

**Pennsylvania Industrial Hemp Engine
Production and Processing Stakeholder Meeting Notes
Tuesday, March 5, 2024**

SUMMARY:

- A. The Type 2 NSF Type 2 RFP has not been let to the community yet. We are still being told the RFP is coming. It is due any day now.
- B. This is the 1st of 12 meetings set up for each sub-committee, Production and Processing is the 1st Sub-Committee/stakeholder group to formally meet regarding the PAIHE. We are committed to meeting every Tuesday of the month until June 2024.
- C. The three (3) Pillars/Groups who are meeting each week are:
 - 1. Production & Processing;
 - 2. Industrial & Consumer Product Development R&D; and
 - 3. Economic Development & Public Policy
- D. Speakers will be identified from each Sub-Committee to address the Stakeholder group to bring increased awareness and interest in the Stakeholder topic area, and also to obtain direction from the Stakeholder community about what is working, what needs improvement and what needs to be discontinued
- E. Speakers:
 - 1. Steve Groff: The Hemp industry is new and growing. A farmer in this industry must be willing to persevere through uncertainty. He now grows 9 different varieties of Hemp (the good seeds don't come from the US- why? Steve has planted 50 acres to date. The equipment needed to support hemp crops is not there yet. Cutting technology has been difficult to develop- to date using technology developed with growing and cutting hay. Coming: Field Day in Lancaster County to demonstrate hemp growing, cutting and processing.
 - 2. John Lupien: Entrepreneur- 30 years of Hemp -grow and processing experience. Finding good equipment that works is the biggest challenge. Started in 2005- decortication focused- developed a "decorticator"- patented it in 2010. Began processing Hemp in Nebraska in 2016- developed textile yarn from Hemp- it was very difficult to produce. Began consulting in 2019. Never received financing from federal government. Instead, used Mutual Transfer Agreements. The Production Facilities must be developed for a specific region/use/ manufacturing target. Biggest challenge is compressing the material- compressing machines are extremely expensive. If you cannot compress the material- the material becomes useless. 200lbs of raw material will yield 50% at best, of spin-able fiber.
 - 3. Jude Lin: Professor of Agriculture & Bioengineering, Penn State. There are many Hemp harvesting challenges to contend with. Such as: What kind of de-corticating equipment is needed? Should there be centralized

storage or satellite storage centers? What is the roadmap? We need more experienced hemp farmers and more experienced hemp processors- with better hemp processing equipment for better “end-user” success. With better success in growing, processing and identifying the end user for more customized success along the supply chain. The Supply chain must be built. It exists right now in parts but not one continuum.

The recurring themes for Production & Process seem to be who will grow the hemp, where will the hemp be grown? Also, processing the hemp is expensive because the processing machines are expensive and there are not many available for use to process the hemp into a material that can then be easily used for targeted end-products. Building the supply chain needs to happen with greater interest at each stage of the process: growing, processing, end user specific processing.

Question:

- A. How much risk tolerance in Type 1 and Type 2 RFP’s? Paul Hallacher responded: Because the RFP is coming from NSF, there is an understanding and tolerance for risk. The response does not have to be perfect from the beginning. Start with the “end-user” in mind, back into it and identify the equipment needed to support growth, use & manufacturing.
- B. Where will hemp grow in PA? Will plant double crops after grains. Hemp is a longer season crop that grew to 7 feet tall last grow cycle. Has already started planting.
- C. Did USDA play a financing role in any of John Lupien’s projects? No, he used Material Transfer Agreements; never had a grant.
- D. When building Production Facilities is it cookie cutter, the same or each one is specific? Yes, each facility is specific to the region/use and how to manufacture/process. The biggest challenge has been compressing the material-compression machines are very expensive and hard to find.