

# Basics of pesticide applicator licensing

## Vector Workshop

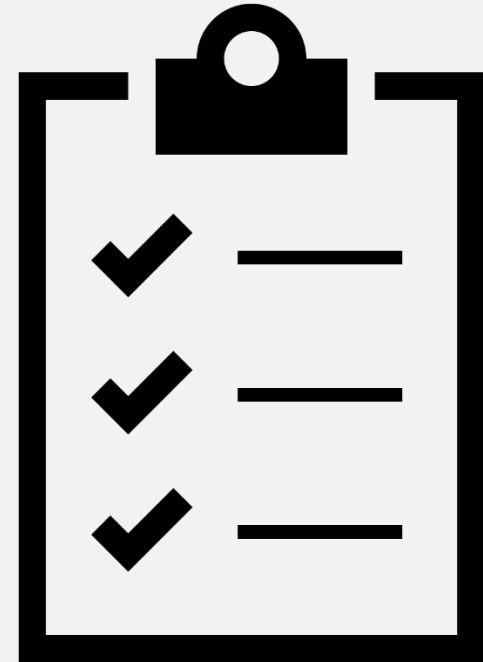
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## What we will discuss:

- **Why pesticide applicator licensing is important?**
- **Who needs to be licensed?**
- **What type of license do you need?**
- **Preparing for your exam**
- **Maintaining your license**

[https://www.epa.gov/sites/production/files/2016-12/documents/certification\\_rule\\_simple\\_comparison\\_chart\\_002.pdf](https://www.epa.gov/sites/production/files/2016-12/documents/certification_rule_simple_comparison_chart_002.pdf)



# Why pesticide applicator licensing is important?

- **Required by Federal Insecticide, Fungicide & Rodenticide Act (FIFRA)**
  - An applicator must be licensed to apply a restricted-use pesticide (RUP)
- **Having licensed applicators may help to promote a positive image of your program**



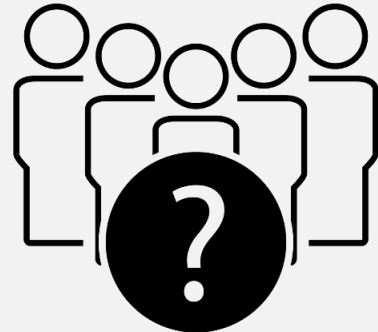
## Who needs to be licensed:

**Application of restricted-use pesticide requires a license.**

**-FIFRA 7 U.S.C. §136 et seq. (1996)**

**HOWEVER, interpretation of this varies by state:**

- **Some states require every applicator have a license**
- **Some state allow a licensed applicator to supervise unlicensed applicators**



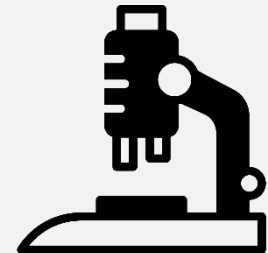
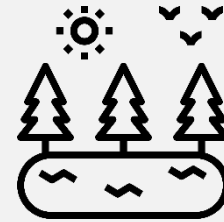
# What type of license do you need?

If you...	then you are a ...
Apply pesticides for the production of an agricultural commodity on land you or your employer owns or rents	Private Applicator
Do not meet the description of a private applicator	Commercial Applicator

# Standards for commercial applicators:

## ■ Show practical knowledge of:

- Pesticide label and labeling comprehension.
- Safety, including pesticide hazards, first aid, personal protective equipment and emergency response.
- Pesticides in the environment.
- Pest identification and management.
- Pesticide formulations.
- Pesticide application equipment and application techniques.
- Laws and regulations



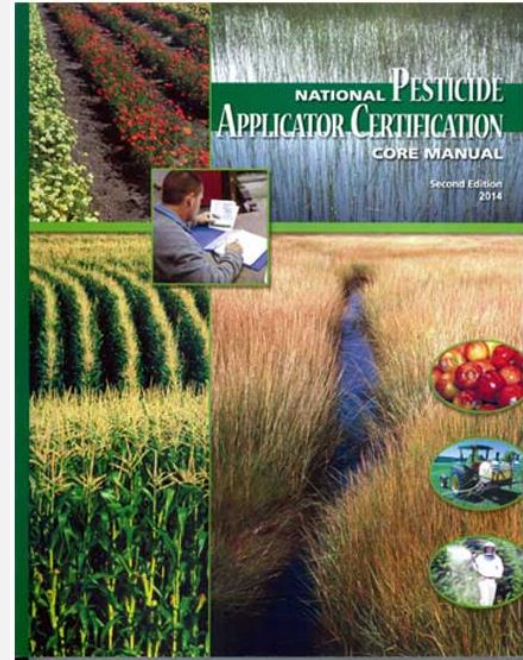
## ■ Plus at least one specific category of application

