

Industrial Hemp:

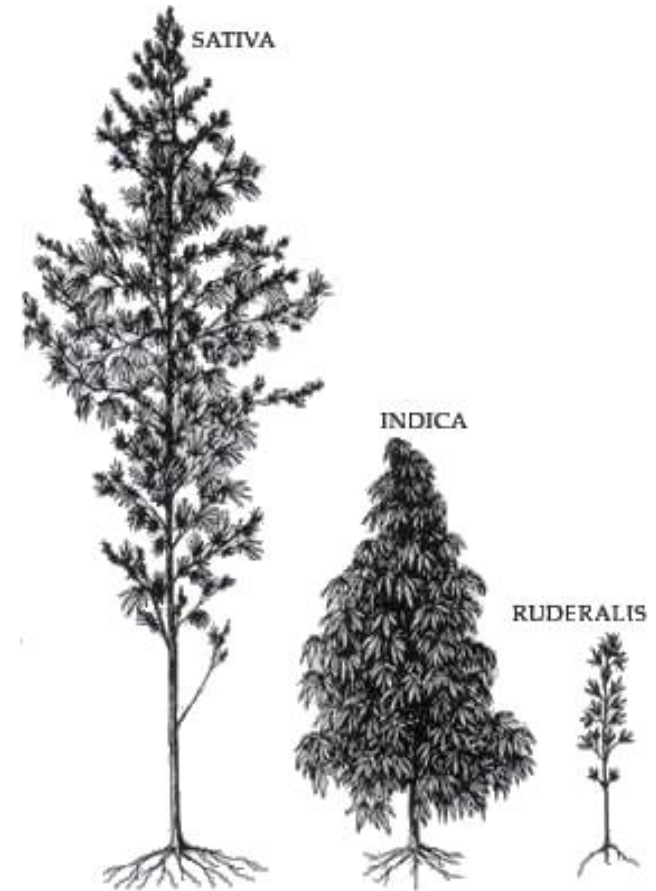
2019 Season and 2018 Farm Bill Updates

Ashley Jeppson

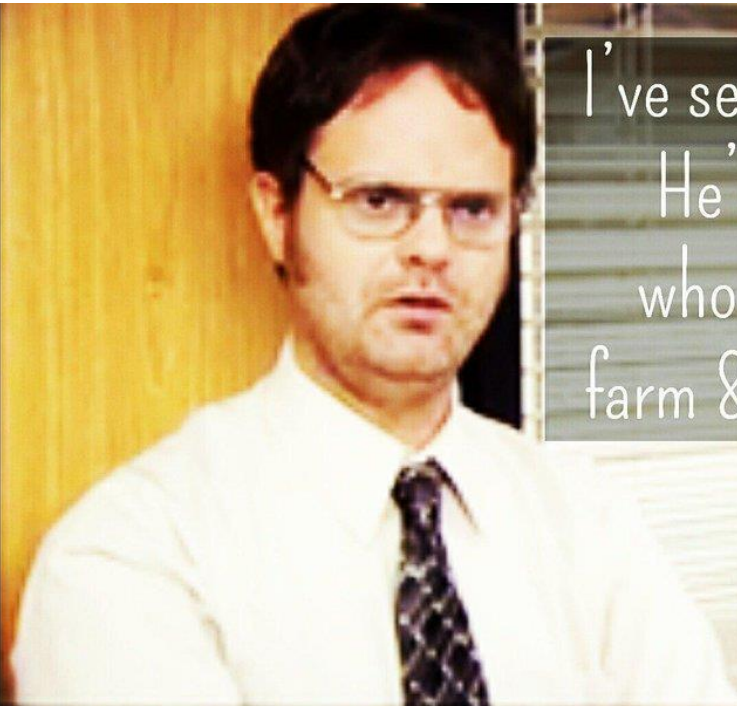
Crops Program Manager

Russell Willhelm

Seed Program Manager

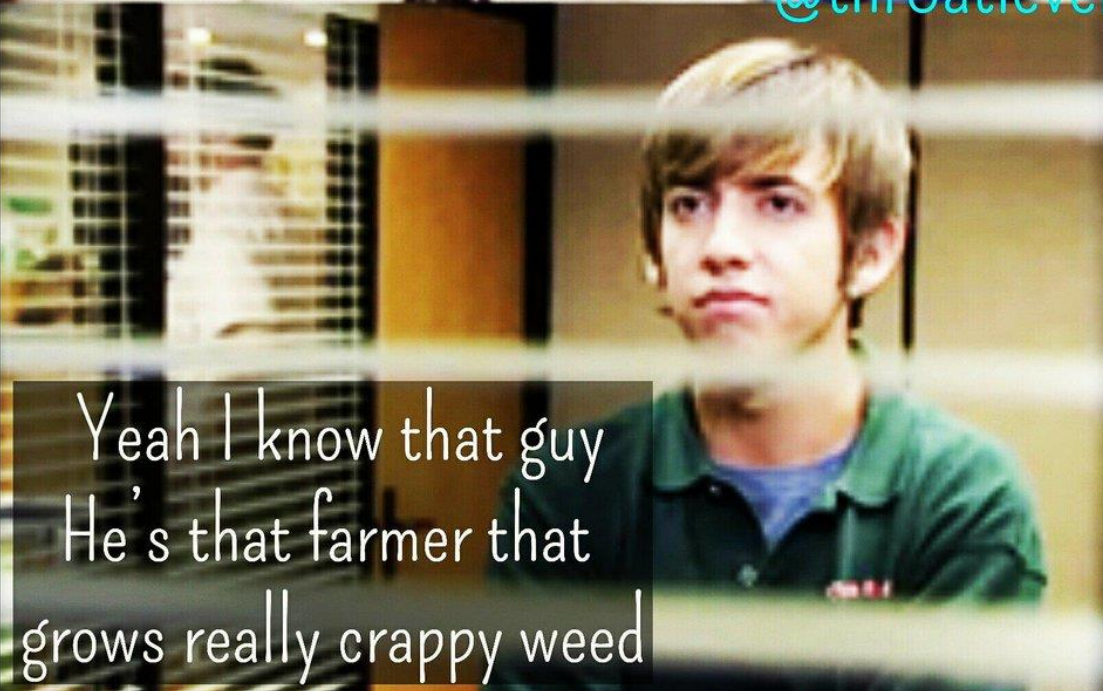


January 30, 2019



I've seen this kid before
He's one the kids
who sneaks on my
farm & steals my hemp

@thr3atlevelmidnight



Yeah I know that guy
He's that farmer that
grows really crappy weed



2019

The Farm Bill was finally signed...

Now what?

- Questions regarding the immediate and future impact on NV hemp program
- Changes will take time for USDA and states to establish reflective procedures
- The objective of this presentation is to provide you with current program details and future plans.

Hemp Regulatory Evolution

- **2014 Farm Bill**
- **Nevada Senate Bill 305 (NRS 557)**
 - Governor Approval: 06/04/2015-Growing
- **Nevada Senate Bill 396 (NRS 557*)**
 - Governor Approval: 06/01/2017-Handling
- **Nevada Administrative Code Ch. 557**
 - Take 1. Codified: 03/10/2016
 - Take 2. *Awaiting response from LCB, after several rounds of public workshops...*

**Most current version of NRS and is the active statutory language.*

Federal Regulations/Involvement

2014 Federal Farm Bill

- Research projects only
- Commercial restrictions
- Only allowed by states that adopt programs
- Fairly undefined testing standards; inconsistent among states



2018 Farm Bill

- **2018 Federal Farm Bill**

- Legalizes hemp production
- Lifts commercial restrictions
- Program based on state proposal as accepted by USDA
- Requires testing to be post-decarboxylated THC or equivalent standard

- ***Hemp Farming Act of 2018:**

- A State...desiring to have primary regulatory authority over the production...shall submit to the Secretary, through the State department of agriculture, as applicable, a plan under which the State monitors and regulates that production...
