

Training Module - Proper Use of Herbicides

No continuing education credits are available for this training module, it is purely for training purposes.

Proper Use Of Herbicides

Beyond the license

“What you don’t know could hurt you.”

A license is just the first step to being a responsible applicator.

As a licensed applicator it is your individual responsibility to:

- 1) Apply the correct herbicide in the most efficient and safest method.
- 2) Read the labels for the herbicides you use.
- 3) Know and use the correct rates.
- 4) Understand how the herbicide you are using affects the environment.
- 5) Be aware of any potential hazards

Training Module - Proper Use of Herbicides

The mentality needs to shift from just “killing weeds” to “managing and sustaining” the system under your care.



Be aware that you are applying substances that will alter the environment and the weeds may not be the only thing affected.



** The use of commercial names is to provide information about products; it does not represent an endorsement of these products.*

Training Module - Proper Use of Herbicides

Don't lose sight of the gravity of your actions!!!



You have been given a trust by the state and the public that you will do your job correctly and safely. It is easy to fall into a routine and become careless.

It only takes a momentary lapse in judgment to turn a situation bad.



* The use of commercial names is to provide information about products; it does not represent an endorsement of these products.

Training Module - Proper Use of Herbicides

While you are busy working, people are watching



The Label Is The Law!

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

See side panel for Storage And Disposal.

See inside booklet attached to container for additional Precautionary Statements and complete Directions For Use.

“Ignorance of the law is never an accepted excuse for a violation”
(Applying Pesticides Correctly, Frederick M. Fishel, University of Florida
IFAS 2010)

The use of any herbicide in a way that is not consistent with its label is considered a violation and can be legally prosecuted under FIFRA.

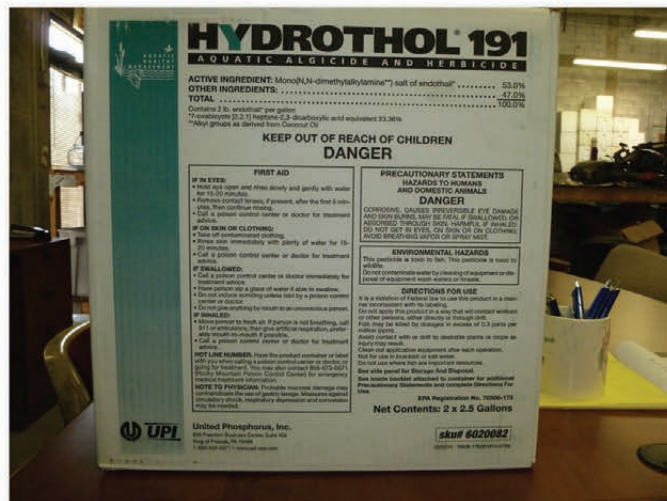
Training Module - Proper Use of Herbicides

Even the simplest of products have potential hazards



“This product is toxic to fish. Direct application of copper sulfate to water may cause a significant reduction in populations of aquatic invertebrates, plants, and fish.”

Do you know how much is too much?



Greater than 0.3 ppm can kill fish (That's only 57.6 ounces per acre foot).

* The use of commercial names is to provide information about products; it does not represent an endorsement of these products.

Training Module - Proper Use of Herbicides

Be aware of the indirect outcomes of your treatment

OXYGEN RATIO

Fish breathe oxygen in the water and a water/oxygen ratio must be maintained. Decaying weeds use up oxygen, but during the period when this product should be used, the weed mass is fairly sparse and the weed decomposition rate is slow enough so that the water/oxygen ratio is not disturbed by treating the entire area at one time.

If treatments must be applied later in the season when the weed mass is dense and repeat treatments are needed, spread granules in lanes, leaving buffer strips which can then be treated when vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment.

Buffer lanes should be 50 to 100 feet wide. Treated lanes should be as wide as the buffer strips. (See illustration to the right.)



WATER pH

ACTIVE INGREDIENT:

Butoxyethyl Ester of 2,4-Dichlorophenoxyacetic Acid*.....27.6%

OTHER INGREDIENTS:.....72.4%

TOTAL:.....100.0%

*Isomer specific by AOAC Method. Equivalent to 2,4-Dichlorophenoxyacetic Acid.....19%

**KEEP OUT OF REACH OF
CHILDREN
CAUTION**

Much of the time it's not the actual herbicide that can cause a problem but the secondary effects caused by the treatment

Are there any special regulations for the herbicide you are using?



(Florida Organo-Auxin Rule 5E-2.033)

* The use of commercial names is to provide information about products; it does not represent an endorsement of these products.

Training Module - Proper Use of Herbicides

Properly calculating treatment areas



The labels will give you the correct “rate” but it is critical to properly measure the treatment area in order to determine how much herbicide to apply in each situation

It’s not just “what” you’re using, but “how” and “where” you use it.

- Is the water you’re treating used for irrigation?
- Are there any use restrictions after your treatment?
- Are there any sensitive non-target plants in the area?
- Do roots of non-target plants extend into your treatment area?
- Will any mitigation be adversely affected by your treatment?
- Are there any homeowners that have herbicide sensitivity in your treatment area?

Training Module - Proper Use of Herbicides



If you're using Imazapyr, did you know?



- “Water treated with imazapyr may not be used for irrigation purposes for 120 days after application or until residue levels are below 1.0 ppb.”
- “Do not apply more than 6 pints of product per acre per year.”
- “Untreated desirable plants can be affected by root uptake of imazapyr from treated soil”
- “Injury or loss of desirable plants may result if imazapyr is sprayed on or near desirable plants, on areas where their roots extend, or in locations where treated soil can come into contact with their roots.”
- Imazapyr can stay active in the soil for up to 3 years.

Avoiding Off Target Damage



- Runoff – Herbicide drips off target plants or washes across a surface and out of the boundaries of the treatment area
- Leaching – Herbicide in solution moves through the soil
- Drift – Droplets of air-born herbicide are blown onto non-target plants
- Overspray – Non-target plants are accidentally sprayed while spraying target plants

* The use of commercial names is to provide information about products; it does not represent an endorsement of these products.

Training Module - Proper Use of Herbicides

FIFRA Enforcement

Violations can be prosecuted in federal, state or both jurisdictions.

FIFRA provides for a \$6500.00 civil/administrative fine PER count.

Criminal prosecution can carry a sentence of one year jail time PER count.

Sentences of 2-3 years PLUS fines are commonplace for pesticide violations.

(Information taken from "Biology And Control Of Aquatic Plants, A Best Management Practices Handbook", Copyright 2009 AERF)

It's your responsibility...

The license you carry represents that you are aware of, and will follow the regulations that govern our line of work.



Regulations exist to protect the public, the applicators and the environment.

** The use of commercial names is to provide information about products; it does not represent an endorsement of these products.*

Credit: Stephen Montgomery | Senior Biologist | Allstate Resource Management Inc.