# 10 Federal categories of certification:

1. Agricultural
2. Forest
3. Ornamental & Turf
4. Seed Treatment
5. Aquatic
6. Right of way
7. Industrial/structural
8. Public health
9. Regulatory
10. Demonstration/research

# Preparing for your exams:

- **Core exam**
- **Category exam**
  - Certified by state/territory or tribe
  - Varies by state
  - Will usually require knowledge of vectors and pests in the state.
  - May require knowledge of rate calculations
- **Check with your licensing agency for exam prep resources.**





# Maintaining your license:

- **Applicators must be recertified to maintain certification**
  - Usually every 3-5 years
  - Requirements vary by state
- **Make sure the CEUs apply to your license**
  - Core and category
- **Keep training records**
  - Update for each applicator



# Understanding pesticide labels

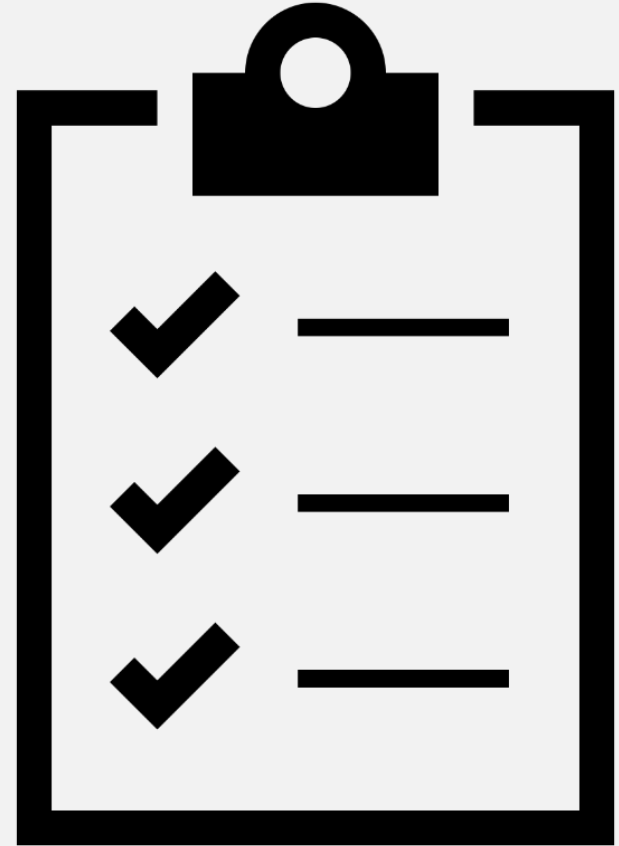
## Vector Workshop

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## What we will discuss:

- **Why pesticide labels matter?**
- **Parts of a label**
- **Safety data sheets (SDS)**
- **Understanding directions for use**
- **Basic rate calculations**



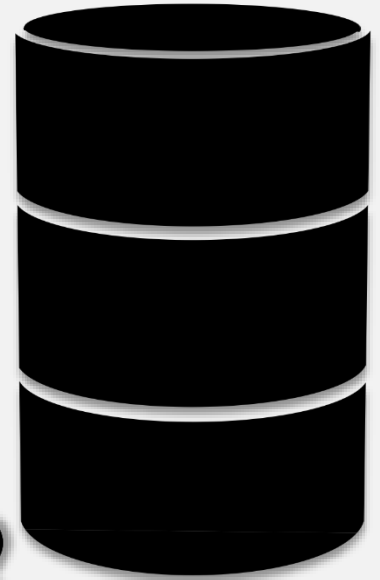
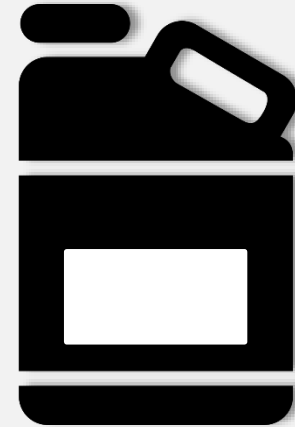
# Why pesticide labels matter:

- **The label is the LAW**
  - “The USER is liable for personal injury, crop or site damage, or pollution that occurs through misuse of a pesticide”<sup>1</sup>
  - Civil or criminal
- **What does a pesticide label tell you?**
- **What are other reasons to follow the label?**



