approval
License Fee - DISTRIBUTOR	\$2,000 License Fee (per licensed research section)	Within 15 days of receipt of notice of conditional approval
PROCESSOR	 License Fee per Processing End-Use Fiber Processor - \$3,000 (per processing facility in each licensed research section or mobile processing facility) Grain Processor - \$3,000 (per processing facility in each licensed research section or mobile processing facility) Floral Material Processor - \$6,000 (per processing facility in each licensed research section or mobile processing facility) NOTE: License holders working with multiple harvestable components will be required to pay a fee for EACH component. Each license fee shall include one sample collection and one laboratory test 	Within 15 days of receipt of notice of conditional approval
Sampling Fee	\$45 per hour, plus transportation time and mileage	
Testing Fees Modification Fee	\$250 per laboratory test \$750 per requested change to license previously issued	

Pre-Harvest Inspection, Sample Collection, Testing, and Post-Testing Actions

- Licensee shall notify the department of harvest dates in pre-harvest report 30 days before harvesting.
- Department shall collect a sample of industrial hemp and initial testing requires no payment or additional fees.
 - Licensees can request separate samples be taken but requires additional sampling and testing fees.
- Sample tested to determine delta-9-tetrahydro cannabinol concentration (THC).
 - Must be 0.3% or less to warrant a passing report of analysis.
 - If higher than 0.3%, it warrants a failing report or analysis and testing results and location may be reported to KBI. If higher than 2.0%, testing results and location shall be reported to KBI.

Pre-Harvest Inspection, Sample Collection, Testing, and Post-Testing Actions

- Licensees shall receive a passing report analysis prior to harvesting and has 10 days to fully harvest industrial hemp after issuance of passing report of analysis.
- If licensee receives a failing report of analysis:
 - Licensee may request a subsequent pre-harvest sample and pay sampling and testing fees or licensee shall destroy all industrial hemp within seven days.



Post-Harvest Inspection, Sample Collection, Testing, and Post-Testing Actions

- The department may conduct inspections any time after harvest.
- Same requirements and pre-harvest inspection.
- If a sample is collected, the licensee must be issued a passing report of analysis to handle, condition, distribute, transport or process the sampled industrial hemp plants, plant parts, grain or seeds.



Harvest Certificate

- No more than five days after the licensee completes harvest of industrial hemp, the licensee shall notify the department that harvest has been completed.
- The department shall not issue a harvest certificate until the following information is provided:
 - The official name of the industrial hemp variety that was cultivated, planted or grown.
 - Each date the licensee harvested the industrial hemp plants, plant parts, grain or seeds.



Harvest Certificate

- The global positioning system coordinates for each
 research area where the industrial hemp was harvested.
- A statement of **intended end-use** for all industrial hemp harvested.
- After harvest, a copy of the harvest certificate shall accompany the industrial hemp plants, plant parts, grain or seeds.



Reports

- Research License Application Applicants
 - For the 2019 growing season, the deadline is March 1.
 - For other growing seasons, the deadline is November 30.
- **Field Planting Report** Licensed research growers within 15 days after every planting.
- Voluntary Withdrawal Report Licensed research growers
 - On or before June 1 if no industrial hemp was planted or
 - Within 15 days if a licensee conducts a voluntary destruction.



Reports Continued

- **Pre-Harvest Report** Licensed research growers at least 30 days prior to intended harvest dates
- **Production Report** Licensed research growers within 30 days after last harvest date for every harvest
- **Distribution Report** Licensed research distributors by November 30
- **Processing Report** Licensed research processors by November 30
- **Research Report** All licensees by November 30



Information to Gather Now If Planning to Participate

- Names of all individuals involved with the growing, distributing or processing of industrial hemp.
- GPS coordinates of fields and buildings associated with specific license type.
- Know the intended end-use of product.
- Pencil out research proposal.

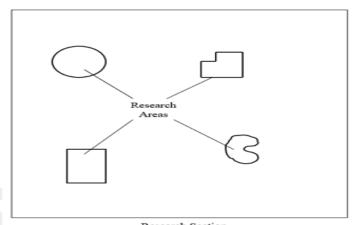


Identifying License Areas

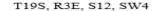
Example of Required Maps for Research Sections

Difference between

Research Areas and Licensed Research Section



Research Section



Research Are
West Field
6 acres
38.12345
-97.12345

Building 1 Industrial Hemp Storage 1,700 sq ft 38.12351 -97.12353

Research Area
Home Field
7 acres
38.12345
07 11004

Building 2 Transportation Storage 800 sq ft 38.12347 -97.12034

Research Area 3 East Field 14 acres 38.12356 -97.08346





Research Proposal

Research Proposal Instructions:

- Complete the following sections, either by utilizing the fillable form or by providing your answers on a separate page(s). Handwritten submissions are strongly discouraged.
- If answering on a separate document, please label each section (A-F).
- Be concise: Your research proposal should be as concise as possible; not to exceed 2 pages total.
- For more information on how to write a research proposal, please see the Technical Bulletin on How to Conduct Research on Your Farm or Ranch by visiting https://www.sare.org/Learning-Center/Bulletins/How-to-Conduct-Research-on-Your-Farm-or-Ranch.

