



## Illicit Marijuana Disguised as Hemp

Date: July 2020

### Executive Summary

The Midwest High Intensity Drug Trafficking Area (HIDTA) prepared this document to provide law enforcement with information regarding the current state of industrial hemp across the Midwest HIDTA following the passage of the *Agriculture Improvement Act of 2018*. Anecdotal reports from law enforcement within the Midwest HIDTA have found that alleged hemp transporters have alluded to legal recourse should their shipment be impeded or seized by law enforcement. Law enforcement officers are encouraged to use the resources (see appendices) within this document to determine the validity of any permits and accompanying paperwork presented to them by alleged hemp transporters.

In December 2018, Congress passed the *Agriculture Improvement Act of 2018* (also known as the 2018 Farm Bill), which legalized the production, cultivation, and retail sale of industrial hemp. As of mid-2020, all states within the Midwest HIDTA have opted to participate in industrial hemp cultivation. There have been at least four instances of drug traffickers smuggling illicit marijuana under the guise of industrial hemp in the time since the bill's passing, either comingling marijuana with industrial hemp shipments or by falsifying documents in an effort to disguise marijuana as legal hemp. At least two of these instances have occurred within the boundary of the Midwest HIDTA. This document has identified several challenges that industrial hemp legalization has presented to law enforcement. It is very difficult to discern between marijuana and hemp based on visual inspection alone; more often than not, laboratory tests are needed for confirmation. Few state forensics laboratories in the Midwest HIDTA have the capability to conduct delta-9-Tetrahydrocannabinol (THC) quantitative analysis, leading to long turnaround times for laboratory submissions. Narcotic detecting canines are unable to distinguish between illicit marijuana and industrial hemp, rendering the identification of marijuana from hemp by a means other than laboratory analysis ineffective.

## Hemp vs. Marijuana

Both industrial hemp and marijuana are broad classifications of the cannabis plant. The Agricultural Marketing Act of 1946, for which the Farm Bill derives its definition of hemp, defines hemp as “the plant *Cannabis sativa* L. and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a THC concentration of not more than 0.3 percent on a dry weight basis.” (United States Senate Committee on Agriculture, Nutrition & Forestry, *Agriculture Marketing Act of 1946 Sec. 297A*, 2018) Hemp is primarily used to describe non-intoxicating strains of cannabis that are harvested for industrial uses and, more recently, cannabidiol (CBD) extraction. CBD is a chemical compound extracted from the cannabis sativa plant that is marketed for the ostensible treatment of certain ailments, including anxiety, chronic pain, depression, and certain types of cancer.<sup>1 2 3</sup> Industrial hemp is used for the production of items such as paper, textiles, biodegradable plastics, and fuel.<sup>4</sup>

“Marijuana” is defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970 as “all parts of the plant *Cannabis sativa* L., whether growing or not; the seeds thereof; the resin extracted from any part of such plant; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds or resin.” (Senate and House of Representatives of the United States of America, *Comprehensive Drug Abuse Prevention and Control Act* 1970). Marijuana is a Schedule I controlled substance and any product containing THC levels greater than 0.3% is considered illegal under Federal law.

## Overview of the Agriculture Improvement Act

In December 2018, Congress passed the final version of the Agriculture Improvement Act of 2018. Also referred to as the “Farm Bill”, it reclassified industrial hemp as cannabis containing 0.3% or less of THC, removing it from the Controlled Substances Act. Industrial hemp is a variety of the cannabis sativa plant that contains much lower levels of the psychoactive chemical THC than are found in marijuana. Industrial hemp grown for commercial sale must, by law, contain no more than 0.3% THC, though there is an exemption for hemp grown for research purposes. Effective October 31, 2019 through November 1, 2020, the United States Department of Agriculture’s (USDA) Agricultural Marketing Service released its interim final rule that outlined how states and Indian Nations may submit plans that will enable producers to grow hemp in their areas.

