Proposal for Cannabis Regulation in Vermont by the Agency of Agriculture, Food & Markets (VAAFM)

### VAAFM activities to date or in progress

- State hemp regulation
- State certification of applicators
- Laboratory method development-resources
- Authority to provide access to approved (legal) pesticide products
  - National Workgroup to obtain multi-state input for human & environmental risk assessment resources (toxicology, env. fate, worker exposure...)
  - National agriculture workgroup "proposed model bill"

### EPA Special Local Needs "State Registration" for pesticide products

- EPA letter of intent of Colorado
  - Provides a path forward
  - Outlines conditions required
  - <u>http://www.epa.gov/sites/production/files/2016-</u> 01/documents/epa\_letter\_to\_cda\_5-19 <u>15\_slns\_for\_marijuana.pdf</u>
- Requires states to perform risk assessments
  Requires support from the pesticide product registrants

chell Yergert, Director			
of Plant Industry	MAY	1 9 2015	
Department of Agriculture	1101	1 3 2013	
rlocken Parkway			
eld, Colorado 80021			

Subject: Special Local Needs Registration for pesticide uses for legal marijuana production in Colorado

OFFICE OF CHEMICAL SAFET

Dear Mr. Yergert:

Mr. Mit Division Colorad

305 Inte Broomf

Thank you for your inquiry regarding the utilization of Special Local Need (SLN) registrations of pesticides under FIFRA section 24(e) for use on cannabis. As you are aware, EPA's regulations, 40 CFR 162.152(a)(4), state that any SLN registration must be in accord with the purposes of FIFRA, which authorizes the registration of a pesticide only on a finding that it will not lead to "unreasonable adverse effects on the environment." In order to facilitate this finding. EPA strongly encourages a State to pursue SLN authorizations only where a federally registered pesticide is approved for use(s) similarity would provide the best support for making the necessary determinations. Given our understanding of how cannabis is cultivated and the intended way cannabis plant materials may be consumed by humans, we anticipate that a federally registered pesticide would be regarded as having similar use patterns if the federally registered pesticide is approved for use:

- on food (in order to have a complete toxicity database to evaluate the potential toxicity of acute, short-term, intermediate, and chronic exposure);
- on tobacco (in order to have a pyrolysis study to determine the breakdown products formed when the treated plant material is burned);
- by the same type(s) of application methods (in order to assess the exposure of workers who mix, load, and apply the pesticides);
- on crops with agronomic characteristics similar to cannabis (in order to adequately protect workers reentering areas following application of the pesticide); and
- 5. In the same kind of structure (e.g., greenhouses/shadehouses) or on the same kind of site (e.g., outdoor dryland site) as the proposed SLN use (in order to ensure that workers handling the pesticide for example, ensuring that the adequate personal protective dwhen applying the pesticide for example, ensuring that the adequate personal protective equipment is required and that the environmental fate and effects of the SLN use are adequately understood and that any appropriate measures are in place to protect non-target organisms and water resources).

In addition, EPA encourages the State to consider pesticides for which the agency's aggregate and cumulative risk assessment indicate that some modest additional exposure would not approach a risk of concern, i.e., that there is "room in the human health risk cup."

### State FIFRA Issues Research and Evaluation Group- SFIREG

- Workgroup Created December 2015
  - NV has been developing two 24(c) applications.
  - CropLife America expressed concerns from registrants, and suggested that they be included in a workgroup as well. They also want hemp to be included in the conversation.
  - Risk cup considerations are a significant issue. If the risk cup is already close to full, the product will not be pursued.
  - Colorado agricultural statistics for the 2015 season show \$800 M for alfalfa, \$700 M for cannabis, and \$600 M for corn.

National meeting in March with State Lead Agency's and EPA

# Why do we need legal pesticides and certified applicators?

If there is not a legal solution growers will use whatever works.

- High residues in concentrates
- Undisclosed pesticide active ingredient in products
- Word of mouth



### News release: Pesticide product Guardian ordered removed from sale

NEWS RELEASE, PESTICIDES IN FEBRUARY 5TH, 2016 IN 86 VIEWS

Pesticide product Guardian<sup>™</sup> ordered removed from sale, growers asked to stop its usage

 February 5, 2016... The Oregon Department of Agriculture has ordered stoppage of sale and the removal of the pesticide product Guardian, which is labeled for use on ornamental, food, and feed crops for mite control but also used by cannabis growers. In addition, ODA is asking growers who may have purchased the pesticide product to refrain from using it. ODA's actions come following an investigation of the product that found the presence of the pesticide active ingredient abamectin, which is not listed on the product label.