- A procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration levels of hemp produced in the State or territory of the Indian tribe...
- The term 'marihuana' does not include hemp, as defined in section 297A of the Agricultural Marketing Act of 1946

Industrial Hemp – Defined 2018

- **Industrial Hemp (*Cannabis sativa* L.)**
 - Defined within the 2018 Federal farm as:
 - “(1) HEMP.—means 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 **delta-9 tetrahydrocannabinol concentration of not more than 0.3** percent on a dry weight



FB-Required State Plan

- Maintain relevant info. regarding land on which hemp is produced in the State..Records maintained >3 years
- Procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 THC concentration levels
- A procedure for the effective disposal of products that are produced in violation

FB-Repeat violations

- A hemp producer that negligently violates a State or Tribal plan under subparagraph (A) 3 times in a 5-year period shall be ineligible to produce hemp for a period of 5 years beginning on the date of the third violation
- Further Action-Report to AG
- This is the minimum NV must pursue per 18 farm bill-NV may be stricter

NDA Approach

- Working on plan to USDA, in the meantime:
- Business as usual-state regulations
- Continue registration for growers and handlers as previous years
- Changes to THC testing criteria
- Transportation challenges-ongoing
- Collaboration among state agencies-ongoing

NDA Objectives-Grower

- Ensure operation is registered and information is accurate-Parcel #
- Site approval from landowner
- County/city awareness of production
- Production size reflects application
- Product tested $<0.3\%$ Post Decarb THC (Total Potential current method as more testing procedures are evaluated)

