

## **MISSOURI GUIDELINES FOR PESTICIDE TECHNICIAN TRAINING PROGRAMS**

Sections 281.038 (3) and (4) of the Missouri Pesticide Use Act authorize the Missouri Department of Agriculture, through the Bureau of Pesticide Control, to establish minimum criteria for the initial training and required retraining of Missouri pesticide technicians. These guidelines are considered a summary of the law and regulations defining pesticide technician training and may not contain all requirements for obtaining and maintaining a Missouri Pesticide Technician license.

### **TECHNICIAN TRAINING PROGRAM APPROVAL**

Each pesticide technician training course must be approved by the Bureau of Pesticide Control. Before using a pesticide technician training program in Missouri, the Certified Commercial Applicator must meet one of the following requirements:

1. To use the Department's preapproved programs (MDA-3, MDA-7A and/or MDA-7B):
  - A. Print the program outlines for each category needed by your company from the Department website [mda.mo.gov/plants/pesticides/technician](http://mda.mo.gov/plants/pesticides/technician) (no charge); and
  - B. Acquire the training materials listed in each outline;
2. For submission of a previously approved program (any program which has received approval from Missouri in the past), submit the following information to the Bureau:
  - A. Company name and address;
  - B. Category or subcategory the program covers;
  - C. Title, publisher and publication date;
  - D. Time allotted for each training topic for both classroom and on-the-job training;
  - E. Previous Missouri approval code; or
3. For submission of a new program (any program which has never received approval), submit a copy of the entire training program to the Bureau. This shall include the following information:
  - A. Company name and address;
  - B. Category or subcategory the program covers;
  - C. Title, publisher and publication date of program;
  - D. Time allotted for each training topic for both classroom and on-the-job training;
  - E. Copies of all training materials (audio, visual and printed). Training materials will be returned after review.

## **TECHNICIAN RETRAINING**

Pesticide technician retraining may be accomplished by one of the following methods:

1. Require licensed pesticide technicians to complete the classroom training portion (10 hours minimum) of an approved technician training program for each licensed category; or
2. Require licensed pesticide technicians to attend an approved "Pesticide Recertification Program" in the license category in which the technician does the majority of work. These programs must conform to Missouri Guidelines For Pesticide Recertification Programs and be approved by the Bureau of Pesticide Control.

## **TECHNICIAN TRAINING PROGRAM REQUIREMENTS**

Courses will be approved on a category basis and shall remain valid until the Department determines they no longer meet these guidelines. Proposed programs will be evaluated on the basis of their compliance with course curriculum requirements and the quality of proposed training aids. Bureau personnel will act in an advisory capacity to help any company or organization gain approval of a training program.

It is the responsibility of the program sponsor to acquire the needed materials and personnel for the program. Bureau personnel may monitor any pesticide technician training program at any time. If, in the opinion of the personnel monitoring the program, the approved curriculum was not followed, the course content was altered so that it no longer meets the minimum standards or the coverage of topics was inadequate, an inquiry may be initiated to determine if the attendees have been trained in accordance with the Missouri Pesticide Use Act.

Any fees charged for pesticide technician training programs shall be waived for Bureau personnel monitoring the program. Copies of all training materials distributed to program attendees should be made available to Bureau personnel.

## **TECHNICIAN TRAINING PROGRAM CURRICULUM**

The applicant shall complete at least forty (40) hours of training within forty-five (45) calendar days of employment as a pesticide technician trainee. Such training shall consist of at least ten (10) hours of classroom-type training and at least thirty (30) hours of on-the-job, practical training for each category or subcategory.

The following topic outline is considered to be a minimum needed for approval of a pesticide technician training program in Missouri. The program does not have to be in the following format; however, the information must be easily recognizable in the submitted material and in the actual training program. These topics are based on requirements found in 2 CSR 70-25.155.(3)(B) of the Rules Promulgated by the Authority of the Missouri Pesticide Use Act, 40 CFR 171.4 and the U.S. EPA's National Training Priorities.

**ORNAMENTAL AND TURF PEST CONTROL**  
**CATEGORY 3**

**CLASSROOM INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 2 hours)

This discussion shall include information regarding the identification of common Missouri ornamental and turf pests (insects, diseases and weeds), common types of turf and ornamentals affected by these pests and reference materials which may be used to locate further information on ornamentals, turf and associated pests.

2. EQUIPMENT: (suggested time 1 hour)

Discussion of this topic shall familiarize the trainee with maintenance, calibration and proper use of equipment commonly used in ornamental and turf pest control.

3. PESTICIDES: (suggested time 2 hour)

The discussion of pesticides shall include the characteristics, selection and application techniques of pesticides commonly used in the treatment of ornamentals and turf. It shall also include the common names, pests controlled, pesticide formulations, area measurements and dilution calculations for commonly used ornamental and turf pesticides. Technicians shall be made familiar with reference materials that may be used to locate further information on pesticides.

