Applying Herbicides Safely and Legally

Roger Flashinski
Program Manager
Pesticide Applicator Training
Herbicides vs Pesticides

Herbicides

Pesticides . . .
Fungicides
Insecticides
Rodenticides
. . . Others
T/F All pesticides are insecticides. **Wrong!**
Wisconsin Pesticide Laws & Regulations
Individual Landowner
Two Types of Applicators

PRIVATE

COMMERCIAL
## What am I?

<table>
<thead>
<tr>
<th>Individual</th>
<th>Applicator Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>Private</td>
</tr>
<tr>
<td>NC Landowner</td>
<td>Commercial</td>
</tr>
<tr>
<td>Volunteer</td>
<td>Commercial</td>
</tr>
<tr>
<td>Custom</td>
<td>Commercial</td>
</tr>
</tbody>
</table>
When is Certification Legally Required?

- Apply restricted-use pesticides (RUP)
- Apply any pesticide on a for-hire basis
- Apply any pesticide in schools or on school property
- Apply any pesticide to waters of the state (DNR permit condition; some exceptions)
- Label requirement (e.g. Habitat) or state special rule (e.g. metam sodium)
### Do I need to be a certified applicator?

<table>
<thead>
<tr>
<th>Individual</th>
<th>Applicator Type</th>
<th>Certify?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>Private</td>
<td>Maybe</td>
</tr>
<tr>
<td>NC Landowner</td>
<td>Commercial</td>
<td>Maybe</td>
</tr>
<tr>
<td>Volunteer</td>
<td>Commercial</td>
<td>Maybe</td>
</tr>
<tr>
<td>Custom</td>
<td>Commercial</td>
<td>YES</td>
</tr>
</tbody>
</table>
Volunteers

➡ Outside the regulations for certification

BUT . . .

➡ Many organizations, volunteer groups, municipalities have “in-house” certification policy
Pest Control Categories

1.1 Field & Vegetable Crops
1.2 Fruit Crops
1.3 Livestock & Poultry
2.0 Forestry
3.0 Turf & Landscape
3.1 Greenhouse & Nursery
4.0 Seed Treatment
5.0 Aquatic Pest Control
5.1 Antifouling Paints
6.0 Right-of-Way
7.1 Structural Pest Control
7.2 Space & Commodity Fumigation
7.3 Termite Control
7.4 Wood Preservation
7.5 Sewer Root Control
11.0 Companion Animals
24.0 Mixer & Loader

Pest Control Subcategories

9.9 Aerial Application
25.0 Soil Fumigation
26.0 Chemigation
Pest Control Categories

1.1 Field & Vegetable Crops
3.0 Turf & Landscape
5.0 Aquatic Pest Control
What About Supervision?

➤ Most commercial applicators
  • Certification trumps supervision (eliminated)

➤ For commercial applicators where certification is not required
  • Nothing legally stopping you from supervising others
Commercial Certification: 5 Years

[Image of a commercial pesticide applicator certification card]

Certification Number: 056905 001.1
Category: Public
Expires: 1/31/2007

Wisconsin Department of Agriculture, Trade & Consumer Protection
Division of Agricultural Resource Management
P.O. Box 8911
Madison WI 53708-8911

COMMERICAL PESTICIDE APPLICATOR
This certificate issued in accordance with Chapter 94.705
Wisconsin Statutes
Certified → Recognizes Knowledge
Licensed → Authorizes Use (must be certified)
Commercial License: 1 Year

Wisconsin Department of Agriculture, Trade and Consumer Protection

Commercial Applicator-For Hire

John Q Public

Expiration Date: December 31, 2005

License Number: 191113-CA

93 - 000001 - 000001
Labels and labeling

Information on the container

The label and other information
Identifying Information

Ingredient statement

Active Ingredient:
triclopyr: 3,5,6-trichloro-2-pyridinloyxycetic acid, butoxylpolyester

Inert Ingredients: .............................................................................................................. 38.4%

Total .............................................................................................................................. 100.0%

Contains petroleum distillates
Acid Equivalent: triclopyr - 44.3% - 4 lb/gal

WPS Uses: Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural-plant uses are covered – must wear:
• Long-sleeved shirt and long pants
• Chemical-resistant gloves such as Barrier Laminates, Nitrile Rubber, Neoprene Rubber, or Viton
• Shoes plus socks

Non-WPS Uses: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS – must wear:
• Long-sleeved shirt and long pants
• Shoes plus socks

Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washability, use detergent and hot water. Keep and wash PPE separately from other laundry.

First Aid
If on skin: Flush skin with plenty of water. Get medical attention if irritation persists.
If swallowed: Do not induce vomiting. Call a physician.

