



Kentucky's Pesticide Applicator Training & Certification Program

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If you are a pesticide user who will apply certain products classified for Restricted Use only, then you should become familiar with certification requirements developed by the U.S. Environmental Protection Agency (EPA). The certification program is designed to ensure that users of Restricted Use pesticide products are properly qualified to handle and apply these materials without harming themselves, other people, or the environment.

Each state actually certifies applicators, and to do so must develop and administer certification programs that conform with the EPA standards.

Legislative History

The following legislative highlights directly concern pesticides and pesticide applicators. They provide a background for understanding the authority behind pesticide registration and regulation.

- **1947—Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)** (also included herbicides). Required proper labeling of all such pesticides, which must be registered by the manufacturer with the Secretary of Agriculture (USDA) before being marketed in interstate commerce. Products manufactured and sold in only one state were not covered.
- **1970—Environmental Protection Agency (EPA)** established. Most pesticide regulatory responsibilities were transferred from Health, Education, and Welfare (HEW), Food and Drug Administration (FDA), and USDA to the EPA. Many of the old USDA registration numbers were changed to EPA registration numbers until the old pesticides came up for reregistration (“grandfathered in”).
- **1972—Federal Environmental Pesticide Control Act (FEPCA)**, also known as “amended FIFRA.” Extended registration to all pesticides sold in the U.S., not just those sold in interstate commerce. It established the pesticide label as a legal document and provided for classification of pesticides as “General Use” or “Restricted Use.”

A Restricted Use pesticide is defined as a material that, even when used according to label directions, may result in adverse effects on the applicator or on the environment, and thus requires special care in handling. Restricted Use pesticides can legally be purchased and used only by persons who have had special training as certified applicators, or under their direct supervision.

Private applicators apply pesticides only on their own property or on the lands of another on a “trading of personal services” basis. Commercial applicators apply pesticides as a business (pest control operators, lawn service companies, aerial applicators, etc.). (See *Definitions of Applicators*.)

- **1988—Amendments to FIFRA.** Mandated a nine-year reregistration scheme which applies to each registered product containing any active ingredient registered before November 1, 1984. This amounted to approximately 600 groups of related pesticide-active ingredients, or “cases,” representing 1,150 active ingredients in 45,000 formulated products. The EPA divided these 600 cases into four lists: A, B, C, and D.

List A: List A consists of 194 chemical cases (350 active ingredients) for which EPA had issued Registration Standards prior to the effective date of FIFRA '88.

The Registration Standards program, begun in 1980, was a systematic process for reevaluating existing pesticides and identifying conditions that registrants had to meet before the EPA would reregister them. In 1988, the 194 Standards issued accounted for about 85% of the total volume of conventional pesticides used in the U.S.

Lists B, C, and D: The remaining pesticides were divided into three lists based on their potential for exposure and other factors; list B was of highest concern and D of least concern. Classification criteria included potential for residues of concern in food or drinking water; significance of outstanding data requirements; potential for worker exposure; Special Review or Restricted Use status; and unintended adverse effects to animals and plants.

Amendments to FIFRA '88 also authorized the collection of fees to support reregistration activities; and changed EPA's responsibilities and funding requirements for the storage and disposal of suspended and cancelled pesticides and the indemnification of holders of remaining stocks of such cancelled pesticides.

- **1990—Food, Agriculture, Conservation and Trade Act of 1990 (1990 Farm Bill).** The 1990 Farm Bill made provisions for recordkeeping by all certified applicators of Restricted Use pesticides. The USDA has formed a committee of the key agencies involved in developing and implementing the pesticide recordkeeping requirements. The National Agricultural Statistics Service has been given the lead in defining the information the applicators will be required to maintain and collecting the data for a yearly report to Congress (See *Recordkeeping Requirements*).

