Pesticide Label Comprehension

Introduction

- Every pesticide must be registered with the Environmental Protection Agency before it can be sold or used.
- Individual Products are registered not generic pesticides.
- Federal Regulations specify the format and information that is to be included in a pesticide label.

Introduction

• Pesticide Labels are legal documents that must be followed.

When to Read the Pesticide Label

- The Pesticide Label should be read before you:
 - buy a pesticide
 - mix a pesticide
 - apply a pesticide
 - store a pesticide
 - dispose of a pesticide.

Before You Buy a Pesticide the label should be read to determine...

- Is the pesticide needed for the job?
- Can the pesticide be safely used under the application conditions?
- Where is the pesticide allowed to be used?
- Are there any restrictions on the pesticide's use?
- How much product is needed?

Before You Mix a Pesticide the pesticide label should read to answer the questions:

- What protective equipment is required?
- With what can the pesticide be applied?
- How much of the pesticide should be used?
- What is the procedure for mixing the pesticide product?

Before You Apply a Pesticide read the label to know answers to the following questions:

- What safety measures should be followed?
- When may the pesticide be applied?
- How should the pesticide be applied?

Before You Store A Pesticide

• Determine where and how the pesticide should be stored.

Before You Dispose of a Pesticide or Its Container

• Determine how to decontaminate and dispose of the pesticide container.

Facts to Learn from the Label

• Items that can be found within a pesticide label include: brand name, chemical name, common name, formulation, ingredients, contents, manufacturer, registration and establishment numbers, signal word, precautionary statements, statement of practical treatment, statement of classification, directions for use, misuse statement, reentry statement, storage and disposal directions and warranty.

Brand Name

- This is the name that a specific manufacturer has given to a product.
- Different companies have different brand names for what is essentially the same product.
- As an example, most of us know what a Band-Aid is, but this is a brand name and the common name of this product being "adhesive strip". In Latin America an adhesive strip is commonly known by the brand name Curel.

Chemical Name

• This describes the structure of a chemical and is based on international rules for naming chemicals.

Common Name

- Chemical names are often times complex. To simplify things, many pesticides have been assigned an official common name.
 This is a generic name.
- An example of a common name is "cola" while a brand name of a cola might be "Coke" or "Pepsi".

Formulation

- Pesticide labels always indicate a product's type of formulation.
 This is sometimes indicated in the suffix of a product's brand name.
- The pesticide label may only show an abbreviation for the formulation such as "WP" for wettable powder and "D" for dust.

Ingredients

- Pesticide labels indicate the percent of active and inert ingredients by weight.
- Inert Ingredients are the components of a pesticide product that do not have pesticidal action although they might be toxic, flammable, or pose risks to one's safety or the environment.
- The Active Ingredients are the components of a pesticide product that do have pesticidal action.
- The active ingredients of a product must be specifically identified by name on a pesticide label.
- The inert ingredients, however, can simply be listed as inert ingredients and do not have to be identified by name.

Contents

• A products net contents by weight or volume are always listed.

Manufacturer

• The name and address of the product manufacturer will be indicated on the label.

Registration and Establishment Numbers

• The EPA assigns a number to each pesticide when it is registered.

Signal Word

- A pesticide will receive a signal word of Danger, Warning or Caution to indicate how toxic it is.
- The words Danger or Danger Poison indicate a pesticide is highly toxic or poses a dangerous health or environmental hazard.
- Warning indicates moderate toxicity.
- Caution indicates low toxicity.

Precautionary Statements

Precautionary statements indicate the hazards
 associated with a chemical; there are three parts to this.

Precautionary Statements - The First Section

- This first section tells
 - (a) why the pesticide is hazardous;
 - (b) what adverse effects may occur;
- (c) describes the type of protective equipment that one must wear when handling packages and mixing and applying a pesticide.

Precautionary Statements - The Second Section

• The second part of precautionary statements indicates the environmental hazards associated with a products use. It indicates whether a pesticide is toxic to nontarget organisms such as honey bees, fish, birds or other wildlife and may explain how to avoid contaminating the environment.

