

Industrial Hemp Working Group Meeting 1 – 7/14/2020

DRAFT Minutes

- Chapter 745 of 2020 General Assembly directed VDACS to develop working group to assess the opportunities for development and manufacturing in the industrial hemp industry. This is the first of three meetings.
- The goal of this meeting is to educate participants of where the industry currently stands, where it's going, and where the most promising opportunities for development of the industry in Virginia lie.
- During the next meeting the group will discuss our current understanding of markets for hemp and hemp products and the value that these markets will provide to our communities. explore economic development strategies to further develop the industry through lead generation, site selection, workforce development and training. Final meeting will discuss findings from first and second meetings.
- **Erin Williams, who directs VDACS' hemp program, provided an overview of the hemp industry. Erin discussed the following:**
 - Differences between industrial hemp and marijuana
 - Different varieties of industrial hemp (fiber v. floral v. grain/seed)
 - CBD uses and products
 - 2018 Farm Bill
 - Virginia Industrial Hemp Law (Grower, Processor and Dealer Registrations)
 - Virginia Criminal Code and Drug Control Act
 - Food safety practices for industrial hemp processors
- As of July 11, 2020:
 - 1,291 active Industrial Hemp Grower Registrations
 - 360 active Industrial Hemp Processor Registrations (11 currently under Food Safety inspection and in operation)
 - 234 active Industrial Hemp Dealer Registrations
 - 9,093 acres planned for hemp in 2020
- Felix Schapiro asked if, in states where marijuana has been legalized, does a farmer's interest in growing industrial hemp persist? In Colorado, where there are both hemp and recreational programs, the state boasts one of the largest hemp programs in the U.S. There's no ability to cross over between the two programs; once you're in the hemp program, you must stay in that program and comply with the THC limitations.
- **Eric Steenstra (President, Vote Hemp) provided an overview of the hemp industry and existing challenges. Eric discussed the following:**
 - Vote Hemp background
 - History of growing hemp in Virginia in early 20th century
 - Establishment of mandates in the 2018 Farm Bill to regulate industrial hemp – expect more rules to develop following this year's harvest
 - Significant growth between 2018 and 2019 – jumped from around 25,000 acres to over 78,000 acres of hemp grown in 23 states.
 - In 2019:
 - 40 universities conducted research

- 3,546 state licenses were issued
 - 511,000 acres were licensed
 - 450% increase over 2018
 - Most producers had no contract and were unable to sell crop
 - FDA regulation of hemp extracts under existing food, drug and supplements – specifically concerned about dietary supplements and other health claims from CBD processors.
 - The largest area for growth in the industry is through hemp seed, as a good source of protein and fits in well with growing interest in plant-based proteins. Eventually, once large food companies will become more comfortable using hemp seed in its products, hemp seed production will surpass current acreage being grown for flowers (CBD).
 - Challenges ahead:
 - Definition of hemp is overly restrictive – need to increase to 1% THC definition
 - Banking access is still seriously limited, similar to cannabis market
 - Sale and marketing of hemp-derived products is limited on various platforms including Amazon and Facebook
 - While the 2018 Farm Bill legalized interstate transportation of hemp, many states didn't get the memo and continue to police
 - Individual state bans of hemp CBD product sales and patchwork regulation
 - FDA failure to provide guidance creates confusion hurting industry
 - Lack of processing infrastructure
 - Seed certification and development of new compliant genetics.
 - What does the industry need for success:
 - Hemp genetics to meet the new 1% THC threshold
 - Reasonable and accurate sampling and testing regulations from USDA
 - Crop insurance – only available in select states
 - Investments in hemp processing to provide a path to market for farmers
 - Updated state legislation to be ready for 2018 Farm Bill programs
 - Regulatory certainty and guidance from FDA
 - Formal banking guidance from Treasury Department
 - Interstate transportation guidance
- Sandy Ratliff asked why the future of industrial hemp will be more surrounding fiber and seed – Why? In 2018, hempseed oil, hemp hearts and protein powder received GRAS status (Generally Recognized As Safe) – eventually companies like Kellogg, Nestle, etc. will start to use this ingredient once its more widely accepted/grown/available. It's very comparable to soy but has higher nutritional value and better flavor profile. Will also be supportive of the growing plant-based diet trends. The fiber-side of the industry will continue to grow as more research is conducted for a variety of applications aside from animal bedding and textiles.
- Ryan Turman stated that in October, USDA will include THC-A with THC – will Virginia follow suit? There is some flexibility that could exist within the USDA guidelines. Some changes that need to be made include:
 - Need to test the whole plant, not just the top where there's a stronger level of THC