- **1994—The Worker Protection Standard (WPS)** governs protection of employees on farms, or in forests, nurseries, and greenhouses from occupational exposure to agricultural pesticides. It covers agricultural workers, people who perform tasks related to cultivation and harvesting of plants, and pesticide handlers, people who mix, load, apply, and do other tasks related to agricultural pesticides. Labels of agricultural pesticides require compliance with the WPS. Statements referring to the WPS will appear in the Agricultural Use Requirements box on pesticide labels. Some of these requirements include personal protective equipment, notification and training requirements, and restricted entry intervals.
- **1996—The Food Quality Protection Act (FQPA)** became law in August 1996. The main focus of the FQPA is to protect the public from pesticide residues in dietary and nondietary sources. Some provisions of the FQPA include:
 - A single health-based safety standard for pesticide residue tolerances in both raw and processed food (a tolerance is the amount of pesticide residue that can legally be present in/on a food);
 - An explicit determination that residue tolerances are safe for children;
 - Consideration of (1) aggregate exposure to residues of pesticides (including food, drinking water, and residential use) and (2) cumulative exposure to all pesticides with a common mechanism of toxicity, when setting residue tolerances; and
 - EPA review of all existing residue tolerances within 10 years.

Definitions of Applicators.

Certified Applicator

A certified applicator is any individual who is certified as authorized to use or supervise the use of any pesticide which is classified for Restricted Use.

Private Applicator

A private applicator is a certified applicator who uses or supervises the use of any Restricted Use Pesticide (sometimes referred to as RUP's) for purposes of maintenance or production of any commodity on property owned or rented by him/ her or his/her employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person. This definition includes school and apartment maintenance as well as greenhouse and nursery workers.

What this means is that a farmer can exchange a pesticide application for other service(s) from another farmer without being considered commercial. An example of "trading personal services" is when a farmer helps another farmer put up a crop of hay in exchange for a highboy pesticide application on his tobacco crop.

Commercial Applicator

A commercial applicator is a certified applicator (whether or not he is a private applicator with respect to some uses) who uses or supervises the use of any pesticide which is classified for Restricted Use for any purpose or on any property other than as provided under the definition of "private applicator."

Kentucky currently has 17 categories of commercial applicators:

- 1. Agricultural Plant and Animal Pest Control:** control of insects, weeds, and plant diseases in farm crops, grasslands, and non-crop agricultural lands. This category also includes soil fumigators, such as those who fumigate tobacco seed beds.
- 1c. Agriculture Fumigation Non-Residential:** for applicators using or supervising the use of poisonous gases registered for control of pests in enclosed spaces (e.g., warehouses, ships, barges, granaries); residential structures are prohibited.
- 2a. Forest Pest Control:** for applicators involved in forestry practice, in the control of forest weeds and the insects and diseases of conifers and hardwoods.
- 2b. Wood Preservatives:** persons involved in the application of chemicals to wood to protect it from fungi and insect infestation.
- 3. Ornamental and Turf:** control of pests in the maintenance and production of ornamental trees, shrubs and flowers in nurseries, greenhouses,, cemeteries, parks, or lawn care and tree care systems; control of pests in the maintenance of turf.
- 4. Seed Treatment Pest Control:** concerned with preserving the quality of field crop and vegetable seed by controlling the fungi and stored product insects.
- 5. Aquatic Weed Control:** control of undesirable plant life in static, limited flow, and moving water situations; safety of aquatic animal life is stressed.
- 5a. Antifouling Paints:** application of tributyltin (TBT) paint.
- 6. Right-of-Way Pest Control:** for applicators who use selective or non-selective herbicides to control vegetation on highway, railroad, power line, or other rights-of-way.
- 7. Industrial, Institutional, Structural, and Health-Related Pest Control:** for pest control operators and other applicators using pesticides to control insects, ticks, millipedes, small mammals (such as rats, mice, squirrels), snakes and birds, and other pests in households, industrial, or institutional structures; termite control.
- 7c. Fumigation, Including Residential Structures**
- 8. Public Health Pest Control:** for applicators involved in public health programs or in general control of human health-related pests; for example, flies, mosquitoes, fleas, bedbugs, spiders, cockroaches, ticks, chiggers, rodents, and other public health pests.
- 9. Regulatory Pest Control:** for applicators who implement federal and state regulations regarding pest control or quarantines of goods entering or leaving Kentucky.
- 10. Demonstration and Research Pest Control:** for persons conducting and supervising field research or public demonstrations in situations where Restricted Use Pesticides are involved, including researchers, Extension specialists, county Extension agents, and pesticide industry representatives;

additionally, such persons shall meet the standards applicable to the specific category in which they work (such as Agricultural Pest Control, Ornamental and Turf Pest Control, etc.).

