Hemp Update

Successes & Challenges for the hemp industries in the West
What is the Hemp Industries Association?
Since 1994, the mission of the Hemp Industries Association (HIA), a 501(c)(6) membership-based non-profit trade group, is to represent the interests of the hemp industry and to encourage the research and development of new products made from industrial hemp, low-THC oilseed and fiber varieties of Cannabis in the United States.

HIA v. DEA United States Court of Appeals, Ninth Circuit
Decided February 6, 2004 in favor of Petitioners
Executive Director, Colleen Keahey

- Colleen Keahey, resident: Phoenix, Arizona
  formerly: Nashville, Tennessee

- Former Outreach Coordinator at Vote Hemp 2014 - 2016

- Founder of the Tennessee Hemp Industries Association, first conceptual state-chapter of the HIA.

- State hemp legislation policy advisor and Department of Agriculture liaison

- Previous career at non-profit trade association dedicated to water and wastewater
Board of Directors

- Larry Serbin, Hemp Traders
  *President*

- Eric Pollitt, Global Hemp
  *Vice President, Treasurer*

- Tyler Frank, Hemptopia
  *Secretary*

- Anndrea Hermann, The Ridge Cannabis Consulting

- David Bush, Hoban Law Group

- Rick Krantz, Tahoe Hemp Company
The DEA's Final Rules purport to regulate foodstuffs containing “natural and synthetic THC.” And so they can: in keeping with the definitions of drugs controlled under Schedule I of the CSA, the Final Rules can regulate foodstuffs containing natural THC if it is contained within marijuana, and can regulate synthetic THC of any kind. But they cannot regulate naturally-occurring THC not contained within or derived from marijuana—i.e., non-psychoactive hemp products—because non-psychoactive hemp is not included in Schedule I. The DEA has no authority to regulate drugs that are not scheduled, and it has not followed procedures required to schedule a substance.

The DEA’s definition of “THC” contravenes the unambiguously expressed intent of Congress in the CSA and cannot be upheld. DEA-205F and DEA-206F are thus scheduling actions that would place non-psychoactive hemp in Schedule I for the first time. In promulgating the Final Rules, the DEA did not follow the procedures in §§ 811(a) and 812(b) of the CSA required for scheduling. The amendments to 21 C.F.R. § 1308.11(d)(27) that make THC applicable to all parts of the Cannabis plant are therefore void. We grant Appellants' petition and permanently enjoin enforcement of the Final Rules with respect to non-psychoactive hemp or products containing it.
HIA Membership Growth & Progress

- 2014 - est. 100 members
  - Chapter program created
  - First chapters were Tennessee, Indiana, Kentucky, New York, Washington and Oregon
  - Farming Memberships introduced based on the USDA Farm Income Scale

- 2015 - est. 200 members
  - HIA conference held in a legal hemp state for the first time - Lexington, Kentucky

- 2016 - est. 300 members
  - HIA conference held in Colorado and educational tracks expanded

- 2017 - est. 500 members
  - HIA takes legal stance against DEA and opens two lawsuits to challenge “marihuana extract” rule and separately interstate transport of domestically grown hemp commodities
In this Presentation

- What is Hemp?
- Agricultural Programs
- Challenges
- Hemp Commodities
- Finished Products
- Legalization
- National Marketing Campaign
What is Hemp?
What is hemp?

Hemp IS Cannabis - There are different varieties of cannabis. Hemp and marijuana ARE genetically distinct.
Current Hemp Definition

**American Agricultural Act of 2014, aka Farm Bill, SEC 7606**

"the plant Cannabis sativa L. and any part of such plant, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis."

**Definition Debate Concerning <1% THC**

USDA, law enforcement researchers and the Congressional Research Service have all recognized that industrial hemp is *Cannabis* with no more than 1% THC Concentration based on scientific data. The current definition referencing <0.3% is arbitrary and any definition that defines hemp below <1% is also considered arbitrary.
Where is hemp being grown?
Where is hemp being grown?