Cert. Eligibility

- **Requirements for eligibility:**

- Applicant cannot be convicted of a drug-related felony within the last 5 years.
- New application must contain SS# as per NRS 557.210.
- Must be in good standing with the Department or any other regulatory agency.
- If all requirements are met, then a license is issued and remains **valid until December 31 of the issued year.**

BRIAN SANDOVAL
Governor

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STATE OF NEVADA



DEPARTMENT OF AGRICULTURE

405 South 21st Street
Sparks, Nevada 89431-5557
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JERRI CONRAD
Director

Elko Office:
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Fax (775) 738-2630

Certificate number
#####

Industrial Hemp Grower Certificate

This certificate is to verify the following industrial hemp production site is certified by the Nevada Department of Agriculture (NDA) Industrial Hemp program.

This certificate is subject to the laws of the state of Nevada, including the provisions of Nevada Revised Statutes (NRS) Chapter 557.


Business name:
Authorized individual:
Production area:
Site(s):
Authorized production size:

This certificate is non-transferrable and shall be conspicuously posted in the establishment described above. The certificate is only valid through the expiration date shown above and for the location noted above.

*The NDA issues this certificate under authority of NRS 557.070. This producer shall abide by federal and state law when producing industrial hemp (*Cannabis sativa* L.). This certificate is not a guarantee that the producer possesses eligible industrial hemp; it authorizes the business to cultivate hemp in the state of Nevada.*

*Further inspections by the NDA are required to ensure the eligibility of this production and documents to showcase crop eligibility (*Cannabis sativa* producing less than 0.3% delta-9 ~~Tetrahydrocannabinol~~ on a dry-weight basis) will take place after inspections are completed. Crop eligibility will be inspected and certified through the NDA Producer Certificate program.*

For more information about the NDA's Industrial Hemp program or this certificate, please contact: http://agri.nv.gov/industrial_hemp/ or 775-353-3711.

 NDA Industrial Hemp program approval	Issue date	December 31, 2018 Expiration date
Nevada Department of Agriculture		

Original document will be embossed

Industrial Hemp: Grower

- **Regulatory Protocol:**

- Step 1: File an Application
- Step 2: Application is reviewed for eligibility
- Step 3: License is issued
 - Licenses are valid from date of issuance through December 31 of the issued year
- Step 4*: Preliminary site inspection conducted
- Step 5: Compliance inspection conducted
 - Must occur within 15 days of harvest
- Step 6: Analysis completed and ROA issued
- Step 7: Compile an invoice for services

The Grower's Application

- **Application Submission**

- Currently no window for submission

- Applicants may file all year round

- Application Fees:

- \$500.00 Flat Fee &
- \$5.00/acre and/or;
- \$0.33/1,000 Square Feet

- Renewal applications when licenses expire with active plants on site.

- Allow for an open window to re-file an application a month prior to expiration (12/1/####)

A Case of Isolation Fever

- **Cross pollination is a concern for this industry;**
 - 🌱 Not only for marijuana cultivators, but also for hemp growers.
 - 🌱 Focus is currently on the production of hemp for CBD oil, which involves specifically growing **female-only** crops.
- Hemp is a dioecious species: it produces both a male and female plant
- Pollen from the male can impact female's CBD yields, which results in monetary loss
- Many growers desire new policy implementing a buffer zone from one hemp field to the next:
 - 🌱 1 mile? 5 miles? 10 miles? 200 miles?

Property Ownership & Zoning

- **License eligibility based upon authority to cultivate by landowner:**
 - If the applicant **is** the legal landowner (verify through County Assessor Website), then good to go.
 - If applicant **is not** the legal landowner, a notarized authorization letter must be submitted with the application.
- **County zoning enforcement:**
 - Is land in an agricultural zone?
 - Local jurisdiction comes into play when producing crops of certain size, dependent on city/county-level ordinances
 - Water rights?

Certificate Issued → What's next?

- **Preliminary Site Inspection:**
 - Conducted to verify that hemp was planted in the area specified on the application
- **Compliance Inspection:**
 - Conducted to obtain a representative sample of the crop that will be analyzed for THC compliance.
 - Compliance inspection is scheduled after the submission of a **"Harvest Report."**
- **Sample analysis occurs**
- **ROA is compiled and sent to grower**
- **Invoices for services is sent to grower**
 - \$50.00/hr. drive time
 - \$50.00/hr. inspection time
 - \$0.545/mile
 - \$40.00 per sample analyzed

Hemp Harvest Report

Industrial Hemp Harvest Report



Nevada Department of Agriculture
Industrial Hemp, Research & Development Program
405 South 21st Street, Reno, NV 89431
Program Manager: Russell Wilhelm
Telephone: (775) 353-3711
Fax: (775) 353-3661
Email: rswilhelm@agri.nv.gov

Attach a map of the field to the back of this form, designating varietal separation, for inspector use.

