

NCDA & CS Pesticides Section

Vineyard Workshop

Travis Snodgrass
NC Department of Agriculture & Consumer Services
Structural Pest Control & Pesticides Division
Pesticides Section



Topics

- NCDA&CS Pesticides Update
- Pesticide Drift
- Things to consider when using late season applications of oxidizers at harvest



Website

www.ncagr.gov/SPCAP

Pesticide Section Highlights

[March 9th Pesticide Board Meeting Conference Call Agenda](#)

[Auxin Resources - June 2020 Dicamba Updates](#)

[New Paraquat Requirements](#)

[2018 Pesticide Report](#)

[Winter 2019 Pesticide Update](#)

[How to Protect Your Beehives from Mosquito Spraying Following a Hurricane](#)

[Driftwatch](#)

[Pollinator Protection](#)

[New Record Keeping Requirements & Form](#)

[Licensing Exams & Schools](#)

[Soil Fumigation Information](#)

[Soil Fumigant Management Plan Templates](#)

- [EPA Fumigant Management Templates](#)
- [NCDA Fumigation Field Summary](#)

[Grain Fumigant Management Plan Template using Phosphine Gas](#)



Pesticides Section

Mission Statement

To protect the public health, safety and welfare, and to promote continued environmental quality by minimizing and managing risks associated with the legal use of pesticides through administration and enforcement of the N.C. Pesticide Law of 1971 and pursuant regulations adopted by the N.C. Pesticide Board.

ATTENTION: To help limit the spread of COVID-19 in our community, public access to the Ballentine Building and Annex is being restricted starting March 13th. If you have any questions, please contact us at 919-733-3556.

Available now!
ONLINE PESTICIDE EXAMS

[Click for details](#)

Limited in-person exams available

[Click here for exam information](#)

[*New guidelines for hosting pesticide continuing education courses*](#)

[Online Credit Options Available!](#)

Frequently Visited Section Links:

[Your Pesticide License Renewal - Payments](#)

[Mosquito Control - Frequently Asked License Questions](#)

Browse Section

[Division Home Page](#)

[Pesticides Section Home](#)

[Pesticide Registration](#)

[Licensing & Certification](#)

[Compliance Monitoring & Field Operations](#)

[Pesticide Disposal Assistance Program](#)

[PETE](#)

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Online Exams



Limited in-person exams available

[Click here for exam information](#)

Online Exams

- Available 24/7 on your computer
 - No mobile devices, iPads, etc.
- Exam scores available instantly
 - Exam score validity will be pending proctor review of the exam session
- Fees
 - Fees are paid online with credit card
 - NCDA&CS exam fees will remain the same
 - \$50 Core, \$20 categories, \$10 private applicator, etc.
 - Additional \$23 service charge per exam