State and tribal plans contain individualized provisions governing the production, cultivation, transportation, and retail distribution of hemp. All plans require approval from the USDA prior to implementation. The USDA did not include specific guidelines or templates for state use when drafting official forms for hemp production, transportation, or sale. All paperwork and accompanying documents regarding industrial hemp provisions will vary from state to state, further complicating enforcement efforts and providing more opportunities for drug trafficking organizations to leverage this lack of consistency in their favor when smuggling loads of illicit marijuana.

## Interstate Commerce and Hemp Transportation:

The 2018 Farm Bill reclassified industrial hemp as an agricultural commodity and removed it from the list of federally controlled substances. As such, industrial hemp may now be transported across state lines and tribal territories. Moreover, the 2018 Farm Bill claims that “no state or Indian Tribe shall prohibit the transportation of hemp or hemp products” regardless of local laws that may ordinarily prohibit the transportation of hemp within state or tribal boundaries.<sup>5</sup> Transporters of hemp are required to maintain bills of lading that meet the requirements of the origin and destination state plans. More information on each of the state transportation requirements for hemp can be found in the “Midwest HIDTA State Overview” section (although if a shipment of hemp originating outside of the Midwest HIDTA is encountered, transportation requirements should be available on that state’s department of agriculture website). Hemp transporters may also carry testing certificates of their cargo verifying that the hemp being transported does not exceed the acceptable THC limits. As noted earlier, these documents are subject to fraudulent use by drug traffickers.

## Concerns with Industrial Hemp

### Visual Similarities

The most obvious challenge presented to law enforcement by industrial hemp is its resemblance to illicit and more potent marijuana. Figures 1 and 2 below illustrate the similarities between the two plants, while Figure 3 depicts two different illicit marijuana strains: Cannabis Indica and Cannabis Sativa. To generalize, hemp leaves tend to appear skinny and long, while marijuana leaves often appear much broader. Additionally, hemp plants are usually tall and thin with most of the leaves clustered near the top while marijuana plants are often stockier and exhibit a bush-like appearance. When law enforcement intercept large quantities of cannabis on interstate highways, the visual similarities make it nearly impossible determine whether the shipment is legitimate.



Figure 1: A mature industrial hemp plant.



Figure 2: A mature illicit marijuana plant.



Figure 3: Leaves from mature Cannabis Indica (left) and Cannabis Sativa (right) plants.

As an agricultural crop, hemp is produced for two main purposes: Cannabidiol (CBD) extraction and industrial use. Hemp that is grown for CBD extraction may bear a striking similarity to marijuana. As the highest concentrations of CBD are sourced from non-psychoactive cannabis flower, growers aim to maximize flower size, similar to growers of marijuana. Hemp plants grown for industrial purposes, however, are typically taller with longer leaves and less flower.

### **Narcotics Detection Police Canines**

Similar to visual inspection, police canines trained to alert on marijuana will be unable to distinguish between marijuana and industrial hemp.<sup>6</sup> The same terpenes in marijuana are also present in hemp. Terpenes are the aromatic oils secreted from the various glands within the plant which give marijuana its distinctive odor. While terpenes are primarily produced within the flower, they are also present within leaves, fiber, and root.<sup>7</sup>

### **Fraudulent Laboratory Certificates**

According to the Department of Agriculture for each state within Midwest HIDTA, legal documentation must accompany any legal hemp shipment. Unfortunately, the documentation itself is easy to forge. The lack of a nationally standardized template from the USDA furthers the possibility of counterfeit paperwork. By simply entering “hemp laboratory certificate of analysis” in an online search engine, drug traffickers have access to thousands of templates which can be altered to mislead law enforcement into believing their shipment is legitimate. Appendix 1 depicts a generic certificate of analysis found online. In at least one incident involving a Midwest HIDTA-based law enforcement encounter with a bulk shipment of marijuana, the driver presented the officer with what appeared to be a legitimate laboratory certificate of analysis. Later that day, the officer searched through Google images for examples of laboratory certificates only to find the exact same one used by the individual during the stop earlier.