Please complete the form in its entirety. Any forms submitted that are incomplete and illegible will be returned. The report must be submitted at least 15 days prior to harvest. This report is used to initiate a final inspection for any industrial hemp crops approved by the Nevada Department of Agriculture.

No plants shall be destroyed, or moved, without prior Department approval. Once lab analysis has resulted in THC concentrations below the approved threshold (0.3% Total THC on a dry weight basis), harvested material can be moved at the producer's own risk.

Producer Information:

Certification Number: _____ Registered Name: _____
Contact Name: _____ Registration Business Address: _____
Business Phone: _____ Email Address: _____

Cultivation Information:

Production County: _____ Production Size: _____ Date Planting Occurred: _____
of Varieties Planted: _____ Acres./Sq. Ft. _____
Varietal Names: _____
Location plantings occurred - GPS required (Decimal Degrees Format):
Latitude: _____ Longitude: _____ Indoor Outdoor

Disclaimer:

I attest, to the best of my knowledge, that the following statements are complete and true:

Initials _____ All crop(s) reported in this Industrial Hemp Harvest Report are of the variety and/or cultivar that have been reported as planted, and were planted, within the location of the acreage or sq. ft. as stated within the submitted program application.

Initials _____ I intend to use the harvested crop material in a legal manner and will provide details regarding harvested use within a final report.

Signature

Date

- **Harvest Report Breakdown:**
 - Submitted 15 days prior to harvest
 - NDA will be on site within that 15 day window to pull samples
 - 10 cuts for 1 sample
 - 1 variety composite sample is typically pulled per variety
 - After samples have been extracted harvest can begin
 - Some growers may opt to wait until results are obtained to begin harvest in the event that THC concentration >0.3%.
 - In this event a re-sampling can occur with the option to sub-lot the field at the growers expense.
 - Grower's must inform NDA personnel where material will be stored after harvest
 - **Traceability** is necessary in the event that THC concentrations exceed the legal limit

Crop Sampling

- Minimum notification of 15 days before harvest
- NDA request 30 to combine inspections-lower cost
- Representative Sample of varieties
- Top six inches of plant being sampled (working with states to identify future sampling protocols)

Document Control Number NDA-IHP-SOP-000-001	Standard Operating Procedures Industrial Hemp Program Nevada Department of Agriculture	First Edition
Effective Date 10/10/2016	Standard Procedures – Industrial Hemp Program: Sampling Procedure	Page 2 of 3

The following diagrams represent an aerial sampling image of a proper representational technique:

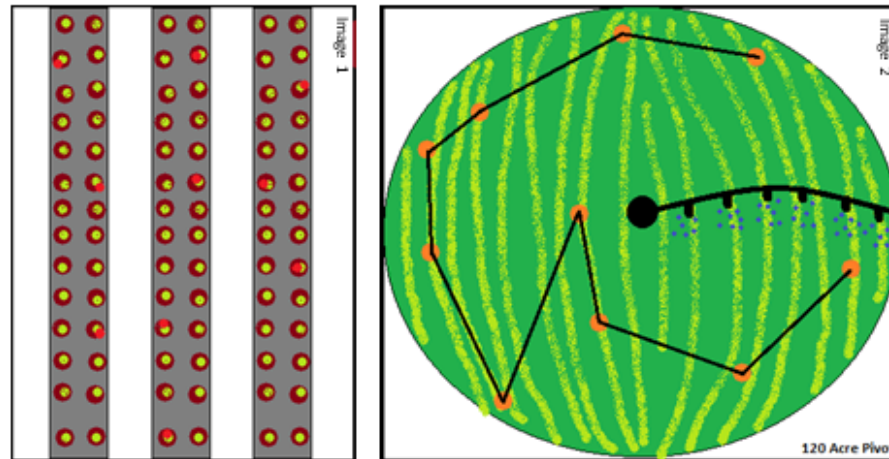
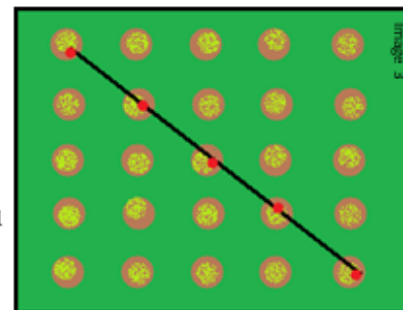


Image 1 represents a greenhouse sampling of 84 total plants.

Image two represents a sampling of a 120 acre pivot.

Image 3 represents a small varietal trail of 25 total plants.