11. **Aerial Application of Pesticides:** for applicators engaged in pest control by aerial methods; equipment maintenance, types of dispersal accessories, personal safety, calibration, and drift control are stressed.
12. **Pesticide Dealer:** for persons engaged in wholesale or retail sales of Restricted Use pesticides; dealers should be certified in an appropriate category selected from those listed above.
13. **(None listed)**
14. **Consultant**

What Agencies are Involved?

Two agencies are involved in Kentucky's pesticide applicator training and certification program: the University of Kentucky's Cooperative Extension Service and the Division of Pesticides, Kentucky Department of Agriculture.

Cooperative Extension Service, University of Kentucky

The Kentucky Cooperative Extension Service is responsible for providing initial and recertification training for private and commercial pesticide applicators.

Initial training is for applicators who have never been certified in Kentucky before or who have let their certification expire. This training helps prepare applicators to take the certification test.

Recertification training provides applicators who are currently certified with the most current information on new technology and safe use of pesticides, along with alternative control strategies where appropriate. Participation in these meetings keeps certification in effect.

Division of Pesticides, Kentucky Department of Agriculture

The Division of Pesticides is responsible for testing, certifying, and licensing pesticide applicators and enforcing Kentucky's pesticide laws.

The Division has approximately 20 inspectors who inspect pesticide dealers and respond to complaints concerning pesticide applications. Certified private and commercial applicators will receive plasticized certification cards from the Division of Pesticides; these cards are required when purchasing Restricted Use Pesticides and must be carried by the applicator when making pesticide applications.

Private Applicators

Private applicators become certified and receive recertification credit by attending training sessions at local county Extension offices and having their names submitted to the Division of Pesticides by Extension agents. Contact your local county Extension agent for agriculture to find out when training sessions will be offered. Private applicator certification is valid for five years.



The University of Kentucky Cooperative Extension Service offers commercial pesticide applicator training sessions at several locations throughout the state.

Commercial Applicators

If you are a commercial applicator you should attend training sessions oriented toward your specific category. Training sessions conducted by Extension Specialists are typically held during winter and early spring for several categories. Study materials for all categories are available free of charge from:

Department of Entomology
S-225 Ag Science Building, North
University of Kentucky
Lexington, KY 40546-0091
(606) 257-5955

Commercial applicators must take and pass a **written examination** covering their specific category(s) to become certified. Tests are typically administered immediately after initial certification training sessions. Tests also are given monthly at ten Kentucky locations: Boone county, Bowling Green, London, LaGrange, Morehead, Mayfield, Owensboro, Prestonsburg, Princeton, and Versailles. Commercial applicator certification currently requires an **application fee** and is valid for five years.

Recertification can be obtained during the five-year period by attending training sessions that have been approved by the Division of Pesticides for recertification credit. Those commercial applicators receiving adequate recertification credit will be certified for another five years without taking a test.

Pest control operators (Categories 7 and 8) are given a much more rigorous test, including identification of pest specimens. Higher fees are assessed to these applicators.

If you have any questions concerning certification, contact:

Division of Pesticides
100 Fair Oaks Lane, 5th floor
Frankfort, KY 40601
(502) 564-7274

Commercial applicators/operators and consultants must also apply for and receive a license from the Division of Pesticides which is valid for one year.

Recordkeeping Requirements

Currently, commercial pesticide applicators must keep records of their pesticide applications for a period of three years. Dealers must maintain records for two years which show brands and amounts of Restricted Use Pesticides sold and to whom they were sold.

The 1990 Farm Bill has made provisions for recordkeeping by certified private applicators, too. The Farm Bill reads as follows: "records required under this provision shall contain information comparable to that maintained by commercial applicators in the state in which the certified applicator resides."