## THC Testing

As hemp and marijuana are both of the genus *Cannabaceae*, both contain varying levels of THC. Although hemp is defined as having a THC level of no greater than 0.3%, laboratory testing is the only way to differentiate between the two. This renders the use of current roadside tests ineffective, which only indicate the presence of THC. Gas chromatography-mass spectrometry (GC-MS) and high-performance liquid chromatography (HPLC) are the two most commonly used laboratory methods for quantifying the THC content of marijuana, although only the GC-MS method is used within the Midwest HIDTA.<sup>A B</sup> More laboratories throughout the Midwest HIDTA are currently in the process of procuring THC testing equipment, although the timeline until these laboratories have full testing capability is unknown due to the cost of this equipment and the certification required to operate the equipment.



Figure 3. A Nartec MH-21 Marijuana Test Kit, formerly used by MSHP.

## THC Stability

Once a marijuana or hemp plant is harvested, the THC levels begin to degrade. The rate of degradation varies and is dependent upon numerous factors such as temperature, humidity, ultraviolet light exposure, and oxygen levels. This poses yet another challenge to law enforcement when distinguishing between illicit marijuana and industrial hemp. Due to the high number of submissions, most crime laboratories have a turnaround time ranging from several weeks to several months. The longer the sample awaits analytical testing, the greater the chance of THC degradation.

A 1999 study funded by the National Institute on Drug Abuse examined the concentration of cannabinalol (CBN) and THC in marijuana of different varieties stored at room temperature over a four-year period to determine how THC levels changed over time.<sup>8</sup> The study found that the THC levels of the marijuana samples decreased from its original amount by an average of 16.6% after one year. The study also found that after two years, the THC content decreased by 26.8% and after three years, it decreased by 34.5%. The results of the study also indicated that marijuana samples with high THC levels tended to have a quicker degradation rate than less-potent samples.

<sup>A</sup> Only the GC-MS method is used in the MW HIDTA due to the excessive costs surrounding THC quantity testing equipment and technician certification training.

<sup>B</sup> The MW HIDTA reached out to state drug labs in each of its six states to determine the methods used to quantify THC.

## Midwest HIDTA State Overview

All six states within the Midwest HIDTA have opted to participate in the industrial hemp program. Each state's department of agriculture is responsible for managing this program.

| Iowa  | Kansas  | Missouri  | Nebraska  | North Dakota                                      | South Dakota  |
|---|---|---|---|---|---|
| Received plan approval from the USDA in March 2020. | Received plan approval from the USDA in April 2020. | Will continue to operate under 2014 pilot program | Received plan approval from the USDA in January 2020. | Will continue to operate under 2014 pilot program | State plan pending USDA approval.                                 |
| 30 Industrial Hemp Licenses issued                  | 211 Hemp Grower Licenses issued                     | 68 Hemp Seed Permits issued                       | 73 Cultivator Licenses issued                         | 57 Hemp Producer Licenses issued                  | No Hemp Producer or Processor Licenses are available for viewing. |
| 49 Hemp Seed Permits issued                         | 24 Hemp Processor Licenses issued                   | 165 Producer Registrations issued                 | 13 Processor/Handler Licenses issued                  | 12 Hemp Processor Licenses issued                 |   |
|   | 21 Hemp Distributor Licenses issued                 |   | 7 Broker Licenses issued                              |   |   |

### Iowa

The USDA approved the Iowa Hemp Act in March 2020 and established the Iowa Department of Agriculture and Land Stewardship (IDA) as the primary regulatory authority. The act legalized the production, processing, and marketing of many, but not all, hemp products in Iowa.<sup>9</sup> The act does not legalize the use of CBD for human consumption, extraction, or processing in Iowa. Farmers can now apply for a license to grow hemp during the 2020 growing season and are permitted to grow up to 40 acres of hemp. A list of all licensees is available on the IDA's website, a link to which is included in Appendix 2.

When transporting hemp cultivated under the Iowa Hemp Act, the individual must carry a bill of lading that includes the following information:

- the name and address of the owner of the hemp;
- the point of origin and delivery;
- the kind and quantity of packages or, if bulk, the total quantity of hemp in shipment; and
- the date of shipment.