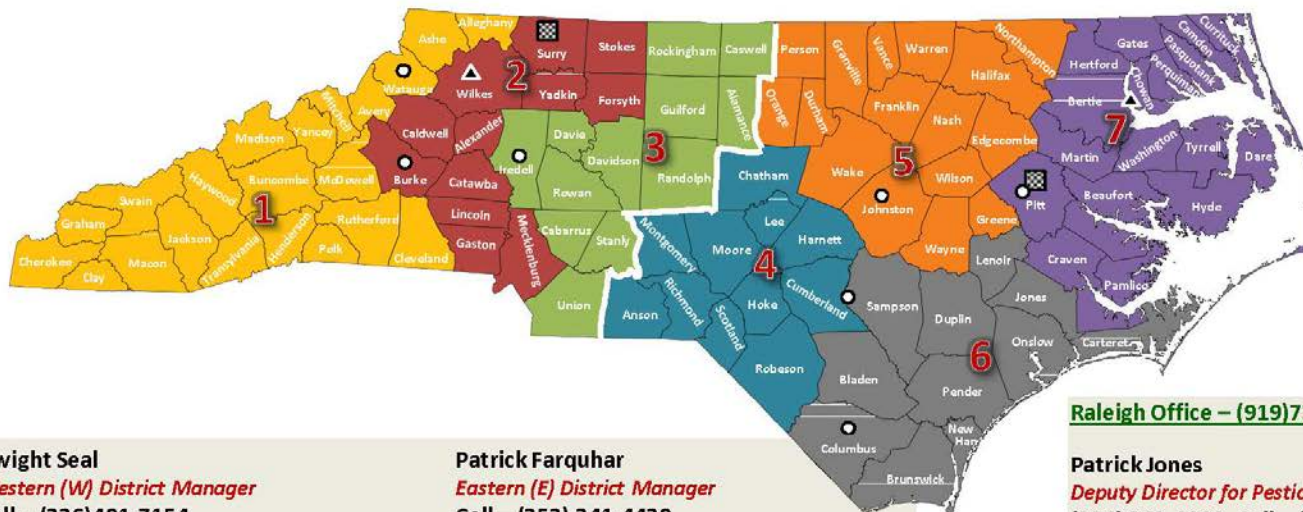


Requirements

- Good internet connection
 - Exam program will check that internet speed is fast enough before the exam begins
 - Internet speed required: 1 Mbps Upload, 2 Mbps Download
- Webcam and Microphone
 - Video and sound is recorded during your exam session and reviewed by a proctor
- Private Setting
 - 360° scan of the room with your webcam required to show that you are alone in the room
- Google Chrome web browser
- Government issued photo ID

Field Staff

NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES
 Structural Pest Control and Pesticides Division
 PESTICIDES SECTION
 Compliance Monitoring and Field Operations Unit
Inspector Level II Territory Map



Dwight Seal
Western (W) District Manager
 Cell – (336)401-7154

- 1** Charles Clark (2002)
(919) 302-4933
- 2** Travis Snodgrass (2010)
(919) 280-6913
- 3** Steve Gatton (2004)
(919) 280-5928

Gwen T. Minton
Pesticide Environmental Investigative Specialist
 (336) 973-4148, Cell – (336) 978-6761

Patrick Farquhar
Eastern (E) District Manager
 Cell – (252) 341-4430

- 4** Doug Bullard (2012)
(919) 218-4774
- 5** Arthur Watkins (2013)
919-302-4899
- 6** Jamie Ward (2008)
(919) 302-4921
- 7** Clay Hudson (2011)
(252) 542-0131

Paul Ward
Pesticide Environmental Investigative Specialist
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Patrick Jones
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 (336) 342-1908, Cell – (336) 496-7106

Sydney Ross
Pesticide Operation Specialist
 (919) 857-4151

Sergio Morales-Monroy
Worker Protection/Bilingual Specialist
 (919) 280-4599

Jenny Johnson
Office Assistant IV
 (919) 857-4149

- Inspector Residence
- ▲ PEI Specialist Residence
- ⊠ District Manager Residence

Field Staff

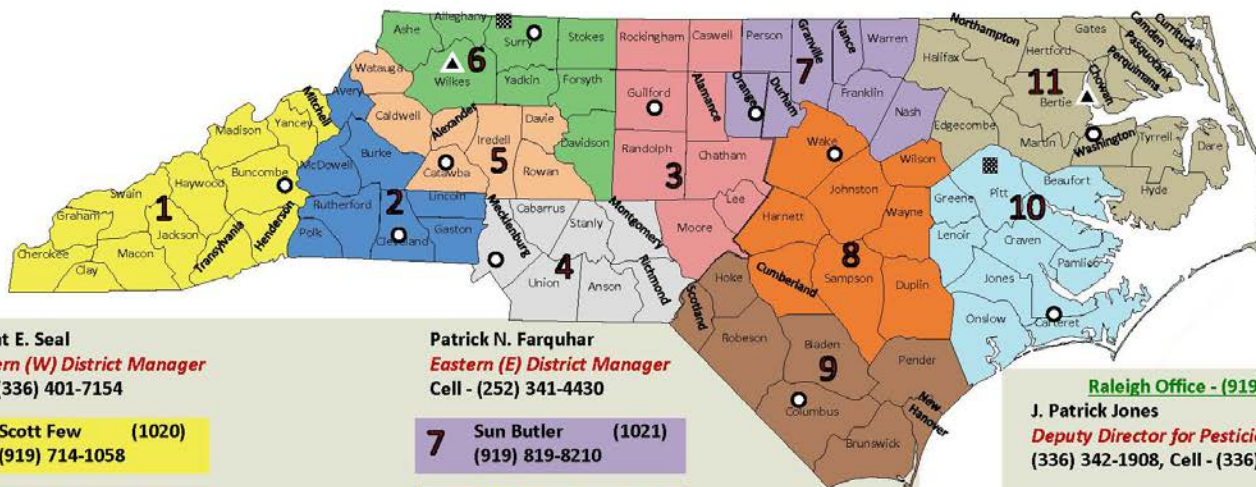
NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