Environmental Hazards
This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to tidal waters below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Physical or Chemical Hazards
Do not use or store near heat or open flame. Do not cut or weld equipment.

Precautionary Statements
Hazard to Humans and Domestic Animals
Keep Out of Reach of Children
CAUTION PRECAUCION
Si usted no entiende la etiqueta, busque a alguien para que le explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Avoid contact with eyes, skin, or clothing. Avoid breathing mists or vapors. Avoid contamination of food.

Personal Protective Equipment (PPE)
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA.

User Safety Recommendations
Users should:
• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Specimen Label

Specialty Herbicide

Dow AgroSciences LLC

For the control of woody plants and broadleaf weeds on rights-of-way, industrial sites, non-crop areas, non-irrigation ditch banks, forests, and wildlife openings, including grazed areas on these sites.

Active Ingredient:
triclopyr: 3,5,6-trichloro-2-pyridinloyxycetic acid, butoxylpolyester

Inert Ingredients: .............................................................................................................. 38.4%

Total .............................................................................................................................. 100.0%

Contains petroleum distillates
Acid Equivalent: triclopyr - 44.3% - 4 lb/gal

Environmental Hazards
This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to tidal waters below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Physical or Chemical Hazards
Do not use or store near heat or open flame. Do not cut or weld equipment.

Precautionary Statements
Hazard to Humans and Domestic Animals
Keep Out of Reach of Children
CAUTION PRECAUCION
Si usted no entiende la etiqueta, busque a alguien para que le explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Avoid contact with eyes, skin, or clothing. Avoid breathing mists or vapors. Avoid contamination of food.

Personal Protective Equipment (PPE)
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA.
Safety Information

Signal word

- **Danger:** highly toxic
- **Warning:** moderately toxic
- **Caution:** slightly toxic to relatively non-toxic
Specimen Label

Dow AgroSciences

Garlon® 4

Specialty Herbicide
For the control of woody plants and broadleaf weeds on rights-of-way, industrial sites, non-crop areas, non-irrigation ditch banks, forests, and wildlife openings, including grand areas on these sites.

Active Ingredients:
- Dichlofop-Methyl: 1% (Experimental: P100®)

Trade Name:
- Garlon® 4

Contains non-volatile solvents:
- Propylene glycol

FPAR Reg. No. 05784-A

Precautionary Statements
Hazards to Humans and Domestic Animals
Keep Out of Reach of Children.

CAUTION PRECAUTION
Inhalation of extended contact, inhalation or dermal contact can cause irritation of the skin. (If you would not understand the label, ask someone to explain it to you first.)

Harmful if Swallowed, Inhaled, or Absorbed Through Skin.

Avoid contact with skin, eyes, or clothing. Avoid breathing dust or mists. Avoid contamination of food.

Personal Protective Equipment (PPE)
Some mixture that are chemical substances in this product are listed below. If you want more details, follow the instructions for category P100® PPE.

Directions for Use
If label or product is in or near water, it may be necessary to contact your local health department for assistance.

Do not use near fish or wildlife resources.

Use the label that came with the product.
Pesticides and Personal Safety

Hazard = Toxicity x Exposure
~ EXPOSURE ROUTES ~

➔ Dermal exposure
~ EXPOSURE ROUTES ~

- Inhalation
- Oral
- Eye
First aid

4. FIRST AID:

EYES: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several minutes. If effects occur, consult a physician, preferably an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

INHALATION: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.
Common exposure situations

◆ Not wearing personal protective equipment
◆ Wearing contaminated work clothes
◆ Splashing pesticide onto yourself
◆ Not washing yourself after handling pesticides
◆ Entering sites immediately after treatment
~ PERSONAL PROTECTIVE EQUIPMENT ~
~ WORK CLOTHES ~

- Long-sleeved shirt
- Long trousers
- Shoes and socks
Chemical-resistant gloves

Most handling situations
Fluorescent dye experiment
~ Coveralls, Apron, Eyewear ~
Fluorescent dye experiment
Fluorescent dye experiment
Fluorescent dye experiment
DON'T USE A DUST MASK

DUST MASK

DUST/MIST RESPIRATOR
# Differences in Respiratory Protection

<table>
<thead>
<tr>
<th>Respirator Type</th>
<th>Average Particle Count (cubic foot air)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No respirator</td>
<td>1919</td>
</tr>
<tr>
<td>Nuisance (dust) mask</td>
<td>1832</td>
</tr>
<tr>
<td>Particulate respirator</td>
<td>1226</td>
</tr>
<tr>
<td>Chemical cartridge respirator</td>
<td>276</td>
</tr>
</tbody>
</table>
~ RESPIRATORS ~
Wash up
Pesticide Applicator Training
University of Wisconsin Extension

http://ipcm.wisc.edu/pat

IPAW_Safely & Legally