In addition to IDA-approved licensees, the USDA has also approved the tribal hemp plan of the Sac and Fox Tribe of the Mississippi. This plan authorizes the aforementioned tribe to oversee and regulate the cultivation of hemp on their territory in compliance with federal and Tribal law. The Farm Bill requires that any tribe that wishes to cultivate hemp within their boundaries, regardless of state, must submit a plan to the USDA and receive approval prior to implementation of said hemp program. Additionally, the contact information for all registered growers, producers, and transporters must be reported to the USDA in real-time. A legal description of the land on which the hemp is grown must also be reported to the USDA.

## **Kansas**

Kansas' Commercial Industrial Hemp Program was approved by the USDA in April 2020. In accordance with the timeline of the formal adoption process, the plan is anticipated to be finalized no earlier than fall 2020. Until then, the industrial hemp industry will continue to operate under Industrial Hemp Research Program regulations. Under Kansas' hemp plan, the cultivation, growth, research, transportation, procession, and distribution of industrial hemp or industrial hemp seed is only allowed with a specialized license. A list of all licensees is available on the Kansas Department of Agriculture's website, a link to which is included in Appendix 2.

A signed bill of lading must accompany any unprocessed hemp in transport within Kansas. The bill must contain the following information:

- the licensee's license number;
- the total quantity of hemp transferred;
- the date the transfer occurred; and
- the name of the person acquiring the hemp.

In addition to KDA-approved licensees, the USDA has also approved the hemp plans of two Indian Nations: the Prairie Band Potawatomi Nation and the Iowa Tribe of Kansas. These plans give each of the tribes the authority to govern the cultivation of hemp within their respective territories.

## **Missouri**

Under an allowable USDA extension, the Missouri Department of Agriculture (MDA) will allow registered individuals to participate in the 2020 growing season even though Missouri has not submitted an official state plan to the USDA. Missouri is required to adopt Federal Interim Final Rule requirements after October 31, 2020. Upon approval of the MDA's state plan, Missouri will have a Hemp Plant Monitoring System that will contain a list of registered producers and permits. The current list of all licensees is available on the MDA's website, a link to which is included in Appendix 2.

In order to transport hemp within Missouri, any registered producer, permit holder, or their agent must include the following information with their shipment:

- A copy of their valid producer registration or agricultural hemp propagule and seed permit;
- A certificate of laboratory analysis for each lot in transport;
- A bill of lading, if applicable; and
- A chain of custody form.

Third-party commercial transportation of viable industrial hemp is exempt from the registration and permit requirements, although third parties must have the other required documentation in order to legally transport the load.

## **Nebraska**

Federal officials approved the Nebraska Hemp Farming Act in January 2020 and granted primary regulatory authority to the Nebraska Department of Agriculture (NDA). The NDA has approved license holders for the 2020 growing season. According to the plan, the NDA requires separate licenses to grow, process, and broker industrial hemp. A list of all licensees is available on the NDA's website, a link to which is included in Appendix 2. When transporting hemp cultivated under the Nebraska Hemp Farming Act, cultivators and processors are required to carry a copy of their license and a copy of the test results showing an acceptable THC level. Acceptable THC levels are determined by the NDA via sample testing.

In addition to NDA-approved licensees, the USDA has also approved the Winnebago Tribe of Nebraska's Tribal Hemp Plan. Under this plan, the Winnebago Tribe of Nebraska is authorized to regulate the cultivation and sale of hemp in compliance with federal and Tribal law. The Yankton Tribe is currently drafting a plan for USDA review.<sup>10</sup>

## **North Dakota**

The North Dakota Department of Agriculture (NDDA) is currently reviewing North Dakota's hemp program plan, but the USDA has approved the state to continue operating under its 2014 pilot program. Under this program, the NDDA requires separate licenses to produce and process industrial hemp. A list of licensees is available on the NDDA website, a link to which can be found in Appendix 2.