Structural Pest Control and Pesticides Division

PESTICIDES SECTION

Compliance Monitoring & Field Operations Unit

Inspector Level I Territory Map



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1 Scott Few (1020)
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3 Tyler Harran (1019)
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4 Chris Smith (1011)
 (919) 280-8397

5 Eric Ball (1016)
 (919) 218-1935

6 Brad Boyd (1014)
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7 Sun Butler (1021)
 (919) 819-8210

8 Jason H. Williams (1018)
 (919) 437-4275

9 Jimmy Merritt (1012)
 (919) 302-4942

10 John Colborne (1010)
 (919) 302-4944

11 Chris Hassell (1003)
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Revised 9/21/2020

Paraquat

New in 2020

EPA has mandated changes to the label

- Certification/Supervision
- Additional Training
- Supplemental Warning Materials
- Closed System (New in 2021)



Paraquat

New in 2020

- Only Certified Applicators can handle & apply
 - Cannot spray under someone else's license
 - Handling= mixing, loading, disposing, etc.

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY
FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS ONLY- NOT
TO BE USED BY UNCERTIFIED PERSONS WORKING UNDER THE SUPERVISION
OF A CERTIFIED APPLICATOR.**



Paraquat

New in 2020

- Required training before Handling or Applying
 - Required every Three years
 - Must keep a record of training

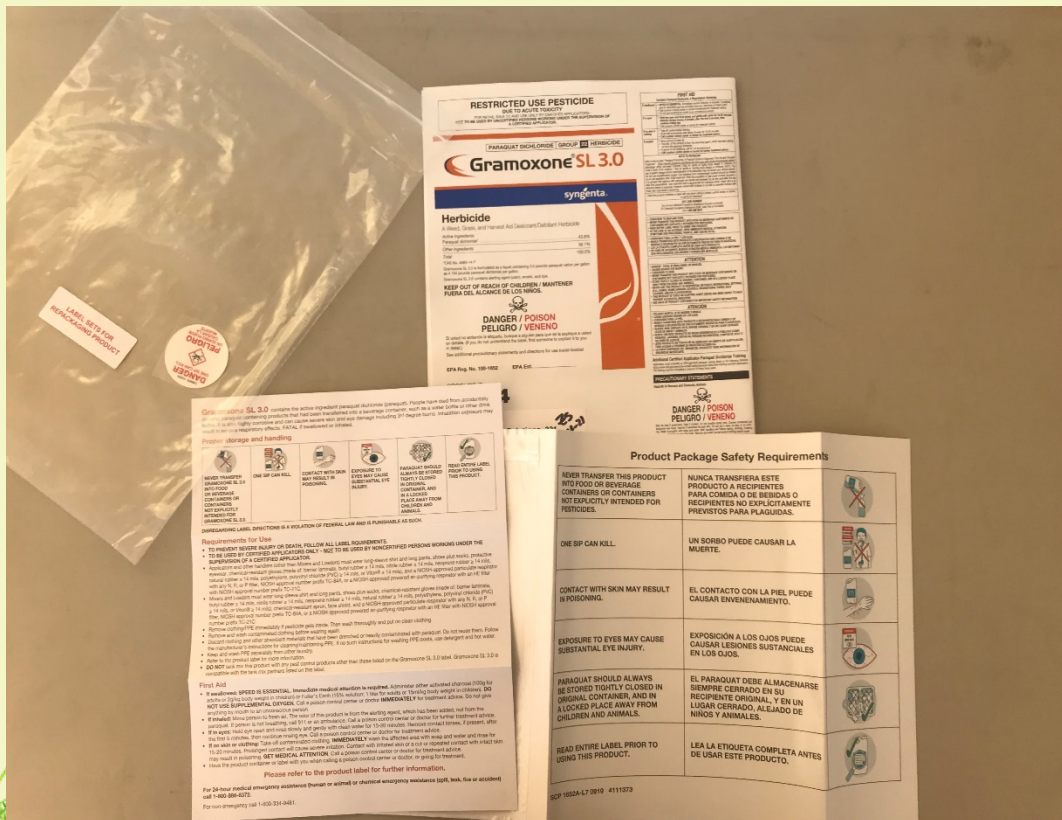
CERTIFIED APPLICATOR TRAINING

Applicators must complete an EPA-approved paraquat training listed on the following website <https://www.epa.gov/pesticide-worker-safety/paraquat-dichloride-training-certified-applicators>. The training must be completed a minimum of every three years.