## Parts of a label:

- Name, brand, or trademark product sold under
- Name and address of the producer or registrant
- Net contents
- Registration numbers & establishment number
- Ingredient statement
- Signal Words
- Warning or precautionary statements
- Directions for use
- Use classification

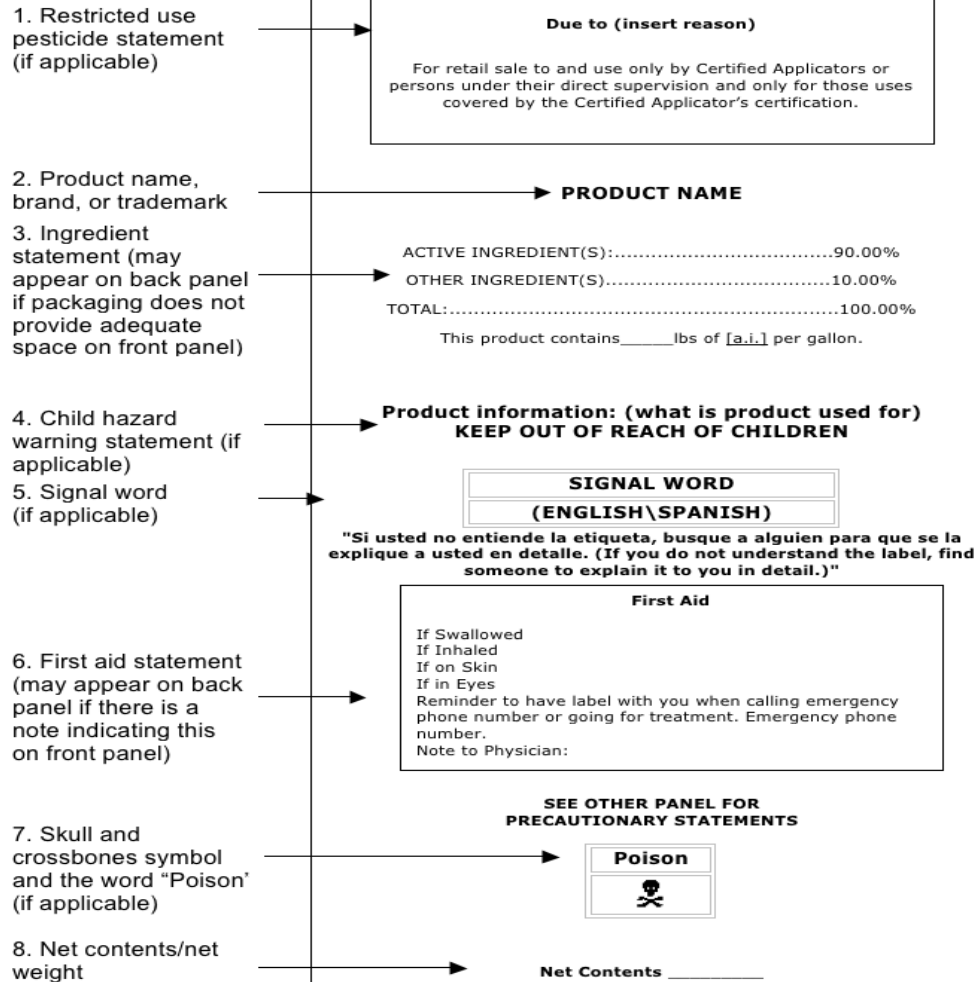


# Sample Label Front:

## Signal words

- Toxicity Category I: Danger
- Toxicity Category II: Warning
- Toxicity Category III: Caution
- Toxicity Category IV: None required

<https://www.epa.gov/pesticide-labels/label-review-training-module-2-parts-label-page-4>



# Sample Label Back:

1. Precautionary statements

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMAN AND DOMESTIC ANIMALS

#### Signal Word

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Causes moderate eye irritation. Wear goggles. Harmful if swallowed. Harmful if absorbed through skin.

#### ENVIRONMENTAL HAZARDS

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#### PHYSICAL OR CHEMICAL HAZARDS

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2. Directions for use (if the product is a restricted use pesticide, then this header will be followed by "Restricted Use Pesticide" if the product is an RUP). "General" is not recommended.

## DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

### APPLICATION DIRECTIONS

#### INFORMATION (non-site-specific):

#### PRECAUTIONS AND RESTRICTIONS (non-site specific):

## DIRECTIONS for USE (continued)

Non-Crop Site/Pest:  
Non-Crop Site/Pest:  
Non-Crop Site/Pest:  
Crop/Pest:  
Crop/Pest:  
Crop/Pest:

## STORAGE AND DISPOSAL

PESTICIDE STORAGE

PESTICIDE DISPOSAL

CONTAINER HANDLING

## WARRANTY STATEMENT

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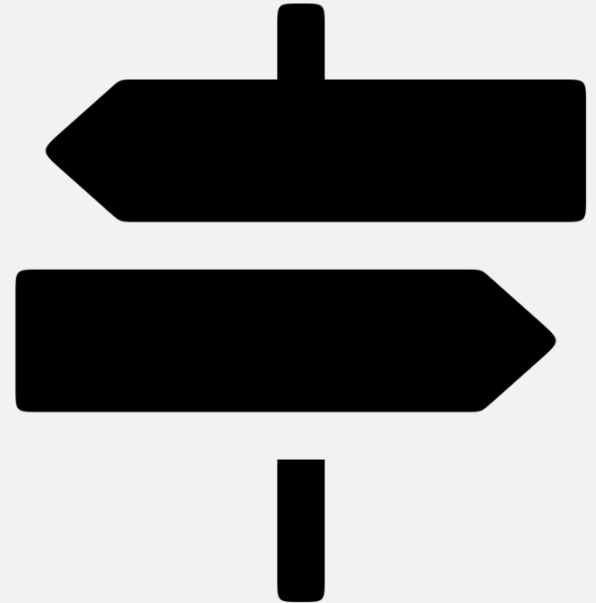
2. Directions for use (continued)

3. Storage and disposal

4. Warranty statement (if the registrant chooses to include one)

# Understanding directions for use:

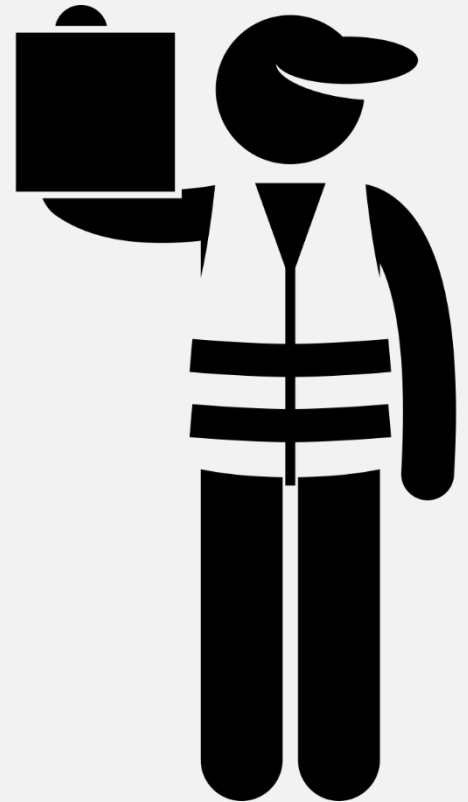
- **How the product can and can't be used**
  - Pests
  - Sites
  - Rates
  - Restrictions
  - Maximum active ingredient per treatment/year
  - Storage and disposal
  - Any other requirements, as necessary





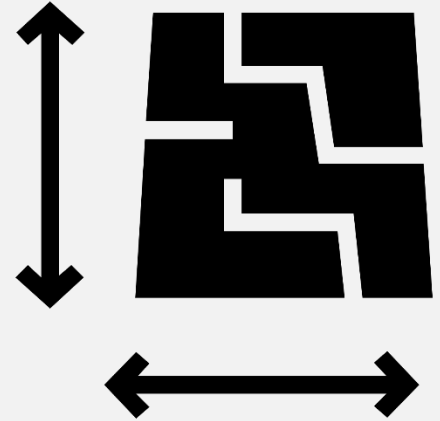
# Safety Data Sheets (SDS):

- Formerly Material Safety Data Sheets (MSDS)
- Since 2016, Globally Harmonized System
  - Standard format including 16 sections
- **Detailed information on:**
  - Chemical properties
  - Firefighting measures
  - First aid
  - PPE
  - Spills



## Basic rate calculation:

- Why is it important to use the right amount of pesticide?
- What do you need to know?
  - Application rate
  - Treatment area
  - Unit conversions