Precautionary Statements - The Second Section

- Examples of general environmental statements include:
 - Do not apply where runoff is likely to occur.
 - Do not apply when bees are likely to be in the area.
 - Do not apply when wheather conditions favor drift from treated sites.

Precautionary Statements - The Third Section

• The third section of the precautionary statements explains special physical and chemical hazards such as risks of explosion if the chemical is exposed to sparks or hazards of fumes during a fire.

First Aid or Statement of Practical Treatment

This describes what emergency first aid procedures to take when the pesticide contacts skin, splashes into one's eye or if dust or vapors are inhaled. It also explains when to seek medical attention.

First Aid or Statement of Practical Treatment

Typical Statements of Practical Treatment include:

- In case of contact with skin, wash immediately with soap and water.
- In case of contact with eyes, flush with water for 15 minutes and get immediate medical attention.
- In case of inhalation, move from contaminated area and give artificial respiration if necessary.
- If swallowed, drink large quantities of milk, egg white or water. Do not induce vomiting.

Statement of Use Classification

The Environmental Protection Agency (EPA) classifies pesticides as either "General - Use" or "Restricted-Use" based on a pesticide's potential to cause injury to people, animals or the environment. Those pesticides that are considered to pose a serious risk are classified as Restricted-Use and this statement will be listed in a prominent place on the label.

Directions for Use

This section:

- lists all the target pests that a pesticide has been registered to control.
- lists the crops, plant species, animals, or other sites where the pesticide may be used.
- may include special restrictions that must be followed.
- provides instructions on how to apply the pesticide.
- tells how much of the pesticide should be used.

Directions for Use (continued)

- provides directions for mixing.
- indicates where to use the product.
- explains when to apply the pesticide.
- sometimes indicates whether a pesticide is incompatible with other often used products.
- indicates the preharvest interval if a pesticide is used on a crop.

Agricultural Use Requirements

This statement appears in the "Directions for Use" section for products labeled for use in production agriculture, commercial greenhouses and nurseries and forests.

Restricted-Entry Statement

This provides the time that must pass before one can enter a treated area. If no reentry interval is given, the treated area may usually be entered once the spray dries or dust settles.

Misuse Statement

- The misuse statement reminds users to apply a pesticide according to the instructions on the label.
- It is illegal to use a pesticide in a manner inconsistent with the label unless federal or state laws specify acceptable deviations from label directions.

Storage and Disposal Directions

- This sections indicates how to store and dispose of a pesticide.
- Pesticides must always be kept out of reach of children and animals and locked in posted areas.
- Some pesticides have special storage requirements to prevent them from losing effectiveness or causing a fire or explosion.

Storage and Disposal Directions

- Always follows the disposal methods listed on the label.
- Improper disposal of pesticides poses a hazard to people, animals and the environment.

Warranty

- Manufacturers commonly include a warranty or disclaimer on their pesticide labels.
- This informs the purchaser of their rights and limits the liability of the manufacturer.

Deviations from the Label

There are times when deviations from the label are permitted. Some of these are addressed below.

- Decrease in dosage rate. There are times when a pesticide used at a lower rate sufficiently reduces a pest population without harming predators, allowing the predators to survive.
- While using a pesticide at a rate less than that specified on the label is allowed, it is never legal for an applicator to apply a pesticide at an amount in excess of the amount per unit area specified on the label

Application at a Frequency Less Than Specified

The directions of the label will many times specify how frequently to apply a pesticide to maintain adequate control of a pest.

- The law allows for a pesticide to be applied less frequently than the label recommends.
- In contrast, it is never legal to apply a pesticide more frequently than the recommended interval listed on a pesticide interval.

Use a Pesticide to Control a Pest not on the Label

One may used a pesticide for the control of a pest not listed on the label as long as the site of application is listed on the label and the label does not forbid its use against the pest to be controlled.

Use an Application Method not Specified on the Label

Pesticide Labels many times do not specify the method by which a pesticide is to be applied. Unless prohibited by the label one is generally allowed to apply a pesticide using any method as long as the application is done consistent with all other label directions.

Mixing Two or More Pesticides Together or Mixing a Pesticide with a Fertilizer

Mixing two or more pesticides together or mixing a pesticide and a fertilizer together is allowed unless specifically prohibited by one of the pesticide labels.