Paraquat New in 2020

- Supplemental Warning Materials (English & Spanish)



Paraquat

“How to Safely Use and Handle Paraquat-
Containing Pesticides”

www.usparaquattraining.com



Paraquat

New in 2021

- Closed system for smaller containers

For containers less than 120 gallons

This product must only be removed from the original container with a closed transfer system.

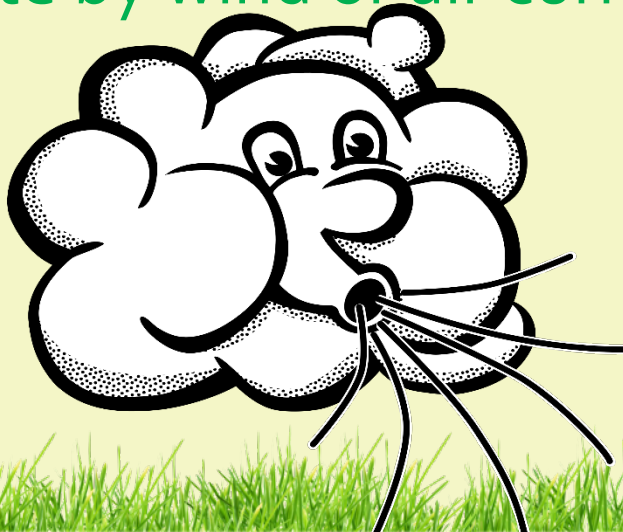


Drift

02 NCAC 09L .1404 DRIFT CONTROL

No person shall apply a pesticide(s) under such conditions that drift from pesticide(s) particles or vapors results in adverse effect.

Drift is pesticide movement away from the application site by wind or air currents



Drift is NOT

Runoff from a rain event

Intentional application to damage a crop (Vandalism)

Herbicide carryover in the soil

Herbicide damage from contaminated mulch, soil, compost, or vegetation



Commonly Use Herbicides

Soybeans & Cotton (Glyphosate, Paraquat, Dicamba, 2,4-d, etc.)

Corn (Glyphosate, Paraquat, Dicamba, Atrazine, etc.)

Pastures (Dicamba, 2,4-d, Aminopyralid, etc.)