- Need to include “measurement of uncertainty” when you’re sampling one plant from an entire acre and assuming that the remainder of the plants have the same THC/THCA levels
- Does the THC content of the hemp plant have any structural impact on the integrity of the fiber or its utility as an industrial product? The variety of industrial hemp grown for cannabinoids is different than the plant grown for fiber. The THC level will likely not impact the quality of the fiber.
- Stephen Versen asked about how we can learn from Canada’s industrial hemp industry – how much of an analog is Canada’s experience for the U.S. and what does it mean for the industry in Virginia? The number one difference for Canada is that they were only allowing hemp to be grown for seeds or fiber, no production of cannabinoids until this year (they’re behind us in VA). Most of the acreage in Canada has been grown for the grain, and they’ve developed a good market. They have struggled with fiber processing there, likely due to a lack of investment, but all pilot projects as of now have failed. To be successful, there needs to be a strategically located processing facility because fiber transport is so expensive.
- Sandy Ratliff asked about processing of the variety of products. Could one processing plant handle all of the different types of hemp processing? All of the different production lines could be in the same building, but each requires its own sorts of equipment. The most important aspect would be proximity to growers since transport of fiber in particular is so expensive. A combined production facility for seed and fiber would make sense because you could harvest the plant for seeds but could then process the stalk for the fiber.
- Christy Morton asked further about Canada’s experience with the industry – are there any other good examples of states or countries that we should be looking at for best practices where we can learn some lessons about our development in Virginia? China definitely has more of the textile hemp production, but the Europeans have a significant fiber processing as well in France, Netherlands, and others. Europeans have focused more on the industrial markets than the textile markets. The technology for processing this fiber is largely 100-year-old technology – there’s a need to apply science to modernize fiber processing. Virginia is well positioned to be a leader in research.
- Stephen Versen asked about where opportunities for development in the industry might be – is there a consensus about the future of this industry and, as it grows, where might we expect to see additional investment and growth? The research side is very significant – Virginia Tech is involved using funding through USDA NIFA. It’s important to be supportive of research/companies looking to modernize technology of processing.
- Robert Spiers made a suggestion about banking – as far as getting financial support, because hemp isn’t a traditional commodity, bankers are less likely to finance your project. To be a buyer, all you have to do is get a license through VDACS. If a grower goes to a bank with a contract, but the financial institution doesn’t know anything about that buyer, they’re less likely to support the project. Need to work with banks to be more supportive of the industry, specifically on the growing side. There needs to be some mechanism that demonstrates worthiness of those grower-buyer contracts.
- **The group presented remarks on industry concerns and how things could be made better through federal and state requirements.**

- Robert Spiers said that a lot of thought needs to go into methods for sampling. If the plant is close to 0.3%, by the time it's processed, it is far below at harvest. It is hard to get the CBD oil content up without surpassing the THC threshold. Industry is not profitable with lower CBD content. Also – might need to better regulate who is allowed to register as a buyer, need to require additional information from buyer applicants.
- Stephen Versen asked if there is a role that state governments might play (similar to VA grain laws for grading/weighing/honoring purchases) for hemp growers? Does Canada have something similar in place? There is a federal program under USDA called PACA (Perishable Agricultural Commodities Act) and there is discussion about having hemp be included in PACA. This allows you to see who the different players are in the industry and to establish credibility for a buyer. Offers more protection for producers.
- Robert Spiers asked if any states or various programs consider sampling in a bonded warehouse, graded on a standardized test and then sold by grade, similar to the cotton industry? It seems like each different processor has their own standard, so it might be a good opportunity to create grading standards and have dealers participate in the development of that scale.
- Stephen Versen presented the two recent investments in Virginia's hemp industry, Appalachian Biomass Processing (Wythe County) and Blue Ribbon Extraction (Halifax County). What have some of the recent announcements been in other states and what do you expect to see more of? Most of the investment so far have been in processing for CBD extraction, especially in Kentucky, Colorado and Oregon, who are the leaders in those types of facility. There is another significant fiber processing project in Montana, others in Texas and Pennsylvania. Seed processing has taken off in places where there was an existing oil seed processing infrastructure – there is a significant cluster in North Dakota. Oil seed processing would be a good opportunity for Virginia.
- Robert Mills said that the growers in Southside VA have been primarily interested in growing for CBD because it uses the same infrastructure and growing mechanisms as tobacco. Blue Ribbon Extraction contracted for over a million pounds of dried flowers. Another company has come in and has contracted with him for 125 acres for use in medical industry. The biggest obstacle as a grower is the 0.3% THC threshold – the plant can't reach its CBD potential. The threshold needs to be adjusted to 0.6% THC, which allows CBD to reach the 13-16% level required to be profitable. The other major obstacle is the current protocols in place for sampling, as mentioned previously during this meeting.
- Stephen Versen asked about supply chain requirements for the industry. Robert Mills said that the most important detail is that processors locate strategically between growers. Blue Ribbon Extraction chose Halifax County because the location is within 50 miles of all of their contract growers. Industrial hemp is an ideal opportunity for manufacturing companies to locate in rural areas, because proximity to growers is key.
- Eric Steenstra made closing comments about where the industry might be headed next. Over the last 30-40 years, we've seen the textile industry disappear in favor of cheap labor elsewhere. With some research and development of new technology, industrial hemp fiber could be a key in reshoring the textile business. There are several American manufacturers experimenting with hemp fibers and yarns. Need to look at Virginia industries to figure out how this material might fit in with businesses that are already here.

- Christy Morton suggested that the group uncover more information about the businesses that are already successfully operating in the hemp industry, particularly as it relates to reshoring of businesses due to COVID-19. From a traditional economic development standpoint, one of the ways we could incentivize growth in the industry is continuing to develop appropriate industrial sites in rural areas in close proximity to growers. If there is any information available about the different companies operating in the flower/fiber/grain spheres, it would be beneficial to send to the rest of the group.
- Sandy Ratliff suggested that VEDP might be able to approach growers and processors to evaluate how to better support the existing industry prior to recruiting new business.
- **Stephen Versen opened the meeting for public comment.**
- Mike from the Tobacco Region Revitalization Commission asked about how growing different varieties of hemp within a certain proximity can affect the crop. Robert Mills said that growing hemp for flowers in proximity to hemp for fiber does present an issue because of potential for cross-pollination. It's important to be in communication with your neighbor growers and plan accordingly.
- The next meeting will be held in two weeks on July 28.