The USDA has also approved the tribal hemp plans of the Turtle Mountain Band of Chippewa Indians and the Standing Rock Sioux Tribe. The approval of these plans authorize each of the tribes to oversee the cultivation of industrial hemp in their respective territories.

## **South Dakota**

South Dakota legalized its industrial hemp bill in March 2020.<sup>11</sup> Industrial hemp producers must wait until the USDA has approved South Dakota's hemp plan, which is estimated to occur in late 2020. Under the program, the South Dakota Department of Agriculture will oversee the implementation and regulation of industrial hemp cultivation. Once approved by the USDA, separate licenses will be required to grow and process industrial hemp. As South Dakota's industrial hemp program is awaiting USDA approval, no authorized grower or processor permits have been made available.

Currently, five Indian Nations in South Dakota have received approval from the USDA to cultivate industrial hemp. The approved tribes are as follows: the Sisseton-Wahpeton, Cheyenne River Sioux, Oglala Sioux, Rosebud Sioux, and Flandreau Santee.



## Case Studies of Marijuana Trafficked as Hemp

In March 2019, a semi-trailer transporting 16,000 pounds of marijuana was stopped at a weigh station near the Arkansas-Oklahoma border by the 27<sup>th</sup> Judicial District Drug Task Force and the Sequoyah County Sheriff's Office (Oklahoma). The semi-trailer was described as new and absent of the required Department of Transportation numbers. According to one of the officers, the required log books appeared to be forged. A narcotics detecting canine was deployed and alerted on the trailer. Law enforcement discovered 46 large bags labeled as "hemp", each weighing between 250 and 350 pounds. After a thorough laboratory analysis, the levels of THC found in the shipment were found to be extraordinarily high and not considered hemp.<sup>12 13</sup>

In June 2019, the Missouri State Highway Patrol stopped a vehicle for a traffic violation. The officer noticed the odor of marijuana upon contacting the driver and observed marijuana plants in the vehicle's front floorboard. A probable cause search revealed nearly 800 marijuana plants (in seedling form), two pounds of THC oil, 30 grams of processed marijuana, and various fertilizing equipment. The driver presented licensing paperwork which showed a license to grow hemp in Maine, dated 2019. They also had paperwork documenting a laboratory testing by the Colorado Department of Agriculture, showing a test from 2018 which indicated a THC value of less than 0.3%. The driver was unable to present paperwork for the current plants and did not possess a receipt indicating they were related to the companies in either of the aforementioned documents, neither of which listed him as a licensed hemp grower.<sup>14</sup>

In October 2019, the Kern County Sheriff's Office (California) executed a search warrant at eleven different fields in the Arvin, California area after receiving information that a hemp cultivation site was deliberately cultivating marijuana. Investigators ultimately seized and eradicated approximately 10 million marijuana plants, with an estimated value of over \$1 billion on the black market. The Kern County Sheriff's Office determined that the illicit marijuana growers were operating under the guise of legitimate hemp production.<sup>15</sup> The company overseeing the growing operation argues that they are allowed to cultivate cannabis above the 0.3% THC limit, although the investigation is ongoing.

In May 2020, the Missouri State Highway Patrol conducted a traffic stop on a vehicle for a traffic violation. The officer noticed numerous indicators of criminal activity during the course of the traffic stop and asked the driver for permission to search the vehicle. The search yielded approximately 50 pounds of marijuana contained in multiple vacuum-sealed bags. The driver initially claimed that their cargo was industrial hemp, though further investigation disproved the claim.<sup>16</sup>

## Options for Law Enforcement When Encountering Hemp

As mentioned previously, distinguishing between industrial hemp and illicit marijuana may be very difficult, especially during a traffic stop. The Farm Bill has rendered both current marijuana field tests and narcotics detection canines insufficient in distinguishing between marijuana and hemp. Short of sending cannabis samples away for laboratory qualitative analysis, law enforcement may rely upon the following steps in the event they encounter a shipment of suspected marijuana:

- Request copies of the required documents that accompany any hemp shipment;
- Verify the approximate number of plants in the shipment;
- Verify that the plants in the cargo all look similar to each other to rule out the possibility that illicit marijuana isn't concealed within the load;
- Contact the seller to determine if the cargo matches that of the description;
- Contact the receiver to determine if the cargo matches that of the description;
- View the laboratory report to ensure the cargo doesn't exceed the allowable THC limit of 0.3%.