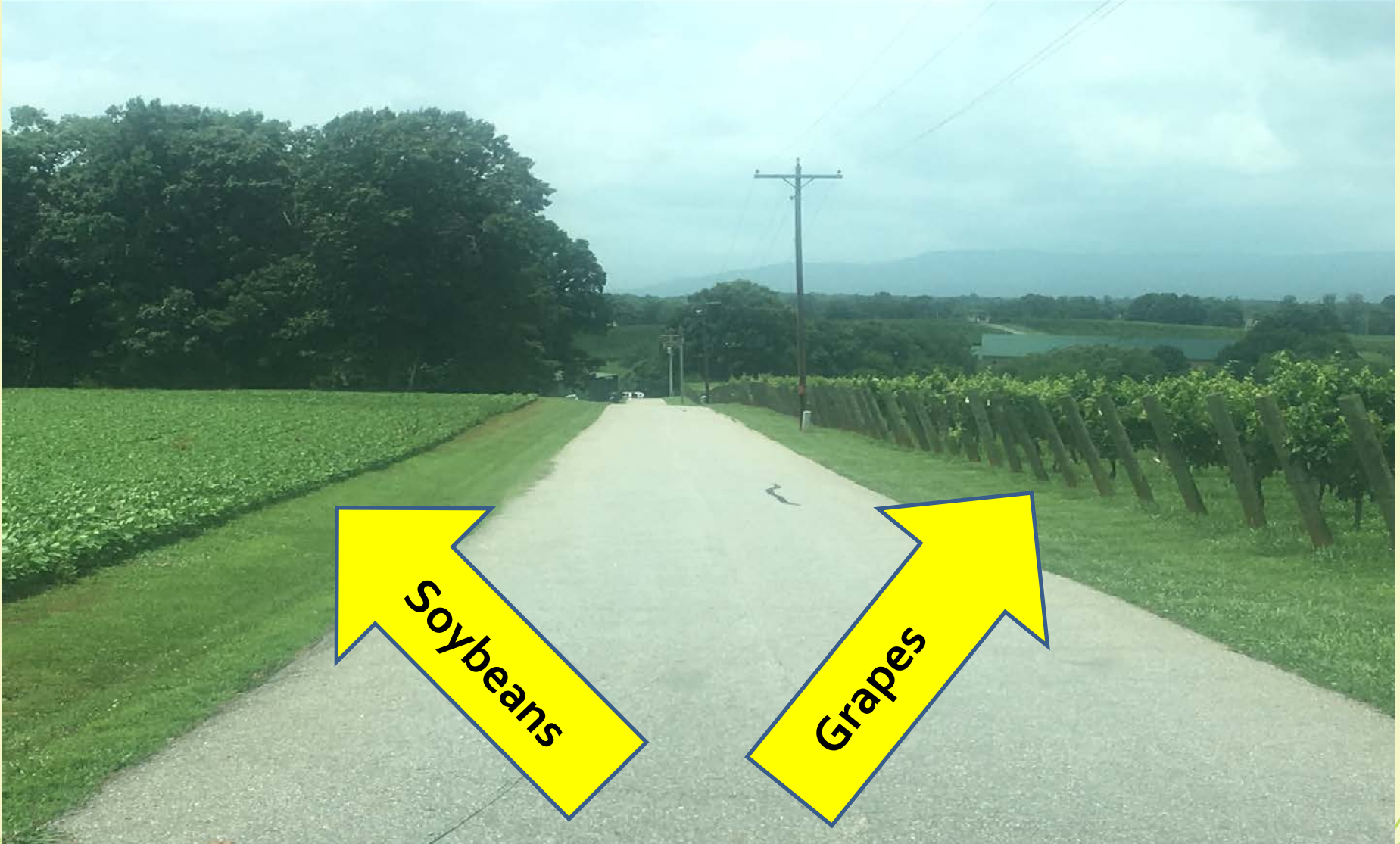
Right of Way (Glyphosate, Imazapyr, Aminopyralid, etc.)

Forestry (Triclopyr, Glyphosate, Picloram, Imazapyr, etc.)

Home Lawns/Landscapes (Dicamba, 2,4-d, Glyphosate, Diquat, etc.)