CANADA
Growing legal hemp crops since 1998
Est. 80k acres of hemp in 2016

Agricultural Programs
Agronomic Data

Recognize the Biophysical Limitations on Regional Production Capacities

- variety trails
- germination rates
- best practices

Source: Jeffery Steiner, Ph.D - National Institute of Food & Agriculture
Agronomic Data

Data from Colorado, Oregon, Kentucky*, Tennessee States that have had programs 2014*, 2015 - 2017

<table>
<thead>
<tr>
<th>Production Year</th>
<th># University Projects</th>
<th>Approved Processors</th>
<th>Approved Growers</th>
<th>KY Counties with Hemp</th>
<th>Planted Acres</th>
<th>Harvested Acres</th>
<th>% Grain</th>
<th>% Fiber</th>
<th>% CBD</th>
</tr>
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<tbody>
<tr>
<td>2014</td>
<td>7</td>
<td>9</td>
<td>20</td>
<td>14</td>
<td>-</td>
<td>33</td>
<td>47%</td>
<td>32%</td>
<td>21%</td>
</tr>
<tr>
<td>2015</td>
<td>8</td>
<td>29</td>
<td>99</td>
<td>41</td>
<td>1,742</td>
<td>922</td>
<td>500</td>
<td>6%</td>
<td>47%</td>
</tr>
<tr>
<td>2016</td>
<td>17</td>
<td>45</td>
<td>137</td>
<td>60</td>
<td>4,600</td>
<td>2,300</td>
<td>2,000</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td>2017 (Aug)</td>
<td>17</td>
<td>49</td>
<td>204</td>
<td>71</td>
<td>12,800</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Agricultural Program

COLORADO

- 6 institutions of higher education
- Registered Land Areas: 514, Registrants: 388
- 12,498 acres applied for this year
- Primary commodities: grain, fiber and CBD.

Grain and fiber appears to be increasing.
Agricultural Program

KENTUCKY

- 7 institutions of higher education
- Grower Licenses: 204, Processors: 49
- 12,800 acres applied for this year
- Primary commodities: grain, fiber and CBD.
OREGON

- 0 institutions of higher education
- Grower Licenses: 224, Processors: 123
- 3,482 acres applied for this year
- Primary commodities: CBD
Agricultural Program

TENNESSEE

- 2 institutions of higher education
- Grower Licenses: ? Processors: ?
- 800 acres applied for this year
- Primary commodities: CBD
Agricultural Program

Total acreage projected combined of Colorado, Kentucky, Oregon and Tennessee: 29.6k

*Other states with active cultivation not reported on:* California, Nevada, New York, North Carolina, Minnesota, Pennsylvania, Washington, Vermont, Virginia, West Virginia,
Challenges
Challenges

Continued Drug Enforcement Administration conflation of cannabis “marihuana” and cannabis hemp

*Working on Solutions:* Federal legislation introduced to further define hemp as being exempt from the Controlled Substances Act. U.S. House Bill, H.R. 3530 introduced by Congressman James Comer (R-KY)
Challenges

Conflicts in federal administration’s stance vs. Congressional Intent

*USDA, FDA & DEA “Joint Statement of Principles” adversely influences state Department’s of Agriculture in key areas.*
- limits the definition of hemp, omits flower
- suggests that hemp products may not be sold in states without agricultural pilot programs.
- suggests that CBD manufacturers and distributors should seek a DEA license.

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Challenges

Lack of industry definitions impacting ingredient certification & acceptance from regulatory organizations, such as the American Animal Feed Control (AAFCO)

*Working on Solutions*: Committee & Task Force members of the HIA are coordinating with Industrial Hemp Research Foundation, U.S. Hemp Roundtable, Cannabis Certification Council and ASTM’s D37 Committee members on definitions for industry
Challenges

Variety Trials

*Working on Solutions*: Various Department’s of Ag are collecting data on variety performance.
Challenges

Lack of industry infrastructure for food & especially fiber

*Working on Solutions*: Opening dialogue with agricultural partners to discuss applications for optimal hemp harvesting, cleaning, storage. Innovative companies in Colorado and Kentucky are working on fiber processing.
Challenges

Cannot compete with current market competition

*Working on Solutions:* Federal & state hemp legalization should eliminate prohibitive cultivation regulations which prevent hemp from being grown on scale of other agricultural commodity crops.
Hemp commodities
Hemp seed

Hull (seed case)
As ingredient
- ground for flour
- animal feed products

Nut (inside seed case aka hemp heart)
As ingredient
- non-dairy milk product
- ground flour
- granola/cereal

Oil (pressed from the seed)
As ingredient or raw material applications
- nutritional food oil
- nutraceutical moisturizing oil
- cosmetics/body care oil
- industrial oil
- plant-based fuel
Hemp stalk