If law enforcement wishes to verify any further details of the shipment, they can access the contact information (online resource) in Appendix 2 to ensure the legitimacy of the cargo. Law enforcement may also contact representatives of each state's department of agriculture to verify hemp grow locations, a list of which is available in Appendix 3.

**For further information or to report any related information , please contact:**

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Appendices

Appendix 1: Sample Certificate of Analysis for Industrial Hemp

**[Redacted]  
Laboratories**

Sample Name:  
Sample ID:  
Sample Type:  
Tested For:  
Sample Size:  
Date Tested:

## Certificate of Analysis

**Potency Test Results**

|                    | mg/g | %    |
|--------------------|------|------|
| Total Cannabinoids | 48.8 | 4.88 |
| Total THC          | ND   | ND   |
| THC                | ND   | ND   |
| THCa               | ND   | ND   |
| THCV               | ND   | ND   |
| Total CBD          | 43.3 | 4.33 |
| CBD                | 17.7 | 1.77 |
| CBDa               | 26.2 | 2.62 |
| CBN                | 1.78 | 0.17 |
| CBG                | 1.52 | 0.15 |
| CBGa               | ND   | ND   |
| CBC                | 2.27 | 0.23 |

**Terpene Test Results**

|                     | mg/g |
|---------------------|------|
| Terpinolene         | 0.35 |
| Linalool            | 1.31 |
| (-)-Isopulegol      | 0.35 |
| Geraniol            | 0.35 |
| beta-Caryophyllene  | 0.01 |
| alpha-Humulene      | ND   |
| (-)-Guaiol          | ND   |
| Nerolidol 1         | ND   |
| Nerolidol 2         | ND   |
| (-)-alpha-Bisabolol | ND   |
| Total Terpenes      | 3.28 |
| alpha-Pinene        | 0.02 |
| Camphene            | 0.08 |
| beta-Myrcene        | 0.03 |
| (-)-beta-Pinene     | 0.04 |
| delta-3-Carene      | ND   |
| alpha-Terpinene     | 0.02 |
| Ocimene             | 0.11 |
| d-Limonene          | 0.44 |
| p-cymene            | ND   |
| gamma-Terpinene     | 0.17 |

**Pesticide Test Results**

|                  |      |
|------------------|------|
| Carbamates       | Pass |
| Heavy Metals     | Pass |
| Organophosphates | Pass |

**Residual Solvent Test Results**

|                         | ppm |
|-------------------------|-----|
| n-Pentane               | ND  |
| Ethanol                 | ND  |
| Ether                   | ND  |
| Ethyl formate           | ND  |
| Acetone                 | ND  |
| 2-Propanol              | ND  |
| Methyl acetate          | ND  |
| tert-Butyl methyl ether | ND  |
| 1-Propanol              | ND  |
| 2-Butanone              | ND  |
| Ethyl Acetate           | ND  |
| tert-Butyl methyl ether | ND  |
| 2-Butanol               | ND  |
| Isopropyl acetate       | ND  |
| 2-Methyl-1-propanol     | ND  |
| n-Butane                | ND  |
| n-Heptane               | ND  |
| 1-Butanol               | ND  |
| 3-Methyl-1-butanol      | ND  |
| 4-Methyl-2-pentanone    | ND  |
| Isobutyl acetate        | ND  |
| 1-Pentanol              | ND  |
| Butyl acetate           | ND  |

**Microbiological Test Results**

|                |      |
|----------------|------|
| Aerobic Count  | Pass |
| Coliforms      | Pass |
| E Coli Count   | Pass |
| Enterobacteria | Pass |
| Yeast and Mold | Pass |

**Sample Certification**

This sample has been tested by \_\_\_\_\_ and is SLAMM certified.