Neighbors



Soybeans

Grapes

Neighbors



Neighbors



Corn

Grapes

Neighbors



Pasture

Grapes





NO
SPRAY



Curling



Yellowing



Spotting



Combination of symptoms



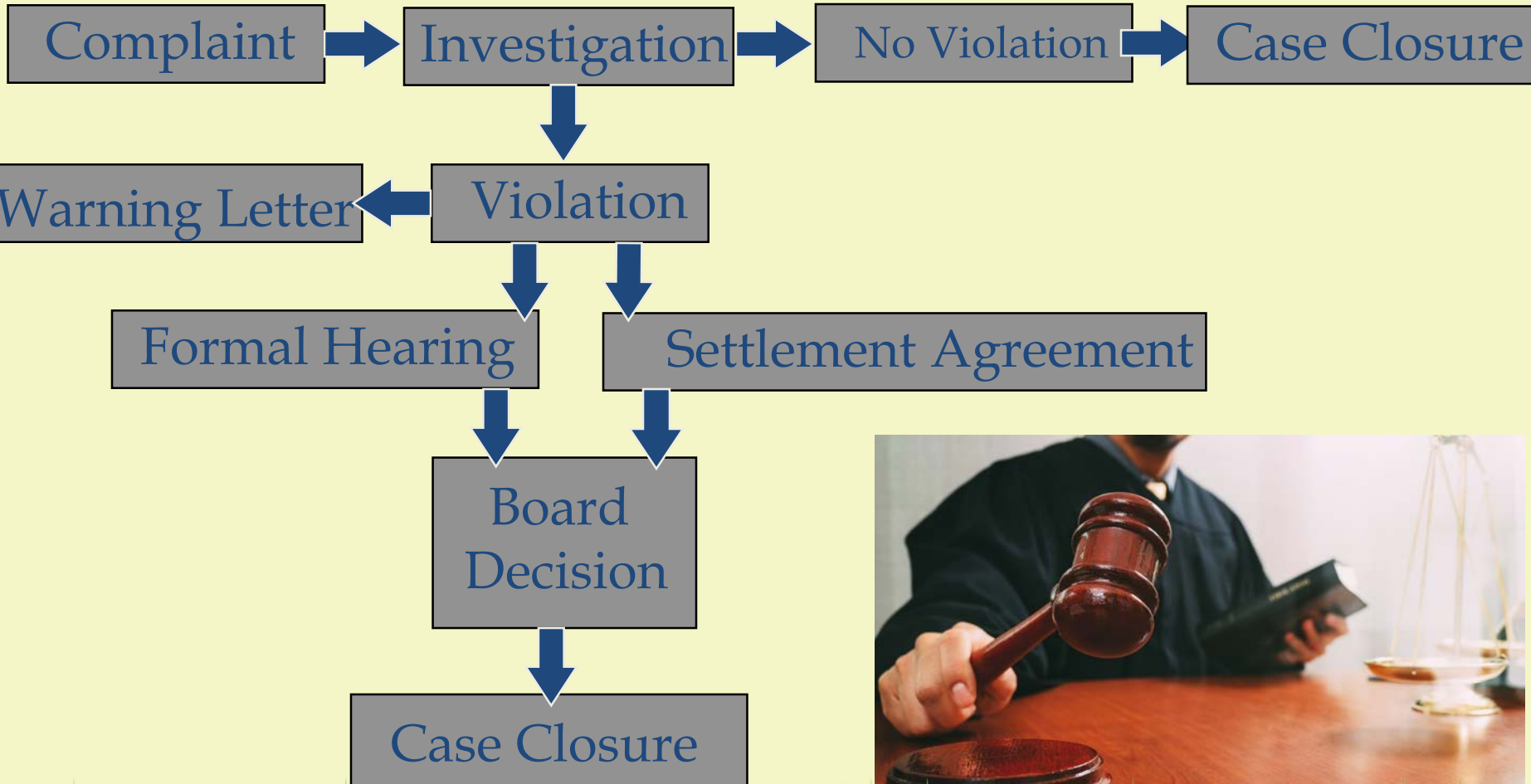
Concerned about neighbors spraying?

- Take pictures and/or videos
- Document all relevant information (Date, Time, Location, Wind speed/direction, Temperature, etc.)
- Contact NCDA&CS' Pesticide Section
 - Initiate an Investigation
- Get your spray records in order

If you contact the NCDA&CS' Pesticide Section

- We will fully investigate the incident(s)
- We will contact the applicator/neighbor and others in the area
- We will look at what you have sprayed
- We will NOT make any 'on-site' quick determinations
- You will NOT hear the outcome until the case has been closed

Investigation Process

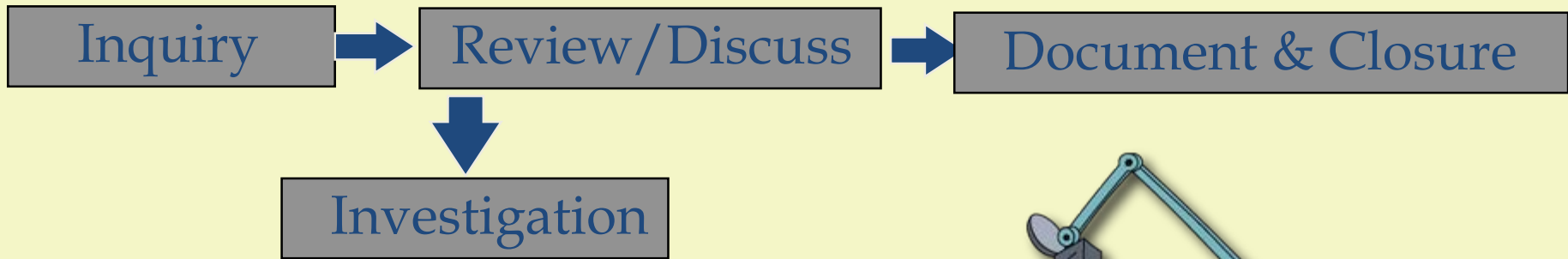


What are some other options?