### Pot products made with unapproved pesticides recalled by Denver companies

Scope of recall covers dozens of products from several retailers, all grown by TruCannabi Denver

By David Migoya The Denver Post

# Check Your Stash: Are you consuming pesticide-peppered pot? Full recall list

#### MARIJUANA

# Hickenlooper issues executive order to declare tainted pot a threat to public

Any marijuana grown with unapproved pesticides would be removed from commerce and destroyed

By David Migoya and Ricardo Baca

#### The Denver Post

POSTED: 11/13/2015 12:01:00 AM MST UPDATED: 11/13/2015 12:55:46 PM MST



# Colorado's largest pot grower sued by two consumers over pesticide use

Colorado marijuana business LivWell has been sued by two cannabis consumers over selling pot grown with an unallowed pesticide that allegedly turns into cyanide when smoked

DENVER AND THE WEST

#### Denver releases 28,000 marijuana products it had recalled for pesticides

The release comes despite Gov. John Hickenlooper's executive order mandating all contaminated cannabis be destroyed

#### By Ricardo Baca and David Migoya

The Denver Post POSTED: 02/02/2016 05:51:21 PM MST UPDATED: 02/03/2016 05:40:35 PM MST

24 COMMENTS

#### Advanced Medical Alternatives yanks pot concentrates in state's 11th recall

Denver marijuana shop Advanced Medical Alternatives is recalling some pot concentrates with extremely high levels of pesticides banned for use on cannabis plants in Colorado



### Cannabis regulatory program at the Agency of Agriculture

- Cannabinoid concentration validation
  - THC
  - THCA
  - CBD
  - CBDA
  - CBN
- Pesticide Residue Analysis
- Adulterated products
  - Powdery Mildew
  - Pathogens (e-coli, salmonella)
- Establish testing protocols and reporting requirements for Vermont

## Proposed VTAAFM responsibilities under Vermont regulatory framework

- **Cultivation and processing operations** addresses cultivation practices, pesticide use, facility requirements, management of water resources, record keeping, Worker protections standard compliance, and information disclosure.
- Laboratory operations is a complement to existing good laboratory practices, these recommendations focus on the personnel, security, sample handling and disposal, and data management and reporting activities that may be unique to laboratories analyzing cannabis samples.

### **Program Development**

### Have

- Condemnation authority over raw agricultural commodities (flowers) – when deemed adulterated.
- Pesticide use & applicator certification regulatory authority
- Consumer protection (recalls), environmental and human health program experience
  - In-depth knowledge of pesticide registration process

### Need

- Condemnation authority over all cannabis products. (oils, dabs, waxes and shatters)-when deemed adulterated.
- Authority for laboratory standards
- Funding
- Human Capitol

### **Opportunities..**

- Build on pre-existing partnerships with other states that have gone before Vermont
  - Nationwide Network of State Regulators currently dealing with Cannabis
- Relationship with EPA and Pesticide registrants
- Development of Vermont specific standards for cannabis production
- Nutrient best management practices
  - Cultivation input controls-Fertilizers, heavy metals, pathogens, approved pesticides

### Immediate Needs 2016-2017

- Program Lead- Assemble internal Cannabis Program Development team
- Legal Support-Rules development
- Outreach-Stakeholder group- Vermont Cannabis Collaborative- Dispensary involvement
- Agricultural Authority to posses Standards and material
- THC analysis methods development
- Pesticide residue method development
- Pathogen testing

### Future Needs 2018 and beyond

- Field Inspection Support
- Program Support
- Laboratory Staff and Instrumentation
- Agricultural Development coordination-
  - Outreach and compliance assistance

### **Cannabis Consumption Survey**

- This survey is intended to obtain a better understanding of the type, manner and amount of marijuana consumed by end users.
- Responses will be used to develop future pesticide use risk assessments to determine potential exposures to residues on Cannabis.



### **Cannabis Consumption Survey**

- Who?
  - Age Range
- What?
  - Flower
  - Concentrates
- How?
  - Inhalation
  - Ingestion
  - Transdermal

- How Much?
- How Often?