Scan to verify at

## Appendix 2: Authorized Hemp Handlers Within the Midwest HIDTA

| Iowa                        |  |
|-----------------------------|--|
| Hemp Seed Permits           | <a href="https://iowaagriculture.gov/hemp">https://iowaagriculture.gov/hemp</a> See "Other Hemp Resources" -> "Hemp Seed Permits"  |
| Active Hemp Licenses        | <a href="https://iowaagriculture.gov/hemp">https://iowaagriculture.gov/hemp</a> See "Other Hemp Resources" -> "Hemp Licenses Issued to Date"   |
| Kansas                      |  |
| Active Grower Licenses      | <a href="https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses">https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses</a><br>See "Expired and Active Industrial Hemp Program Licenses -> "Grower" -> "Active" -> "2020"      |
| Active Distributor Licenses | <a href="https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses">https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses</a><br>See "Expired and Active Industrial Hemp Program Licenses -> "Distributor" -> "Active" -> "2020" |
| Active Processor Licenses   | <a href="https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses">https://agriculture.ks.gov/divisions-programs/plant-protect-weed-control/industrial-hemp/active-licenses</a><br>See "Expired and Active Industrial Hemp Program Licenses -> "Processor" -> "Active" -> "2020"   |
| Missouri                    |  |
| Registered Permit Holders   | <a href="https://agriculture.mo.gov/plants/industrial-hemp/">https://agriculture.mo.gov/plants/industrial-hemp/</a> See "Approved Operations" PDF  |
| Nebraska                    |  |
| Licensed Cultivators        | <a href="https://nda.nebraska.gov/hemp/">https://nda.nebraska.gov/hemp/</a> See "List of Licensees" -> "List of Licensed Cultivators"  |
| Licensed Processor-Handlers | <a href="https://nda.nebraska.gov/hemp/">https://nda.nebraska.gov/hemp/</a> See "List of Licensees" -> "List of Licensed Processor-Handlers"   |
| Licensed Brokers            | <a href="https://nda.nebraska.gov/hemp/">https://nda.nebraska.gov/hemp/</a> See "List of Licensees" -> "List of Licensed Brokers"  |
| Licensed Testing Facilities | <a href="https://nda.nebraska.gov/hemp/">https://nda.nebraska.gov/hemp/</a> See "List of Licensees" -> "List of Approved Testing Facilities"   |
| North Dakota                |  |
| Licensed Processors         | <a href="https://www.nd.gov/ndda/plant-industries/hemp">https://www.nd.gov/ndda/plant-industries/hemp</a> See "Licensed Hemp Processors" PDF   |

**NOTE:** The lists of active hemp licenses are continuously updated so direct hyperlinks are frequently changed. Instead of providing hyperlinks to each of the lists, a hyperlink to each state's Department of Agriculture website has been provided as well as directions to the current listings of licensees. If you are unable to access this information and require assistance, please reach out to us using the contact information provided at the end of this document.

### Appendix 3: Individual State Department of Agriculture Hemp Program Contacts

| State        | Contact Name               | Contact Email  | Contact Phone |
|--------------|----------------------------|--|---------------|
| Iowa         | Robin Pruisner             | <a href="mailto:Robin.Pruisner@Iowaagriculture.gov">Robin.Pruisner@Iowaagriculture.gov</a> | 515-725-1465  |
| Kansas       | Jeff Vogel                 | <a href="mailto:KDA.industrialhemp@ks.gov">KDA.industrialhemp@ks.gov</a>                   | 785-564-6789  |
| Missouri     | Program Staff              | <a href="mailto:HempProgram@mda.mo.gov">HempProgram@mda.mo.gov</a>                         | 573-522-0351  |
| Nebraska     | Ag Promotion & Development | <a href="mailto:Agr.webmaster@nebraska.gov">Agr.webmaster@nebraska.gov</a>                 | 402-471-4876  |
| North Dakota | John Mortenson             | <a href="mailto:Jmortenson@nd.gov">Jmortenson@nd.gov</a>                                   | 701-328-4128  |

## References

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