- Contact the neighbor/applicator
 - Discuss the situation
 - Work out an agreement
- Contact any involved parties
 - Discuss solutions
- Contact Cooperative Extension Agent/Specialist
 - Look at other possible issues
- Contact NCDA&CS' Pesticide Section
 - Ask for a Citizens Inquiry



Citizen's Inquiry Process



Possible outcomes from an Investigation

- Document no drift/violation occurred
- Applicator may receive a warning, fine, loss of license, etc.
- Settlement agreements may include “will not apply certain products near grapes”
- You will NOT receive money from any monetary penalty/fine associated with a case approved by the Pesticide Board (Civil Court is an option)



Signup to Fieldwatch/Driftwatch



[Click here for the FieldWatch Registry Home](#)

Communication + Cooperation + Collaboration = Successful Co-existence

FieldWatch is a non-profit company that offers mapping and communication tools which are just one element of a successful formula for successful co-existence of specialty producers, large scale commodity farmers, commercial and private applicators and beekeepers. **Communication** is the start, but **cooperation** and **collaboration** of all parties is essential. Sometimes it means compromise or adjustments that foster an environment that everyone can do what they need to do with respect to the needs of others.

WELCOME NORTH CAROLINA USERS!!

[NCDA&CS Press Release](#)

Click here to sign up or login as a **commercial crop producer.**

For Crop Producers



Click here to sign up or login **if you are an applicator.**

For Applicators



For Beekeepers



Click here to sign up or login **if you only keep bees.**

SPECIALTY CROP DO NOT DRIFT



[www.fieldwatch.com](#)

FOR ORDERING SIGNS AND FLAGS, YOU MUST HAVE AN APPROVED CROP OR APIARY SITE.

[Click on field sign to go to order page!!](#)

New Apiary Program In Missouri!!

Check out the new Missouri Pollinator Conservancy Program initiated by University of Missouri Extension in collaboration with the Missouri Department of Agriculture, Missouri Farm Bureau, applicators, crop producers, beekeepers and FieldWatch. New BeeCheck flags are available from FieldWatch for beekeepers who have approved apiary sites on DriftWatch. Link for more information: [MPCP](#)



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FieldWatch, Inc. @FieldWatchInc yesterday

More coverage of #BeeCheck thanks to @AgricultureDE wgmd.com/beekeepers-pes...

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Oxidizers in the Vineyard

water mixed on the inside side of the capillary and extended to the spray nozzle, to ensure that the spray is fine and the nozzle itself does not clog. The spray is then directed to the target area.

The system must contain sufficient oxygen supply to maintain the level of the peroxide solution during the use of the spray nozzle. In the case where there is no water source, the water pressure decrease in the pipe when the nozzle is closed is a serious safety hazard.

Systems must use a mixing pump, such as a diaphragm pump, to maintain the level of the peroxide solution during the use of the spray nozzle. The use of a diaphragm pump is advised, especially if the system is used in the field and the pump is not connected to a power source.

Do not use any seal or gasket made of polyethylene or polypropylene.

WARNING:
The active substance is toxic to the aquatic environment, especially to fish. It is also toxic to the bees and other beneficial insects. It is also toxic to the soil and the plants.

Keep out of reach of children. Do not use in residential areas. Do not use on lawns and gardens. Do not use on crops and vegetables.

ZeroTol
Broad Spectrum Algacide/Fungicide

PREVENTIVE TREATMENT FOR ORGANIC PLANT AND TISSUE

ACTIVE INGREDIENTS:

Hydrogen Peroxide	10.0%
Potassium Peroxide	10.0%
Potassium Hydroxide	10.0%
Water	70.0%

PHYSICOCHEMICAL PROPERTIES:

- Appearance: Colorless liquid
- Odor: Pungent
- Specific Gravity: 1.0
- Boiling Point: 100°C
- Melting Point: -1.8°C

PREVENTIVE TREATMENT:

Apply 100 ml of ZeroTol per 1000 ml of water. Use once a week or as needed.

