Pesticide ER Course Agenda

• Introduction and video
• **Pesticides and Fed/State Regulations**
• Human Impacts
• Hazard Recognition
• Case Study – Wildlife Baiting Investigation
  – Break 3:00 – 3:15
• Environmental Impacts
• Case Study – 15 Mile Creek
• Analysis, Treatment, T&D
• Scenario Exercises
• Course Closing and Evaluation
  – Out by 5:30pm
Pesticides And Federal/State Regulations
El Vampiro
REG. IN THE U.S. PAT. OFFICE
KEEP IN A DRY PLACE
DIRECTIONS

FOR COCKROACHES: Blow the Powder between the floor and the wall and all other places bugs infest.
FOR FLIES: Blow the Powder on to the windows or where the flies frequent, and you will find them dead in the morning.
FOR MOSQUITOES: Blow the Powder into the air wherever you hear them singing, and the mosquitoes will soon disappear.
FOR BED-BUGS: Blow the Powder under the mattress and in corners of the bed every morning for three or four days.
FOR FLEAS: Blow Powder thoroughly into the hair of the animal, both on back and belly.
FOR LICE ON CHICKEN: Blow the Powder carefully under the wings and between the legs and on the body. This Powder is absolutely useful for chicks first hatched, as it will not hurt them.
TO USE: Pull out nail from end of package and use box as bellows by pressing on top and bottom with thumb and finger, blowing Powder where required.

El Vampiro
IN THE HANDY BELLOWS BOX
READY FOR USE
MANUFACTURED ONLY BY ALLAIRE, WOODWARD & CO.
PEDIA, ILL.
40% DDT
WETTABLE POWDER

For use on
MANY PLANTS
LAWNS - BUILDINGS

ACTIVE INGREDIENT:
  Dichloro-diphenyl-trichloroethane (DDT) 50%
  (DDT melting point, 89°C minimum)
INERT INGREDIENTS
  . . . . . . . . . . 50%

CAUTION
Avoid excessive inhalation.
Avoid contamination of foodstuffs.
Do not take internally.
Store away from children and domestic animals.

NET 1 LB.

E. I. Du Pont De Nemours & Company
INCORPORATED
WILMINGTON, DELAWARE

ARSENATE OF LEAD
POWDERED

For Control of Certain Insects on Lawn & Turf Areas, Fruit, Shrub, Evergreen and Ornamental Trees and Shrubs.
Definitions

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) specifies:

- A **pesticide** is any substance or mixture intended for preventing, destroying, repelling or mitigating any insect, rodent, nematode, fungi, or weeds or any other forms of life declared to be pests. (FIFRA)

- A **pest** is any form of plant or animal life or virus, bacteria, or other microorganism, except those on or in living man or animals.
### CERCLA vs FIFRA “Mindset”

**OPP only EPA program that allows hazardous materials to be willfully introduced into the environment.**

<table>
<thead>
<tr>
<th><strong>CERCLA Response</strong></th>
<th><strong>Normal Pesticide Application</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous substance, pollutant/contaminant</td>
<td>Released to environment</td>
</tr>
<tr>
<td>Release (or threat of) to environment</td>
<td>Will not cause unreasonable harm</td>
</tr>
<tr>
<td>Discretionary</td>
<td>Pose health &amp; environmental threats</td>
</tr>
<tr>
<td>- Must protect Public Health &amp; Environment</td>
<td>- Sampling guaranteed to find application</td>
</tr>
<tr>
<td>- Define nature/extent of problem—SAMPLE</td>
<td>- Residual expected—not waste</td>
</tr>
</tbody>
</table>
Pesticide Classes

- Insecticide
- Herbicide
- Fungicide
- Rodenticide
- Nematicide
- Bactericide
- Predacide
- Algicide
- Miticide
- Molluscicide
- Slimicide
- Silvicide
- Disinfectants
- Homocide
- Fumigants
- Repellants
Active Ingredient and Inerts

- **Active Ingredient**: The material that does the claimed action.

- **Inert* Ingredients**: Everything else.
  - *Include solvents, surfactants, emulsifying agents and can be flammable, corrosive, or toxic

- Formulations are proprietary
How Pesticides Are Regulated: Federal Level

- The Law = The Label
- USDA: Emphasis on Efficacy (Effectiveness)
- EPA: Human Health, Environment
- Office of Pesticide Programs (OPP)
- Registration, Suspension, and Cancellation
- Regions: Nominal Enforcement, Oversee State Grants
  (EPA’s Oldest and Most Cumbersome Law)
The Law--Framework

- FIFRA specifies that:
  - A pesticide product must be registered by EPA prior to sale or distribution in the U.S. (Sec. 3)
  - EPA may grant an exemption from registration for emergencies (Sec. 18)
    - Public health exemption
    - Crisis exemptions
The Label: Who, What, When, Where, and How of Use*

Phostoxin: This isn’t a label, it’s an owner’s manual!

* Spills, dumping, abandonment etc.. Not regulated by FIFRA
General and Restricted Use

General
- Over the counter available to untrained user
- Signal Word typically Caution

Restricted Use
- Only available for use by certified applicators
- Signal Word Typically Danger or Warning

Dealers must keep records of sale
Degesech: the folks who brought you Zyklon B
How Pesticides Are Regulated: State Level

- State Ag Agency Typically Lead
- Enforces the Law/ Label
- Certifies Applicators
- Registers Pesticides within State
- Operates State Labs
- Coordinates Pesticide Collection Events
What the State has to Offer*

- Knowledgeable Labs
- Knowledge of Crops, Growers, Products and Dealers
- Assistance interpreting labels
- Collection Programs

* Undying love not included
What’s Wrong Here?
- Aerial applicator
- Oversprays field
  - Sprays non-approved crop
  - Sprays farm workers
  - Injuries
- CERCLA or FIFRA response?

- Aerial applicator
- Engine fails
  - Crashes into river
  - Spills pesticide
  - Fish kill
- CERCLA or FIFRA response?

A mint field somewhere in Oregon.
Pesticide and Superfund Interface

**Emergency:**
- Methyl-Parathion
- Anthrax
- 15 Mile Creek

**Removal:**
- McCormick and Baxter (Wood Treater)
- Double H Removal