Stalk (outer layer)
raw material applications
• paper / cardboard
• biofuel

Bast Fiber (second layer)
raw material applications
• cordage & rope
• thread
• fabrics & industrial canvas
• biocomposites

Hurd or Shiv (inner most layer)
raw material applications
• wood-like chips
• animal bedding
• chemical absorbent
• insulation
• fiberboard
Hemp Leaves & Flower

Leaves (from stems and stalk)
*As ingredient or raw material applications*
  * leafy green food
  * juice

Flower
*As ingredient or raw material applications*
  * resin
  * terpenes
  * essential oils
  * hemp-derived extracts
Finished Products
$688 Million Total U.S. Hemp-Based Product Sales by Category in 2016

Personal Care 24%
Hemp CBD 19%
Industrial Applications 18%
Other Consumer Products 2%
Consumer Textiles 14%
Food 19%
Supplements 4%

$163mm
$130mm
$129.3mm
$99.5mm
$125.5mm
$26mm
$14.4mm

Source: Hemp Business Journal and Vote Hemp estimates (consumer sales)
Hemp Personal Care - 24% of market
Hemp CBD & Supplements - 23% of market
Combined from pie-chart
Hemp Foods - 19% of market
Hemp Foods - 19% of market
Hemp Industrial Products - 18% of market

BMW i3
Hemp Fashions - 14% of market
Hemp Fashions - 14% of market
Legalization
Federal & State Legislation Recent History

- **2014** - “Legitimacy of Industrial Hemp Research Act” Sec. 7606 of American Agricultural Act of 2014, aka FARM BILL | Revisit for update & renewal in 2018

- **2015** - Fiscal Omnibus includes amendments that prohibit the Drug Enforcement Administration from contravention of Sec. 7606 of the Farm Bill in states that have hemp laws. *This amendment is renewed in the FY16 Omnibus.*

- **2015 - 2016** - Greatest bipartisan recruitment of support for the federal Industrial Hemp Farming Act - H.R. 525 (75 cosponsors) and S. 134 (16 cosponsors)

- **2016** - United States Department of Agriculture & Drug Enforcement Administration issue a “Joint Statement of Principles” regarding Sec. 7606 of the Farm Bill.


- **2016** - 31 confirmed states with hemp legislation | 29 new pieces of pro-hemp legislation
2017

- New Hemp States: Arkansas & Wyoming
- Now 33 States with Hemp Law
- Est. 30k acres expected in 2017
  reporting only CO, KY, OR and TN to-date
  9.6k acres reported in 2016
- NEW H.R. 3530
  Industrial Hemp Farming Act
38 states and Puerto Rico considered legislation related to industrial hemp in 2017. These bills ranged from clarifying existing laws to establishing new licensing requirements and programs. At least 15 states enacted legislation in 2017 — Arkansas, Colorado, Florida, Hawaii, North Dakota, Nevada, New York, Oregon, South Carolina, Tennessee, Virginia, Washington, West Virginia and Wyoming. Florida and Nevada authorized new research or pilot programs. The governors of Arizona and New Mexico vetoed legislation, which would have established new research programs.
National Marketing Campaign
June 5 - 11, 2017

Campaign Progress Report

2017
- Retailer promotions with natural food stores: 1,512
- Grassroots community events: 381
- Newsletter recipients: 8,091
- Social Media followers: 157,992
- # States campaign will be represented: 50

2016
- Retailer promotions with natural food stores: 1,449
- Grassroots community events: 363
- Newsletter recipients: 7,306
- Social Media followers: 146,980
- # States campaign was represented: 50

YOY % Growth
- Retailer promotions with natural food stores: 4.35%
- Grassroots community events: 4.96%
- Newsletter recipients: 10.74%
- Social Media followers: 7.49%
Learn More…
SHARE THE VISION

24th Hemp Industries Association Conference
Hyatt Downtown Lexington, Kentucky & the Lexington Convention Center

HIA in partnership with

SCHEDULE:
September 8 - HIA Members Only Meetings
September 9 - UK Industrial Hemp Farming Tours
September 10 - Science, Policy & Industry Tracks
  - Science Tracks: Agronomy, Fiber, Food, Economics
September 11 - Tracks Continued till End

REGISTER:
http://tinyurl.com/HIACON17
Sources by Slide.

Slide 6
http://caselaw.findlaw.com/us-9th-circuit/1253723.html

Slide 11

Slide 13

Slide 18

Slide 38
Thank you

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