ECTION A: Identify your research question and objective, including a statement of the type	of research to be
onducted and its purpose.	
CCTION B: Identify your experimental design.	



Research Proposal

	Explain what will be measured and what data will be collected.
	Explain how the project will be implemented, including location and size of your anticipated
search area	s (in acres or square feet), duration of your research operations, and variety of industrial hemp the
ill be used i	in your research.
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Research Proposal

SECTION E: Explain how research data will be collected, recorded and analyzed.	
	_
SECTION E. Fundin Landa des villa international de la constitución de	_
SECTION F: Explain how the data will be interpreted and how conclusions will be drawn, including	
anticipated results.	
·	



Growing Season 2019

- Growing season 2019 stands with rules and regulations as presented.
- KDA cannot make rules and regulations that are not aligned with state statute.
- KSA 2-3902 (c) and (d) requires:
- (c) The department shall oversee and annually license <u>all individuals</u> <u>participating in the cultivation, growth, research, oversight, study, analysis, transportation, processing or distribution</u> of certified seed or industrial hemp pursuant to this act. The department shall establish fees for licenses, license renewals and other necessary expenses to defray the cost of implementing and operating the alternative crop research act in this state on an ongoing basis.



Growing Season 2019

(d) (1) The department shall require, as a qualification for initial or continuing licensure, all individuals seeking a license or license renewal under this act to be fingerprinted and to submit to a state and national criminal history record check. The fingerprints shall be used to identify the individual and to determine whether the individual has a record of criminal history in this state or any other jurisdiction. The department is authorized to submit the fingerprints to the Kansas bureau of investigation and the federal bureau of investigation for a state and national criminal history record check. The department may use the information obtained from fingerprinting and the criminal history record check for purposes of verifying the identification of the individual and for making an official determination of the qualifications for initial or continuing licensure pursuant to this act and rules and regulations promulgated pursuant to this act. Disclosure or use of any information received by the department for any purpose other than the purpose provided for in this section shall be a class A misdemeanor and shall constitute grounds for removal from office or termination of employment.

2019 Application





2019 Application





Expand all

- Submit together in one mailing:
- Send to:
- Deadline: March 1
- State and National Criminal History Background Check
- What if I submitted a Pre-Application and Pre-Application Research Proposal?
- Guidelines for Filling Out Research License Applications
- Important Deadlines

PROGRAM FEES: WHEN AND HOW TO PAY

Expand all

- Application Fee
- Background Check fee
- License Fee
- Payment Options

REQUEST FOR PERMISSION FORMS

Expand all

- Request for Permission
- Request for Permission to Use Unapproved Variety



APPLICATION REVIEW PROCESS

- Complete application arrives at KDA (including the application, research proposal, fingerprint cards, waivers, and applicable fees).
- Fingerprint cards and waivers will be sent immediately to the Kansas Bureau of Investigation to begin the state and national criminal history check. The background check is expected to take 7-10 business days.
- Complete applications will be reviewed by administrative staff at KDA to ensure they meet all program requirements.
- 4. When the results have been received from the KBI, complete applications will be reviewed by the Industrial Hemp Advisory Board and a recommendation will be made to the Secretary of Agriculture, who will then either approve or deny the application for licensure.
- 5. If the Secretary approves the application, you will be notified that you have been conditionally approved and you will be required to send in the applicable license fee.
- Your license fee is due within 15 days of being notified of your conditional approval. If you do not pay the license fee within 15 days, your conditional approval shall be terminated, and your requested licenses shall not be issued. Full List of Program Fees
- 7. Once your license fee is received, your license will be issued.
- 8. See this table of Industrial Hemp Important Deadlines for additional dates which will apply to licensed participants of the Industrial Hemp Research Program

* Watch your email! The primary method of communication throughout this process will be via email.



Kansas Industrial Hemp Research Program						
Request for Permission						
Application Type: Distributor Processor State Educational Institution						
Intended End Use: Seed / Grain Floral Material Fiber						
As an applicant to be a Primary Licensee in the Kansas Industrial Hemp Research Program, I would like to request permission to: (only one request per form)						
Cultivate, plant, grow, handle, harvest, condition, store, distribute or process industrial hemp plants, plant parts, grain or seeds in or within 50 feet of a residential structure. Cultivate, plant, grow, handle, harvest, condition, store, distribute or process industrial hemp plants, plant parts, grain or seeds within one-quarter mile of any public or private K-12 school or public recreational area. Voluntarily withdraw from the industrial hemp research program after providing the department less than 30 days' notice of my intended withdrawal date. Cultivate, plant, grow, harvest or condition more than one approved variety of industrial hemp in a research area.						
As an applicant under a state educational institution research license, I would like to request permission to:						
Store or distribute industrial hemp plants, plant parts, grain or seeds cultivated or grown under the license of another licensee.						
Provide justification for the request selected above. Attach additional pages if necessary. The Secretary of Agriculture may deny your request for a lack of justification or for any other reason.						