4. ALTERNATIVE CONTROL METHODS: (suggested time .5 hour)

Discussion shall include the needs for and methods of non-pesticide pest control. It shall also include Integrated Pest Management practices that incorporate chemical and non-chemical control methods.

5. LABELS: (suggested time 1 hour)

Discussion shall prepare the trainee to comprehend specific information found in pesticide labels and labeling. Such information shall include: the pesticide name, type and ingredients; all precautionary statements; signal words; first aid procedures; and directions for the use, mixing, storage and disposal of pesticides.

6. PESTICIDE HAZARDS AND SAFETY: (suggested time 1.5 hours)

Discussion of this topic shall include the hazards to and safety of man and the environment. This shall include: the use and maintenance of protective clothing and equipment; poisoning prevention, symptoms and first aid; prevention of non-target contamination (drift); environmental conditions affecting the use of pesticides; and other fundamental safety procedures available to pesticide applicators.

7. PESTICIDE SPILLS: (suggested time 1 hour)

Discussion shall include procedures for the prevention, containment, cleanup and reporting of pesticide spills and accidents.

8. PESTICIDE LAWS: (suggested time 1 hour)

Discussion shall include Missouri laws pertaining to pesticides. This shall include at a minimum: 281.020, 038, 055, 060, 070, 085, 101 and 105 of the Missouri Pesticide Use Act and 2CSR 70-25.010, 020, 030, 120 and 156 of the Rules Promulgated by the Authority of the Missouri Pesticide Use Act.

**ON-THE-JOB PRACTICAL INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to identify pests commonly found in ornamental and turf pest control. This topic includes the identification of potential harborages, damage caused by and conditions which favor the existence of ornamental and turf pests.

2. EQUIPMENT: (suggested time 20 hours)

Trainees shall acquire and demonstrate the ability to use, maintain and calibrate equipment commonly used to control pests in ornamental and turf pest control.

3. PESTICIDES: (suggested time 4 hours)

Trainees shall acquire and demonstrate the ability to properly use, mix, handle, store and dispose pesticides commonly used in ornamental and turf pest control.

4. ALTERNATIVE CONTROL METHODS: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to use common non-chemical methods of ornamental and turf pest control, including Integrated Pest Management practices.

5. PESTICIDE HAZARDS AND SAFETY: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to use personal protective equipment, proper waste and container disposal methods and safety procedures that minimize non-target contamination.

6. PESTICIDE SPILLS: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to control, report and cleanup pesticide spills. This shall include: the use of personal protective equipment during cleanup; containment practices and chemical absorption materials; and procedures used to reduce the possibility of pesticide spills.

**GENERAL STRUCTURAL PEST CONTROL**  
**CATEGORY 7A**

**CLASSROOM INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 2 hours)

This discussion shall include information regarding the identification of common Missouri structural pests (insects, rodents, arachnids, etc.), their common harborages and reference materials which may be used to locate further information on general structural pests.

2. EQUIPMENT: (suggested time 1 hour)

Discussion of this topic shall familiarize the trainee with maintenance, calibration and proper use of equipment commonly used in the control of general structural pests.

3. PESTICIDES: (suggested time 2 hour)

The discussion of pesticides shall include the characteristics, selection and application techniques of pesticides commonly used in general structural pest control. It shall also include the common names, pests controlled, pesticide formulations, area measurements and dilution calculations for commonly used general structural pesticides. Technicians shall be made familiar with reference materials that may be used to locate further information on pesticides.

4. ALTERNATIVE CONTROL METHODS: (suggested time .5 hour)

Discussion shall include the needs for and methods of non-pesticide pest control. It shall also include Integrated Pest Management practices that incorporate chemical and non-chemical control methods.

5. LABELS: (suggested time 1 hour)

Discussion shall prepare the trainee to comprehend specific information found in pesticide labels and labeling. Such information shall include: the pesticide name, type and ingredients; all precautionary statements; signal words; first aid procedures; and directions for the use, mixing, storage and disposal of pesticides.

6. PESTICIDE HAZARDS AND SAFETY: (suggested time 1.5 hours)

Discussion of this topic shall include the hazards to and safety of man and the environment. This shall include: the use and maintenance of protective clothing and equipment; poisoning prevention, symptoms and first aid; prevention of non-target contamination; and other fundamental safety procedures available to pesticide applicators.

7. PESTICIDE SPILLS: (suggested time 1 hour)

Discussion shall include procedures for the prevention, containment, cleanup and reporting of pesticide spills and accidents.

8. PESTICIDE LAWS: (suggested time 1 hour)

Discussion shall include Missouri laws pertaining to pesticides. This shall include at a minimum: 281.020, 038, 055, 060, 070, 085, 101 and 105 of the Missouri Pesticide Use Act and 2CSR 70-25.010, 020, 030, 120 and 156 of the Rules Promulgated by the Authority of the Missouri Pesticide Use Act.