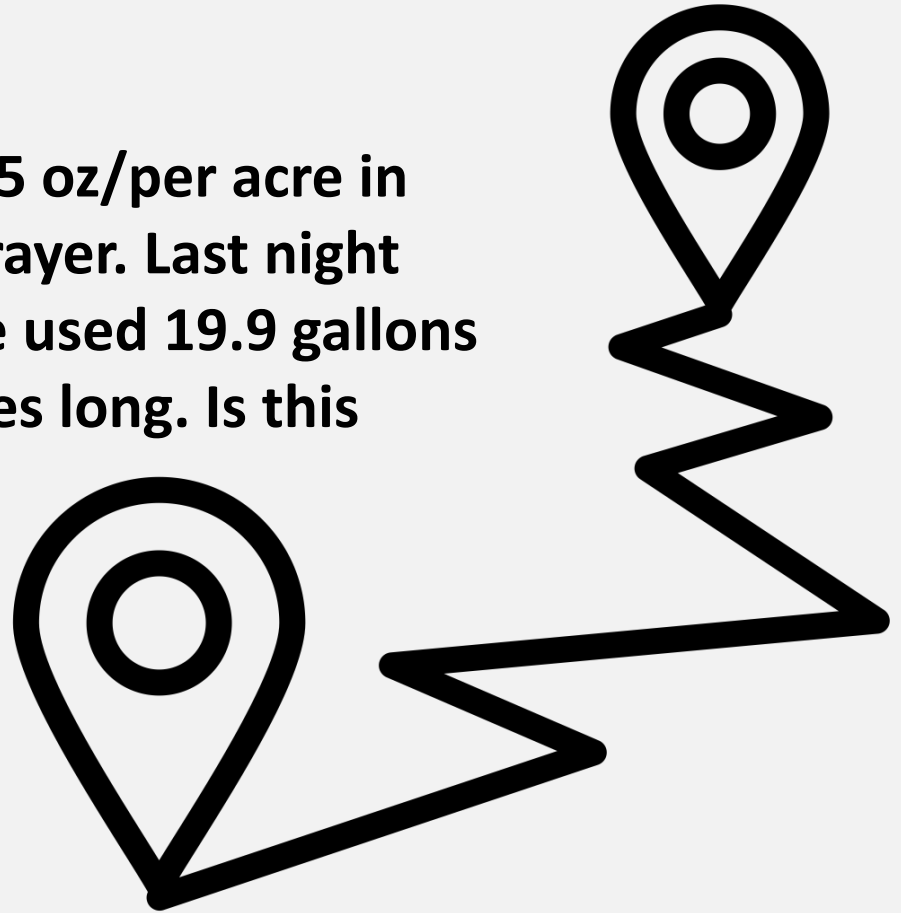
## Sample Calculation 1:

- You need to treat a canal that is 15 feet wide and 3 miles long. The label for the larvicide you are using gives an application rate of 3 lbs per acre. How much product will you need for this job?



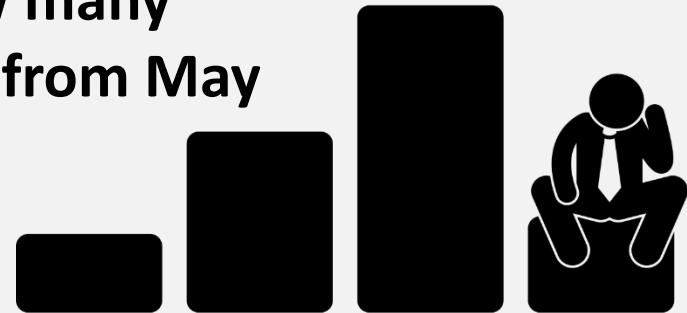
## Sample Calculation 2:

- You are using the label rate of 1.5 oz/per acre in your ULV (Ultra Low Volume) sprayer. Last night your technician recorded that he used 19.9 gallons of product. His route was 33 miles long. Is this accurate?



## Sample Calculation 3:

- You are in charge of ordering larvicide for the season. You have about 90 acres of standing water in your jurisdiction. You decide to buy a product that will last about 30 days per application. The application rate on the label 6 lbs/acre. They come in 50 lbs bags and cost \$200 per bag. How many bags will you need for a season that runs from May 1 to October 31? How much will it cost?



## Additional resources:

- **Pesticide Label Review Training**
  - <https://www.epa.gov/pesticide-labels/pesticide-label-review-training>
- **EPA Pesticide Label Information**
  - <https://www.epa.gov/pesticide-labels>
- **National Pesticide Applicator Certification Core Manual**
  - <http://www.scmac.org/PDF/CoreManual2.pdf>

**Feel free to contact me with any questions at:**

**ARuiz3@cdc.gov**

For more information, contact NCEH

1-800-CDC-INFO (232-4636)

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