2. Once the samples have been extracted from the field they need to be bagged and labeled accordingly.

- a) Each individual variety needs to be bagged and labeled separately
- b) Each sample should be approximately the same weight if proper techniques were used
- c) The bags need to be labeled with a marker accounting for the following information:

Testing

- 2018 Farm Bill
- “(ii) a procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration levels of hemp produced in the State
- NV Approach: Post-decarb; Total Potential THC is placeholder
- Approach taken due to FB language and concerns over transport

Total Potential-Post Decarb.

- **Post-Decarboxylation**

- Decarboxylation occurs when heat is added and a molecular conversion occurs:
 - $\text{THCA} + \text{heat} \rightarrow \Delta 9\text{THC} + \text{CO}_2$
- $\Delta 9$ -THC contains psychoactive potential and is therefore why it is limited in the definition of industrial hemp.
- To determine true THC potential, decarboxylation must occur.
- A very minimal amount of $\Delta 9$ -THC exists naturally in the Cannabis plant.
- NDA prior to 2018 FB examined for naturally occurring $\Delta 9$ -THC,
- **Post 2018 FB (Jan 1,2019) force decarboxylate THC-A to formulate Delta-9 THC (post-decarb). Total potential THC is a placeholder**

Total THC versus $\Delta 9$ -THC

- **There are several derivatives of Tetrahydrocannabinol (THC), the psychoactive molecule within Cannabis. The main forms are:**
 - THC-A
 - $\Delta 9$ -THC
 - Total Potential THC: $(0.877 \text{ (molecular weight ratio)} \times \text{THCA}) + \Delta 9\text{THC}$

Documents Issued to Grower



Nevada Department of Agriculture
405 S. 21st St.
Sparks, NV 89431

Industrial Hemp Report of Analysis

If any results listed below illustrate Δ^9 -THC Concentrations above 0.3%, it is the responsibility of the producer of that material to destroy the crop. If these results are to be contested, the Nevada Department of Agriculture must be informed within 24 hours after the receipt of this report. Contesting this report will initiate an additional inspection at the cost of the requester and a more comprehensive inspection will occur to determine consistency of THC concentrations of the associated industrial hemp crop.

As per the requirements of Nevada Revised Statute (NRS) 557.040, industrial hemp crops must be tested to determine percent concentration of delta-9 tetrahydrocannabinol (THC) on a dry weight basis. Industrial hemp is defined as the plant *Cannabis sativa L.* and any part of such plant, whether growing or not, with a THC concentration of not more than 0.3 percent on a dry weight basis.

Test No: _____
Date Received: _____
Date Reported: _____

Producer's Information:
Name: _____ Phone Number: _____
Address: _____ Email: _____
Kind of Plant: Industrial Hemp (*Cannabis sativa L.*) Variety: _____
Part of Plant: _____ Field Number: _____
Sampled Mass: _____
Test Required:
 Δ^9 -THC: _____ CBD: _____ Other: _____

Information in the above box is to be provided by the inspector

Tetrahydrocannabinol (THC) Analysis: [THC-A]: _____%
[Δ^9 THC]: _____
Cannabidiol (CBD) Analysis: [CBD-A]: _____%
[CBD]: _____

Other Tests Administered: _____
Remarks: _____
_____ High Performance Liquid Chromatography (HPLC).

Determinations:
Analysis results indicate that crop qualifies for criterion to legally meet the description of industrial hemp; exhibiting less than 0.3% Δ^9 -THC on a dry weight basis.

Signed: _____
Russell Wilhelm



Phone: 775.353.3711 Fax: 775.353.3638 Email: rwilhelm@agri.nv.gov

Nevada Department of Agriculture
405 S. 21st St.
Sparks, NV 89431



Invoice Number: _____
Amount Due: _____

Invoice for Services

Industrial Hemp Research and Development Program: **4545-3701**

Customer Name: _____ Date of Invoice: _____
Customer Address: _____ Phone: _____
Email: _____
Cert #: _____

Please return this top portion with your payment

Please keep this portion for your records

Inspection Services

Date of Inspection: _____
Total Number of Acres Inspected: _____ Field Location: _____
Number of Samples Collected: _____ Miles From Headquarters: _____ miles
Inspection Time: _____ Hours @ \$50.00 /Hour \$ _____ Notes: _____
Driving Time: _____ Hours @ \$50.00 /Hour \$ _____
Total Mileage: _____ Miles @ \$0.54 /Miles \$ _____
Total \$ _____

Lab Services:

Date of Service: _____
Total Number of Samples Ran: _____ Varieties Ran: _____
Analysis Fee: _____ Samples @ \$40.00 /Sample \$ _____
Total \$ _____

