

# CHAPTER 1

## *Introduction*

### Learning Objectives

- ✓ Pest-control regulations
- ✓ Regulatory agencies for pesticide applications
- ✓ Responsibilities of the certified operator
- ✓ Types of pest- control certification

Many living organisms can be found in or around homes and commercial buildings in Mississippi. These organisms may be insects and related arthropods, birds, mammals, or fungi. The majority of these organisms are benign; however, others are definitely classified as pests because of the damage they cause. Some pests, such as those that damage the structural integrity of the building, or those that infest or contaminate stored foods and other items, cause huge economic losses each year. A few pests spread disease organisms that cause serious human illness. Certain types of pests inflict annoying or painful stings or bites. In addition, some pests are classified as “nuisance pests.” These pests generally do not damage structures, contents, or people but because of numbers, they create unpleasant conditions, occasionally contaminate products, or cause legal concerns in commercial areas. Effective, economic, and safe pest management is necessary to control these pests.

Pesticides are an effective tool for controlling pests. However, used improperly, they may injure the applicator and other people as well as create environmental problems. In addition, some improperly used pesticides may damage treated surfaces. **To prevent problems and accidents, the applicator must always follow pesticide label instructions and use basic common sense.**

### HOW TO USE THIS PUBLICATION

This publication is organized by topics. It moves from the introduction through pest management concepts and pesticide information to pest groupings. Pests are grouped by areas of infestation, such as pests on or near food, structural pests, etc.

If your intended goal is to pass the licensing examination, use the entire manual as a study guide.

References include many well-illustrated books and pamphlets that provide additional information on identification, biology, and pest management. Furthermore, you can obtain pest-management information and control recommendations for specific pests from Mississippi State University or the Mississippi State University Extension Service offices in each county.

### AGENCIES AND REGULATIONS AFFECTING THE PEST-CONTROL INDUSTRY

#### U.S. Environmental Protection Agency and Federal Insecticide, Fungicide, and Rodenticide Act

Federal and State laws regulate the application of pesticides. At the Federal level, the primary regulating act is the

### Pesticide Concerns

Pesticides are often the focus of a great deal of public attention. Many people have genuine concerns over the use of pesticides, while others use them regularly to manage pest problems.

Pesticide concerns arise from reported incidents where exposure has produced mild to severe illness in farm workers, pesticide applicators, manufacturing plant workers, and even in consumers who have eaten improperly treated produce.

Pesticides have also been implicated in environmental problems such as ground water contamination and wildlife injury.

The debate over the advisability of using pesticides will continue for many years. In the meantime, pesticide hazards must be reduced by proper handling and application, accurate timing, and by using alternate control methods whenever possible.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which was enacted in 1947 (FIFRA). This act replaced the Federal Insecticide Act of 1910 and was the first law that required the addition of protective information to the label. These protective statements were added as safeguards for the applicator, consumer, and the environment. Before 1970, the United States Department of Agriculture administered FIFRA; however, in 1970 the responsibility for administration was passed to the newly formed Environmental Protection Agency (EPA).

Through EPA, FIFRA governs the registration of pesticide products. A pesticide may not be marketed in the United States until EPA reviews an application for registration, approves each use, and assigns it a product registration number. A major concern is that the company seeking registration must demonstrate that the product will not result in unreasonable adverse effect to human health.

### **Essential Points of FIFRA**

- The EPA will register all pesticides as well as each use for that pesticide and approve the pesticide label.
- Pesticides are to be categorized as either unclassified or restricted-use materials.
- Applicators who use restricted-use materials must be certified or be under the direct supervision of a certified applicator.
- Tolerances are to be established for residues that may remain on raw agricultural products or in processed food.
- Provides penalties for methods of storage or disposal other than those that are directed by regulations.
- Civil penalties may be assessed when the violation of a regulation is unintentional. A fine of up to \$5,000 for each offense may be assessed with the provision that the applicant may request a hearing before the fine is levied.
- Criminal penalties may be assessed when the law is knowingly violated. A fine of up to \$25,000 or one year in prison, or both, may be assessed for commercial applicators.
- States may establish more stringent standards, but they are not allowed to adopt less stringent standards.