Kansas Industrial Hemp Research Program

Request for Permission to Use Unapproved Industrial Hemp Variety

Individuals applying to be a primary licensee in the Kansas Department of Agriculture's (KDA) Industrial Hemp Research Program must obtain written permission from the Kansas Secretary of Agriculture before using a variety of industrial hemp that is not currently on KDA's Approved Varieties list in their research project. Fill out and sign this form as indicated below to request permission to use an unapproved variety of industrial hemp.

This form **must** be attached to the Kansas Industrial Hemp Research Program application which states the intended use of the unapproved variety of industrial hemp proposed to be used. *Request for Permission to Use Unapproved Industrial Hemp Variety* forms that are not attached to an application or not attached to the proper application may not be considered for permission, and Kansas Industrial Hemp Research Program applications that state the intended use of an unapproved variety without an attached *Request for Permission to Use Unapproved Industrial Hemp Variety* form listing the stated variety may **not** be considered for approval.

Application Type:	Grower	Distributor	Processor	State Educational Institution					
Variety: NOTE: List only one variety per form.									
Intended End Use:	See	d / Grain	Floral Materia	al Fiber					



This variety of industrial hemp has been successfully shown to produce the above indicated end-use industrial hemp product that contains a delta-9 tetrahydrocannabinol concentration of no
more than 0.3% on a dry weight basis. I have attached supporting documentation that illustrates: The plant was tested for delta-9 tetrahydrocannabinol concentration on a dry-weight basis
Proof of certification to AOSCA standards
The certification of the testing lab The part of the plant that was tested
The results of the test
This variety of industrial hemp has not been successfully shown to produce the above indicated end-use industrial hemp product that contains a delta-9 tetrahydrocannabinol
concentration of no more than 0.3% on a dry weight basis.



Potential Business Opportunities







Distributor

• Distribute, transport, condition, handle, store, sell seed





Types of Processors

Fiber processor

- Biomass
- Building materials, fabrics, animal bedding, injected molds, plastics





Types of Processors

- Grain processor
 - Hemp seed oil, hulled seed, hemp protein, hemp fiber





Types of Processors

- Floral processor
 - Cannabidiol (CBD) products



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Licensing Guide

✓	Department	Description	Renewal
	Office of the Secretary of State	Complete the appropriate business entity <u>filings and forms</u> required by the Kansas Secretary of State. Call (785) 296-4564 for more information.	Prior to starting
	www.kssos.org		
	Department of Revenue	Visit the Department of Revenue website to find important <u>business tax information</u> . Call (785) 368-8222 for more information.	Prior to starting
	www.ksrevenue.org		
	Department of Agriculture —Plant Protection and Weed Control www.agriculture.ks.gov	Individuals who would like to be considered for participation in the Kansas Industrial Hemp Research Pilot Program must complete and submit a Grower License Application, Distributor License Application and/or a Processor License Application. (hyperlinks to be added later) Individuals who would like to be considered for participation in the Kansas program as a State Educational Institution must complete and submit the State Educational Institution License Application. (hyperlink to be added later) The KDA Industrial Hemp Research Pilot Program involves research that will promote the development of the future commercial production of industrial hemp. Each program applicant must submit a project research plan to be approved to become part of the KDA pilot program.	March 1, 2019
		For more information, review the <u>Industrial Hemp</u> webpage or call (785) 564-6698.	
	Kansas Bureau of Investigation www.kansas.gov/kbi/	Before conditional approval will be granted, each individual listed on the application must be fingerprinted and submit to a state and national criminal history record check, which shall be performed by the Kansas Bureau of Investigation (KBI). The criminal history record check must be received and reviewed by KDA. Applicants must submit to a criminal history record check no more than 30 days prior to submitting their research license application to the department.	
	Kansas Crop Improvement Association (KCIA) www.kscrop.com	Kansas Crop Improvement Association (KCIA) is the official state certification agency for the certification of seeds or other plant parts for the use of plant propagation. For more information, visit the KCIA website or call (785) 532-6118. Only certain varieties of industrial hemp may be cultivated, planted, grown, handled, harvested, stored, distributed, transported or processed in this state in accordance with the Industrial Hemp Research Program. For more information, review the Approved Varieties of Industrial Hemp for Planting.	



Questions?

Compliance Education

Dana Ladner

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Dana.Ladner@ks.gov

Agribusiness Development
Abby Works
785-564-6757
Abby.Works@ks.gov

Plant Protection and Weed Control 785-564-6700 kda.industrialhemp@ks.gov