Total Amount Due for All Services: \$ _____

Make Checks Payable To:
Department of Agriculture
405 S. 21st Street
Sparks, NV 89431
For Billing Inquiries Please Call: (775) 353-3711

Invoice Date: _____
Invoice #: _____


Phone: 775.353.3711 Fax: 775.353.3638 Email: rwilhelm@agri.nv.gov



THC Non-Compliance

- **What happens in the event that a variety test above the 0.3% THC threshold?**
 - The specific variety in question is considered illegal marijuana and **must be destroyed**.
 - The grower has the option to re-test, dependent upon the level of THC observed (plant must still be in the ground):
 - 0.40% – 1.00% should qualify for a retest
 - Anything above 1.00% should be treated as marijuana
 - When the variety is certain to possess >0.3% THC, then local authorities must be alerted and a destruction plan must be created.
 - Each destruction is handled on a case-by-case basis dependent upon the type of operation.
 - The NDA hemp program has not seen any Δ -9 THC levels in excess of 0.3%, however total potential rates for some varieties have been >0.3% Total Potential THC

Hemp – A Cause for Concern

- Multiple complaints from the public concerned about hemp being grown in close proximity to their homes, businesses, schools, etc.
- **Theft is a problem in this industry...many farmers have been affected.**
 -  People are jumping fences and stealing plants thinking they are marijuana, or stealing hemp and selling it as marijuana on the streets.
- Education and outreach will make huge impacts.
- Properly adhering signage to the sites where hemp being grown is helping.

NAC 557 Draft Development

- **As a result of NV SB396, NAC is being modified to accommodate new requirements set-forth in NRS.**
 - NAC Chapter 557 draft language was submitted to LCB July 2018.
 - New NAC 557 will address changes related to:
 - Quality Assurance Standards
 - Sample size requirements for batch testing
 - Chain of custody requirements for G, SP, and H
 - Label Requirements
 - Etc.

Seed 101

- **Definitions**

- **Certified** Seed Defined: The progeny of breeder, foundation or registered seed, which has been handled to maintain satisfactory genetic purity and identity and has been approved by the Department.
- **Eligible** Seed Defined: Seed that has been vetted within the State of Nevada in previous seasons and has been shown to meet the definition of industrial hemp (*<0.3% Total Potential THC*).
- **Rogue** Seed Defined: Undocumented seed that has not been grown within Nevada and does not have official reports indicating the varietal characteristics (i.e. cannabinoid profile, growth habits, physiology).

Seed 101 Continued

- **Seed 101: Production Limits**
 - Certified seed: Can be grown at any acreage
 - Eligible seed: Can be grown at any acreage
 - Rogue seed: Maximum of 5.00 acres or 5.00 lbs. for the first year of production.
 - After first year, acreage can be increased to area desired
 - All new varieties will be subject to NDA in-house grow-outs.
 - 2-5 seeds will be taken to be grown out by NDA personnel

The use of any industrial hemp variety is at the risk of the producer and may be subject to destruction if THC concentrations exceed 0.3%.

Chain of Custody to Procure Seed-optional after January 1, 2019

- **Chain of custody process as growers procure seed. Have you been serving as the middle man when poor seed has been received? What is the overall process?**
 - 1) Grower submits a “material order form,” which alerts me of an import
 - Last page of the application (not necessary to submit when initially filing application)
 - Optional with passing of 2018 FB for out-of-state imports
 - 2) Seed supplier ships product directly to NDA HQ (not required but may help prevent product from being stopped.
 - 3) Seed is processed
 - Varietal documentation and mass
 - 4) Seed processing form created and sent out with seed to grower, or Russ schedules a pick-up with grower
 - 5) Seed processing form added to grower’s file

When new varieties enter the state, Russ may take 2-3 seeds for internal grow-out in Greenhouse to assess varietal characteristics

Industry's Clone Use

- **Industrial Hemp Cloning:**
 - Plant cloning is a technique used to vegetatively propagate plants by splicing a piece of the stem or root of the source plant (typically a “mother”).
 - Clone Importation: Is it Possible?
 - Transport of cloned material falls under **nursery stock** and is subject to phytosanitary certification/ inspection.
 - Nursery staff will need to inspect shipment for pest/disease at the time of arrival
 - ***This is contingent on the exporting state issuing a state phytosanitary document.
 - Movement of cloned material is at the risk of the importer.
 - Cloned material is largely preferred by this industry to ensure that female plants are produced.