## **Mississippi Department of Agriculture and Commerce (MDAC)**

### **License Application Qualifications**

Applications for a license shall be submitted on regular form furnished by the Bureau of Plant Industry in time to be approved 10 days before the regularly scheduled examinations. No application for a license shall be accepted unless the applicant shall furnish written proof that he/she meets one of the following requirements:

- Must have graduated from a recognized college or university with at least 15 semester hours or equivalent in the category for which a license is requested.
- Must have no less than two years college or university training with special training in the category for which a license is requested.
- Must be at least a high school graduate or equivalent and have had, in addition, at least 4 years experience with a licensed operator within the past 6 years: PROVIDED, that in special cases where an applicant can submit proof of education, experience, and training equal to or exceeding these requirements, he/she shall be allowed to take the required examinations.

At the state level, the **Bureau of Plant Industry (BPI)** governs pesticide rules and regulations by MDAC. This office is responsible for the state registration of pesticides, investigates pesticide complaints, tests and licenses commercial applicators, certifies private and commercial applicators, licenses pesticide dealers, and a number of other pesticide related activities. The Bureau works to protect the applicator, the consumer, and the environment from hazards associated with the improper use of pesticides. Two areas that continue to cause some confusion are certification and licensing.

**Licenses.** It is unlawful for a person to operate a pest-control business (household or structural) in Mississippi without a license. To become licensed, qualified individuals must take and pass an examination with a grade of 70 percent or better.

Once the business becomes operational, there are other requirements the licensee must follow: vehicles used in pest control work must be marked for easy identification (company name); the business must issue written contracts for termite and wood-destroying organism treatments; each business must have required insurance coverage; and the license must be renewed every three years. For a complete list of requirements, obtain a copy of the regulations which govern this area.

**Identification Cards.** The licensee of a commercial pest control business must apply for identification cards for each employee performing pest control for the company. The employee (I.D. cardholder) is further defined as an employee of the licensee who works under the supervision of the owner/license holder; therefore, the licensee is responsible for providing trained supervision for the employee. The employee may not perform, solicit, inspect or apply pesticides until he/she has received 40 hours of on-the-job training in household pest control and/or structural pest control, plus 8 hours of classroom training in general pesticide safety, household pest control, and/or structural pest control. Once these requirements are met, the employee may obtain an identification card.

**Certification.** The amendments to FIFRA in 1972 classified applicators as private/commercial, and pesticides as unclassified/restricted-use chemicals. A private applicator is one who produces an agricultural commodity, while the commercial applicator is an individual who applies “restricted use” pesticide for anything other than the production of an agricultural product. The restricted-use chemicals are so classified because of toxicity or some other factor that would require extra precautions in the handling and application of the chemical. All licensed pest control operators are required to be commercially certified pesticide applicators.

Commercial certificates must be renewed every 3 years. To renew these certificates, an applicator must complete approved continuing education training. Training should include laws and rules pertaining to pest control, safety, pest recognition, and biology, accepted industry practices in pest control, label comprehension, and integrated pest-management practices. Persons exempt from certification are persons conducting laboratory research involving restricted-use pesticides, and medical doctors and veterinarians who might prescribe restricted-use materials during the course of their practice.

### **Agencies Within the State that Regulate Pesticides or Pesticide Application**

Bureau of Plant Industry  
Box 5207  
Mississippi State, MS 39762  
662-325-3390

*Divisions within the BPI office handle licensing, certification, permits, and registration of pesticides. Examples of enforcements which might be handled are improper treatments, use of a nonregistered product, improper use of registered products, performing work without a license, and similar events.*

Department of Environmental Quality (DEQ)  
Box 20305  
Jackson, MS 38289-1305  
601-961-5000

*The Department of Environmental Quality handles pesticide spills and clean up of resulting contamination.*

Poison Control Center  
University of Mississippi Medical Center  
Jackson, MS 39216  
601-354-7660