Application Instructions:

- Mix the product with water in a clean container. Do not use the original container. Do not use the original cap. Do not use the original label. Do not use the original instructions. Do not use the original warnings.
- Apply the mixture to the target area. Do not use on lawns and gardens. Do not use on crops and vegetables.
- Repeat the application as needed. Do not use more than once a week. Do not use more than 100 ml per 1000 ml of water.
- Do not use in residential areas. Do not use on lawns and gardens. Do not use on crops and vegetables.

Bi@Safe Systems...

The additional information can be found at: www.bi@safesystems.com



Oxidizers in the Vineyard

...sides caused on the inside side of the ...
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Bi@Safe Systems...

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ZeroTol
 Broad Spectrum Algacide/Fungicide

PREVENTIVE TREATMENT FOR AQUACULTURAL PLANTS AND TANKS

...
 ...
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Only for Sanitizing Equipment

Oxidizers in the Vineyard

- Relatively inexpensive & effective
- Zero Hour REI (only needs to be dry for entry)
- No PHI (including day of harvest)
- OMRI Certified
- Little to no residue



Label

 **OxiDate[®] 2.0**

FOR AGRICULTURAL USE

EPA REGISTRATION NO. 70299-12

ACTIVE INGREDIENTS:

Hydrogen Peroxide..... 27.1%
Peroxyacetic Acid..... 2.0%

OTHER INGREDIENTS:..... 70.9%

TOTAL:..... 100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER – PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

The Label is the Law

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions For



The Label is the Law

PHYSICAL AND CHEMICAL HAZARDS

Corrosive. Strong oxidizing agent. Do not use in undiluted form. Mix only with water in accordance with label instructions. Never bring undiluted product in contact with other pesticides, cleaners or oxidative agents.

The Label is the Law

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption. This product is highly toxic to bees and other beneficial insects exposed to direct contact on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Do not apply this product or allow it to drift to crops where beneficials are part of an Integrated Pest Management strategy. This pesticide is toxic to birds who eat treated seed exposed on soil surface. Treated seed exposed on soil surface may be hazardous to birds, wildlife, fish and aquatic invertebrates. Cover or collect seeds spilled during loading.

WPS Applies for the use of an Oxidizer

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and Restricted-Entry Interval (REI). The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard.



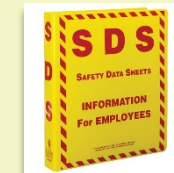
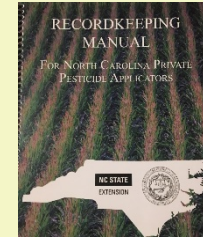
WPS for Workers

- All workers including paid harvesters **MUST** be trained according to WPS Standards

- www.pesticideresources.org



- Spray Records & SDS **MUST** be kept
 - Posted for 30 days and kept for 2 years



- Safety Poster **MUST** be Displayed
 - With nearest medical facility info
 - More than 11 employees may require more posters

- Decontamination Supplies **MUST** be available
 - Soap, Water, & Towels



Worker Entry

For field applications:

Keep unprotected persons out of treated areas until sprays have dried.



WPS Handler Requirements

Handlers who may be exposed to the undiluted product through mixing, loading, application, or other tasks must wear: coveralls over long-sleeved shirt and long pants, rubber gloves, chemical resistant footwear plus socks, and protective eyewear (goggles or face shield). Handlers who may be exposed to the dilute through application or other tasks must wear: long-sleeved shirt and long pants, and shoes plus socks.

Required PPE



Eye protection requirements under WPS

- Eye-flush supplies:
 - System capable of delivering gently running water at 0.4 gal/min for at least 15 minutes OR
 - At least 6 gallons of water in containers suitable for providing a gentle eye-flush for about 15 minutes
- One system per mix/load site (not based on number of handlers)
- One pint of water per handler in portable containers that are immediately available to handler



Additional Handler Requirements

- 3 Gallons of Water
- EPA Approved Handler Training
- AEZ
- Provided with Personal Protective Equipment (PPE)
- Trained in the use of equipment
- Access to and understand the pesticide labels
- Minimum Age (18 years old)



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<http://www.ncagr.gov/SPCAP/>