Industrial Hemp: Handler

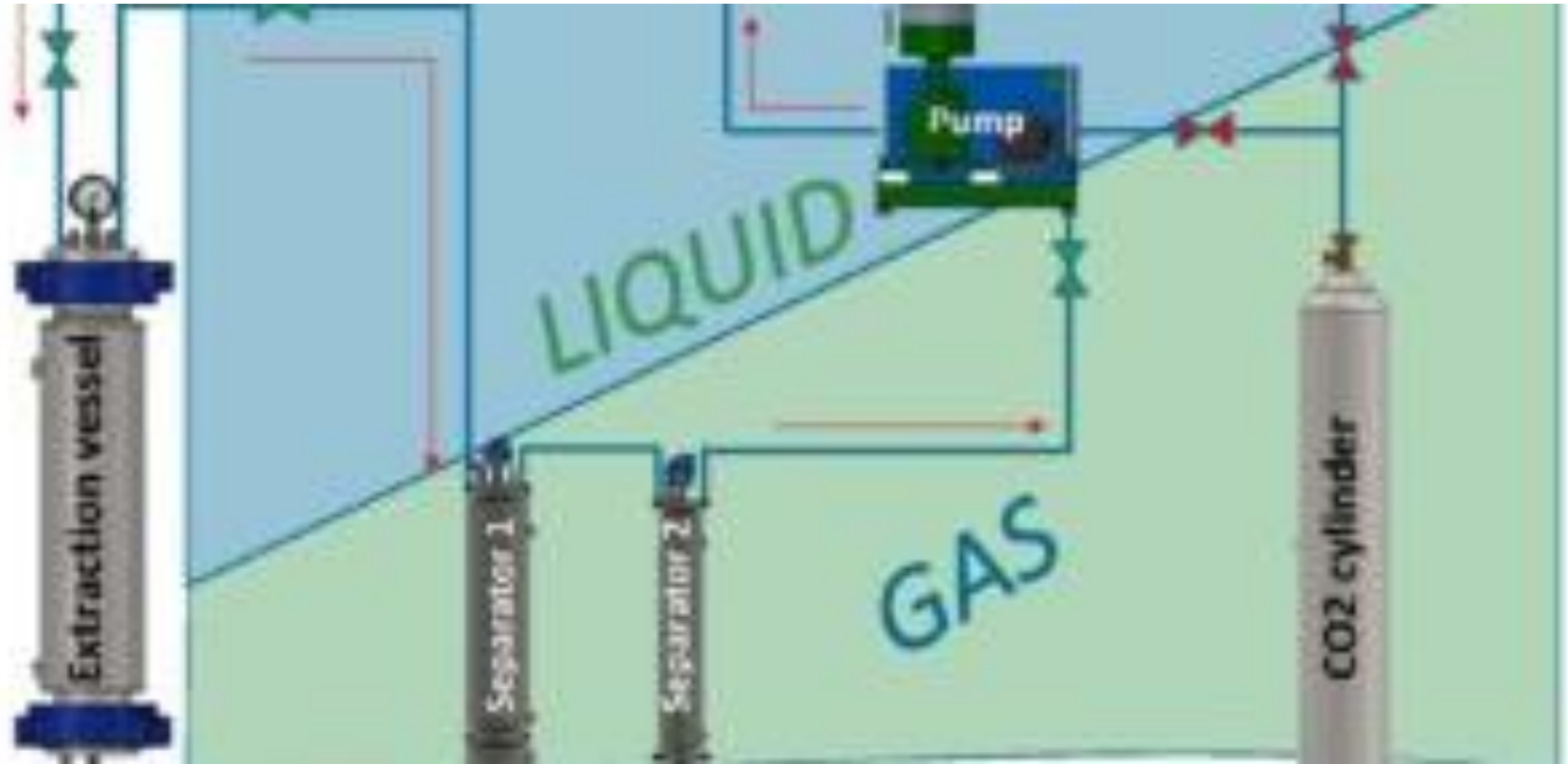
- **As defined by NRS Ch. 557.150:**
 - “Handler means a person who is registered by the Department...and **receives industrial hemp for processing into commodities, products or agricultural hemp seed.**”
 - To qualify as a handler within the state of Nevada, an entity must be **intaking raw in hemp** biomass and processing that biomass into an “ingredient.”
 - If you are growing hemp and intend to process, clean seed, extract oil, grind for pre-rolls, etc, you need a handler certificate.
- ***A company that is simply buying industrial hemp derived oil and infusing that into a line of cosmetics does not need to have accreditation as a handler.**

Hemp Processing



Fiber

Hemp Processing



CO2 Oil Extraction

Handler

- Do you have a business license?
- Are you modifying a facility?-Certificate of Occupancy
- Are you zoned appropriately for the proposed processing? (no combustible solvents in a residential)
- If preparing products intended for human/animal consumption NDA cannot guarantee your facility is structured in alignment with a food facility per health authorities
- Finished product must be $<0.3\%$ Post-decarboxylated delta-9 THC

Responsibility of Handlers

- Ensure your suppliers are certified and are compliant
- Advised to perform research on food establishments if applicable and have in place a food safety procedure
- Applicant is responsible for ensuring they meet all local regulations (permitting, water rights, etc.)

