



GILA RIVER INDIAN COMMUNITY DEPARTMENT OF ENVIRONMENTAL QUALITY

PESTICIDE

CONTROL OFFICE

Community
Applicator
Certification
Training



Image Credit: GRIC DEQ

Module 6:
Pesticides
and the
Environment



Pesticides and the Environment

This Module Will Help You:

- Understand the environmental consequences of pesticide application
- Understand how to prevent drift and runoff
- Identify pesticide-sensitive areas
- Understand how to adjust your methods to minimize environmental impact and maximize effectiveness





The Environment

Everything that surrounds us:

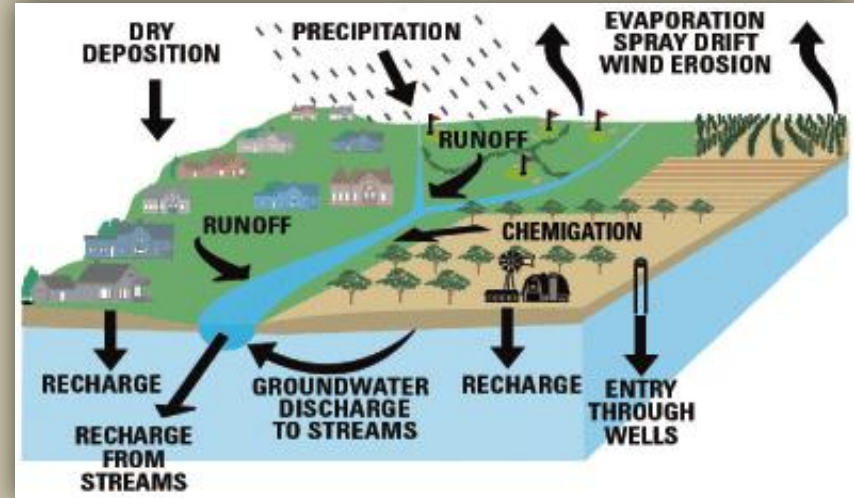
- Air, soil, water, plants, animals, people, in/outside buildings
- Beneficial organisms, endangered species
- There is public concern about the effect of pesticides on the environment





Protecting the Environment, Groundwater, and Endangered Species

- How will this pesticide affect the immediate environment at the site where it is being used?
 - Sources of Contamination
 - Sensitive Areas
 - Drift
 - Runoff & Leaching
 - Non-target Organisms
 - Residues



Schematic diagram illustrating routes of pesticides into streams and groundwater.
(Modified from Gilliom and others, 2006.)
Image Credit: U.S. Geological Survey



Label Warnings

Environmental Hazards Section

- EPA requires pesticides be tested to assess their potential for harming the environment
 - Pesticide characteristics
 - Fate of pesticides in the environment
 - Off-target movement
 - Degradation pathways
 - Impacts on non-target organisms
- EPA makes some products **restricted use** due to environmental concerns

Environmental Hazards

For terrestrial uses, this pesticide is toxic to birds, fish, and aquatic invertebrates. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Care must be taken to avoid runoff. **DO NOT** contaminate water by cleaning equipment or disposal of wastes. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

Termidor 80 WG specimen label
Image Credit: GRIC PCO



Pesticides and the Environment







Protecting Pollinators

THE NEW EPA BEE ADVISORY BOX On EPA's new and strengthened pesticide label to protect pollinators

PROTECTION OF POLLINATORS

 **APPLICATION RESTRICTIONS** EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon  in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators. Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.


When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:
<http://pesticidestewardship.org/pollinatorprotection/Pages/default.aspx>

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state/tribe, go to: www.aspco.org. Pesticide incidents can also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

Alerts users to separate restrictions on the label. These prohibit certain pesticide use when bees are present.

 The new bee icon helps signal the pesticide's potential hazard to bees.

Makes clear that pesticide products can kill bees and pollinators.

Bees are often present and foraging when plants and trees flower. EPA's new label makes it clear that pesticides cannot be applied until all petals have fallen.

Warns users that direct contact and ingestion could harm pollinators. EPA is working with beekeepers, growers, pesticide companies, and others to advance pesticide management practices.

Highlights the importance of avoiding drift. Sometimes, wind can cause pesticides to drift to new areas and can cause bee kills.

The science says that there are many causes for a decline in pollinator health, including pesticide exposure. EPA's new label will help protect pollinators.



Read EPA's new and strengthened label requirements: <http://go.usa.gov/jHH4>



Protect Yourself, Family, Neighbors and Pets



Image Credit: GRIC DEQ



Image Credit: GRIC DEQ

Be a responsible applicator!



Acknowledgements

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