**ON-THE-JOB PRACTICAL INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to identify pests commonly found in general structural pest control. This topic includes the identification of potential harborages, damage caused by and conditions which favor the existence of general structural pests.

2. EQUIPMENT: (suggested time 20 hours)

Trainees shall acquire and demonstrate the ability to use, maintain and calibrate equipment commonly used to control pests in general structural pest control.

3. PESTICIDES: (suggested time 4 hours)

Trainees shall acquire and demonstrate the ability to properly use, mix, handle and store pesticides commonly used in general structural pest control.

4. ALTERNATIVE CONTROL METHODS: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to use common non-chemical methods of general structural pest control, including Integrated Pest Management practices.

5. PESTICIDE HAZARDS AND SAFETY: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to use personal protective equipment, proper waste and container disposal methods and safety procedures that minimize non-target contamination.

6. PESTICIDE SPILLS: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to control, report and cleanup pesticide spills. This shall include: the use of personal protective equipment during cleanup; containment practices and chemical absorption materials; and procedures used to reduce the possibility of pesticide spills.

**TERMITE PEST CONTROL**  
**CATEGORY 7B**

**CLASSROOM INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 2 hours }

This discussion shall include information regarding the identification of termites and other wood destroying organisms commonly found in Missouri, common harborages of these pests and reference materials which may be used to locate further information on termites and other wood destroying organisms.

2. EQUIPMENT: (suggested time 1 hour)

Discussion of this topic shall familiarize the trainee with maintenance, calibration and proper use of equipment commonly used to control termites and other wood destroying organisms.

3. PESTICIDES: (suggested time 2 hours)

The discussion of pesticides shall include the characteristics, selection and application techniques of pesticides commonly used in the treatment of structures for the control of termites and other wood destroying organisms. It shall also include the common names, pests controlled, pesticide formulations, area measurements and dilution calculations for pesticides commonly used to control these pests. Technicians shall be made familiar with reference materials that may be used to locate further information on pesticides.

4. ALTERNATIVE CONTROL METHODS: (suggested time .5 hour)

Discussion shall include the needs for and methods of non-pesticide pest control. It shall also include Integrated Pest Management practices that incorporate chemical and non-chemical control methods.

5. LABELS: (suggested time 1 hour)

Discussion shall prepare the trainee to comprehend specific information found in pesticide labels and labeling. Such information shall include: the pesticide name, type and ingredients; all precautionary statements; signal words; first aid procedures; and directions for the use, mixing, storage and disposal of pesticides.

6. PESTICIDE HAZARDS AND SAFETY: (suggested time 1.5 hours)

Discussion of this topic shall include the hazards to and safety of man and the environment. This shall include: the use and maintenance of protective clothing and equipment; poisoning prevention, symptoms and first aid; prevention of non-target contamination; and other fundamental safety procedures available to pesticide applicators.

7. PESTICIDE SPILLS: (suggested time 1 hour)

Discussion shall include procedures for the prevention, containment, cleanup, and reporting of pesticide spills and accidents.

8. PESTICIDE LAWS: (suggested time 1 hour)

Discussion shall include Missouri laws pertaining to pesticides. This shall include at a minimum: 281.020, 038, 055, 060, 070, 085, 101 and 105 of the Missouri Pesticide Use Act and 2CSR 70-25.010, 020, 030, 120 and 156 of the Rules Promulgated by the Authority of the Missouri Pesticide Use Act.

**ON-THE-JOB PRACTICAL INSTRUCTION:**

1. PEST IDENTIFICATION: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to identify pests commonly found in termite (and other wood destroying organisms) pest control. This topic includes the identification of potential harborage, damage caused by and conditions which favor the existence of termites and other wood destroying organisms.

2. EQUIPMENT: (suggested time 20 hours)

Trainees shall acquire and demonstrate the ability to use, maintain and calibrate equipment commonly used in the control of termites and other wood destroying organisms.

3. PESTICIDES: (suggested time 4 hours)

Trainees shall acquire and demonstrate the ability to properly use, mix, handle and store pesticides commonly used to control termites and other wood destroying organisms.

4. ALTERNATIVE CONTROL METHODS: (suggested time 1 hour)

Trainees shall acquire and demonstrate the ability to use common non-chemical methods of control for termites and other wood destroying organisms, including Integrated Pest Management practices.

5. PESTICIDE HAZARDS AND SAFETY: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to use personal protective equipment, proper waste and container disposal methods and safety procedures that minimize non-target contamination.

6. PESTICIDE SPILLS: (suggested time 2 hours)

Trainees shall acquire and demonstrate the ability to control, report and cleanup pesticide spills. This shall include: the use of personal protective equipment during cleanup; containment practices and chemical absorption materials; and procedures used to reduce the possibility of pesticide spills.