Combustible solvents?



The Handler's Application

- **Application Submission**

- Currently no window for submission
 - Applicants may file all year round
- Application Fees:
 - \$1,000.00 Flat Fee
 - Renewal applications when licenses expire with active manufacturing occurring.
 - Allow for an open window to re-file an application a month prior to expiration (12/1/####)
- The handler's certificate is essentially an added credential that a manufacturing facility can obtain that will allow them to intake and process industrial hemp biomass

Handler Challenges

- **Requirements to be a handler:**
 - Requirements are still being drafted via NAC Chapter 557, waiting for FDA response
 - At this time, FDA considers CBD extracts a drug that requires **additional research** to be added to food or to make medical claims.
 - **Local health involvement:** ongoing communication & working on plan: FDA compliance, address public health concerns, support commercial hemp.
 - NDA's role: Senate Bill 396: register handlers that meet the provisions described in the bill which does not encompass health inspections.



Labeling

- Per FDA, cannot make medical claims unless the product is registered and approved by FDA
- Cannot be used as an ingredient to food. Example; add CBD oil to alcohol, coffee, smoothie, etc.
- Selling CBD oil that has not been combined with other food appears to be acceptable (no medical claims!)



\$19.95
including
FREE
SHIPPING!

**“A HEMP
Gummy a Day
Keeps All
Your Pain and
Anxiety AWAY!”**

Don't do this..



PATENTED by the U.S. Government and
now **LEGAL** in all 50 States comes a new
breakthrough in pain and anxiety relief!



'U.S. Government Patent #6,630,507

What to Ask Brokers and Processors

- If promoting seed suppliers, ask for the suppliers certificate for seed sourcing. Compare with varietal THC Total Potential ranges
- For processing, know relative amounts it should be yielding
- Research the business reputation
- Ask questions, establish contracts

Stance on Commercial Feed

*Currently, the Nevada Department of Agriculture (NDA) does not approve license applications for manufacturers, distributors, or guarantors who distribute, sell or offer for **sale commercial feed** products that contain industrial hemp. Industrial hemp is not an approved ingredient recognized by the Association of American Feed Control Officials (AAFCO).*

****This only prohibits the sale of commercial feed.***

Industry Challenges

- **Looks just like Mary Jane-Transportation**
 - How does law enforcement know?
 - Illegal grows operating under Hemp license?
- **Food Safety**
 - Food safety measures when growing and handling
 - No kill step in various processes (some oil extraction)
 - Health Authorities will not approve CBD as food ingredient or with medical claims
 - Health Authorities don't have inspection program in place for processing facilities
- **New Crop, New Challenges**

Food Safety-Prevention Vs. Reaction

Four primary foci for preventing Contamination:

- Water sources
- Animal Intrusion
- Soil amendments of Animal Origin
- Worker Health and Hygiene education



Transportation

- 2018 Farm bill-new opportunity for distribution
- No federal guidance on transportation requirements
- Still law enforcement concerns
- Ongoing discussion with Nevada law enforcement on protocols
- Ongoing discussion with other states
- Will submit NDA guidance to growers with USDA proposal along with dialogue with law enforcement

Transportation-What to do now?

- Ensure any shipments incoming or outgoing have documentation
 - License
 - Crop testing (THC)
- NDA is sharing grower cert info with law enforcement
- NDA working to train Law Enforcement on program

Grower Challenges

Disease is causing devastation for this industry

- 2016: Fusarium (120 acres lost)
 - 2017: Pythium/Phytoplasma (several acres lost)
 - 2018: Phytoplasma (several acres lost)
- Seed-Borne disease:
 - Alternaria impacts seed germination and causes damping off, resulting in poor stands of delayed emergence.
 - Pests: Leafhopper has been informally identified as the vector to phytoplasma
 - Best to keep seed sources inside the state, but many sources are in CO/OR and those imports are currently handled at the grower's risk
 - Several seed producers now licensed within the state
 - Nursery's coming live that specialize in hemp clones/starts
 - Germination Challenges:
 - Delayed emergence
 - Poor germination (~60-70% avg. germ)
 - Seed treatments work well with diseases/dormancy – "Zerotol 2.0"

Moving Ahead

- Added staff by 2020-submitted request in August 2018 Budget office placed on hold for next budget request.
- With growth of program-position needed now
- Position will have an emphasis on Education initiatives
- Inspections will continue to be a combined effort
- Potential NAC to address crop mismanagement
- We want to hear from you regarding your challenges!
- Learn from each other!

Questions???