In Kentucky, commercial applicators are required to maintain the following records which would apply to private applicators (from Regulations, Title 302, Chapter 31):

- Kinds and amounts of pesticides applied
- Date of use or application
- Purpose of application
- Area of land treated, where applicable
- Crop or type of area treated
- Name of person with certification to purchase, use, or apply Restricted Use Pesticides
- Pesticide dealer where Restricted Use Pesticides were purchased
- Street address or site of use or application.

Records will be required to be retained for two years. Please contact your local Extension Office or the Division of Pesticides for up-to-date information about recordkeeping.

How You Can Become a Commercial Pesticide Applicator

If you are not sure if you need commercial certification, or if you do not know what category applies to the type of work you do, call the Division of Pesticides and explain your situation.

If you know the category of certification that you need, follow these three basic steps:

1. Call the Department of Entomology at the University of Kentucky (the number is (606) 257-5955) to arrange to receive a study packet for the proper category. This packet contains a basic manual, a category manual, and other materials that should be used for study and kept as a reference.
2. Study the manuals and information in the packet to prepare for the test. Attend an initial training meeting if possible.
3. Call the Division of Pesticides (the number is (502) 564-7274) to schedule a time and place to take the test.



If you wish to become certified as a commercial applicator you can obtain free study packets for specific categories.

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Additional Information

Kentucky Cooperative Extension Service Publications
(contact your local county Extension office)

AGR-139	Herbicide Persistence and Carryover in Kentucky
AGR-140	Herbicides with Potential to Carry Over and Injure Rotational Crops in Kentucky
ENT-53	Vendors of Beneficial Organisms in North America
ENT-54	Vendors of Microbial and Botanical Insecticides and Insect Monitoring Devices
ID-98	Guidelines for Pesticide Use
ID-100	Understanding Pesticide Labels and Labeling
ID-103	Kentucky's Endangered and Threatened Species
IP-9	Pesticide Residues in Grains, Vegetables, Fruits and Nuts
IP-11	Residues in Animal-derived Foods
IP-13	Protecting Kentucky's Groundwater: A Grower's Guide
HE2-319a	Tips for Laundering Pesticide-Contaminated Clothing
PAT-3	Sprayer Nozzles: Selection and Calibration
PAT-4	Greenhouse Pesticides and Pesticide Safety
PAT-5	NAPIAP in Kentucky
PAT-6	Personal Protective Equipment for Pesticide Applicators
SR-91-1	Kentucky Pesticide User Practices and Alternatives, 1990
SR-92-2	Kentucky Pesticide User Practices and Alternatives, 1991
SR-93-2	Kentucky Pesticide User Practices and Alternatives, 1992. Includes comprehensive summaries for 1990-1992.

Kentucky Cooperative Extension Service Videotapes
(contact your local county Extension office)

V7-ENT-0316	Applying Pesticides Correctly...The Label Is Your Guide
V8-ENT-0350	Pesticide Safety Equipment
V8-AEN-0348	Groundwater and Well Testing Series

Pesticide Emergency Telephone Numbers

Pesticide Spills

If you have a pesticide spill and need information on how to handle this type of emergency, call:

Kentucky Environmental Response	(800) 928-2380
CHEMTREC Pesticide Emergency Hotline (24 hour)	(800) 424-9300
Disaster Emergency Service (24 hour); State Coordinating Agency for Disasters and Emergencies	(502) 564-7815
Division of Pesticides, Kentucky Department of Agriculture	(502) 564-7274
Kentucky Department of Human Resources	(502) 564-4537

Pesticide Exposures

If you have a person who has been exposed to a particular pesticide, provide your physician or emergency room with these emergency numbers, designed to provide pharmacological information on pesticides to health professionals:

The Kentucky Regional Poison Center of Kosair Children's Hospital	(800) 722-5725
In Metro Louisville call	589-8222
National Pesticide Telecommunication Network (24 hour)	(800) 858-PEST (7378)
Texas Tech University Health Sciences Center School of Medicine Department of Preventive Medicine and Community Health Lubbock, TX 79430	
EXTOXNET: Extension Toxicology Network	http://ace.ace.orst.edu/info/extoxnet/