

Agriculture | Maryland's Leading Industry

Office of Plant Industries and Pest Management

Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor Joseph Bartenfelder, Secretary Julianne A. Oberg, Deputy Secretary Pesticide Regulation

The Wayne A. Cawley, Jr. Building 50 Harry S. Truman Parkway Annapolis, Maryland 21401 www.mda.maryland.gov

410.841.5710 Baltimore/Washington 410.841.2765 Fax 800.492.5590 Toll Free

#### PESTICIDE REGULATION SECTION 410/841-5710 FAX: 410/841-2765

Dear Pesticide Licensee/Permittee:

As a pesticide licensee/permittee you are responsible for ensuring that each employee involved in pest control sales, service, or pesticide applications has completed an approved training program. An employee who has not successfully completed the approved training may only apply pesticides if a certified applicator, or a registered employee, is physically present at the time and place the pesticide is applied by the employee who has not completed the training.

An individual must complete the required training within 30 days of employment and before the Employee ID and Registration Request form is submitted to the Maryland Department of Agriculture (MDA). The training must include the eight required topics that are listed in the Regulations Pertaining To The Pesticide Applicators Law on Pages 90 and 91, Section 15.05.01.04. The attached outline can be used as a guideline for developing the training. In addition, a synopsis of the regulations has been attached. The synopsis is not intended to be an all-inclusive document, but is simply a guideline that lists the key provisions within the regulations that an individual involved with sales or service needs to know in order to recommend, handle and apply pesticides in a competent manor. An outline of your training program is not required to be submitted to MDA for approval, but if you wish to do so it will be reviewed to ensure that it satisfies the training requirements. However, you must keep a copy of your training program on file in your office. These documents will be reviewed by our field inspectors during routine inspections by the Department.

In order to satisfy the training requirements one option is to use of the Core and Category manuals (list attached) that were used in preparing for the certification examinations. The Core manual can be used to cover several of the general topics that relate to the basic use of pesticides, while the category manuals can be used for covering the more specific topics relating to pests, pest control methods and application equipment. Another option for satisfying the training requirements is through the use of a video training series, "Using Pesticides Safely", that has been developed by the University of Maryland Extension (UME). This is a six part series that is available in DVD format, in either English or Spanish, and can be used by any pesticide industry. It covers six of the eight required topics and satisfies the general information on pesticide use. Other training resources will have to be used in order to cover the pest identification and application topics. A brochure is attached that provides a further description of the training series along with information on ordering it from the University of Maryland.

Upon completion of the training the attached Employee Registration and I.D. Card Request Form must be submitted that lists the employees name, social security number, driver's license number and date of employment along with a one inch by one inch color photo with their name printed on the back of the photo and \$30 initial registration fee in order to register each new employee. You may make copies of the form in order to register additional employees. There is also a copy of a form enclosed that can be used for documenting the completion of training that can be used for your files.

Page Two Registered Employee Training

An employee's registration is required to be renewed annually by submitting the Registered Employee Renewal form and submitting the \$30 annual registration fee for each employee. An employee's registration is valid from July 1<sup>st</sup> through June 30<sup>th</sup>. The ID card itself will not be reissued each year. Please note, public agencies and certified applicators are exempt from the registration fees. In addition, if an ID card is lost, stolen or damaged there will not be a fee associated with issuing a replacement ID card. A written request with the employees name must be submitted requesting a replacement card along with a new one inch by one inch color photograph. In the case of a damaged card the old card should be returned along with the request.

Finally, upon termination of an individual's employment you must return the identification card and notify MDA in writing that the individual is no longer an employee of the company, or agency. The attached Termination Of Registered Employee and/or Certified Applicator form can be used to terminate an employee. Should you have any further questions regarding the training requirements for registering an employee please do not hesitate to contact this office.

Sincerely,

Rob Hofstetter Program Manager Pesticide Regulation Section

Enclosures Rev. 01/2020

### MARYLAND DEPARTMENT OF AGRICULTURE PESTICIDE REGULATION SECTION

#### TRAINING STANDARDS FOR REGISTERED EMPLOYEES

Each employee performing pest control sales or service must complete a training program approved by the Maryland Department of Agriculture that satisfies the requirements established by the Regulations Pertaining To The Pesticide Applicators Law, Section 15.05.01.04(3)(a). The purpose of the training is to instruct employees in the proper use of pesticides and the basic principles of pest control. The employee should be competent to recommend, handle or apply pesticides without harming themselves, children, other individuals, pets and the environment. The training can be accomplished with use of the Core and category specific manuals used for taking the certification examinations, or a DVD training series "Using Pesticides Safely" developed by the University of Maryland Extension (UME). The DVD series provides general information and does not address specific information regarding pest identification and control recommendations. The employee must receive training in the following topics and should have a basic understanding of the concepts associated with each subject. The following is a listing of the required topics and associated concepts along with a listing of the corresponding Core Manual Chapters and DVD modules that covers the information:

- 1. Pesticide Law and Regulations Chapters 2 and 13 of the Core Manual or Module 1 of the DVD
  - a. Federal pesticide laws (FIFRA)
  - b. Maryland Laws and Regulations
  - c. Certification requirements
  - d. Enforcement of pesticide laws and regulations
- 2. Label Comprehension Chapter 3 and Chapter 10 page 150 of the Core Manual or Module 2 of the DVD
  - a. Required information and the organization of pesticide product label
  - b. General or restricted use classification
  - c. Following label directions
- 3. Safety and Emergency Procedures Chapters 5, 6 and 9 of the Core Manual or Module 3 of the DVD
  - a. Pesticide exposure
  - b. Potential health effects
  - c. Personal protective equipment
  - d. Pesticide poisoning
  - e. Spill procedures
- 4. **Proper Pesticide Handling and Storage** Chapters 8, 10 and Chapter 11 page 163 of the Core Manual or Module 4 of the DVD
  - a. Mixing and loading
  - b. Proper application
  - c. Stroage
  - d. Disposal

Training Standards Page Two

- 5. **Pest Identification and Control Recommendations** Chapter 1 pages 1 through 9 of the Core Manual and Category Manuals
  - a. Identification of pests
  - b. Characteristics of damage caused by pests
  - c. Pest biology
  - d. Choice of control methods and timing of control techniques
- 6. **Pesticide Application Techniques** Chapter 10 pages 153 through 159 and Chapter 11 of the Core Manual and Category Manuals
  - a. Procedures for applying different formulations
  - b. Proper placement of pesticides
  - c. Misuse of pesticides
- 7. Environmental and Health Concerns Chapter 7 of the Core Manual and Module 5 of the DVD
  - a. Identification of sensitive areas
  - b. Hazards to non-target organisms and endangered species
  - c. Contamination of water sources
  - d. Pesticide persistence and residues
- 8. Integrated Pest Management Principles Chapter 1 pages 10 through 16 of the Core Manual and Module 6 of the DVD
  - a. IPM concepts
  - b. Monitoring pest populations
  - c. Integrated control techniques

Rev 12/10

- I. Purpose of Law and Regulations
  - A. Lead Agency Maryland Department of Agriculture (MDA), Pesticide Regulation Section
  - B. Responsibility Requires the Department to:
    - 1. Regulate the use, sale, storage and disposal of pesticides;
    - 2. Ensure that pesticides are applied by competent individuals;
    - 3. Establish guidelines for the application of pesticides; and
    - 4. Certify pesticide applicators.
- II. General Requirements
  - Pesticide Label Pesticides must be used strictly according to label directions (except as provided by State and federal laws and regulations). Page 88 of the Regulations, Section .02 B(2)(a)(b)(c)
  - B. Precautions Precautions must be observed in the handling, use, storage and disposal of pesticide containers to prevent harm to humans, animals and the environment. Page 88 of the Regulations, Section .02 B(3)(a)(b)(c)
  - C. Anti-Siphon Anti-siphon devices are required on all pest control equipment to prevent the flow of a pesticide into a water system. Page 89 of the Regulations, Section .03 C(1)
  - D. Alternative Pest Control Pesticide applicators must consider other alternative pest control measures such as mechanical, cultural and biological control. Page 89 of the Regulations, Section .03 C(3)
  - E. Safety Equipment Safety equipment indicated on the pesticide label must be provided for the protection of pesticide applicators. Page 89 of the Regulations, Section .03 C(4)
  - F. Pesticide Accident The Department must be notified immediately of any accident involving a pesticide. Page 89 of the Regulations, Section .03 C(5)
  - G. Pesticide Label A copy of the pesticide label for the product(s) being applied must be available at the time and location of the application. Page 89 of the Regulations, Section .03 C(6)
  - H. Display of pesticide business name and license number on each vehicle transporting pesticides or pest control devices. Each vehicle must have the Maryland Pesticide Business License number displayed on both sides the vehicle proceeded by "MDA". The name and license number must be in bold print not less than 2" in height. Page 90 of the Regulations, Section .03 F(1)(2)

### III Pest Control Employees

- A. Registration Licensees and permittees must register with the Department all employees who perform pest control services: Pages 90 and 91 of the Regulations, Section .04 A(1)(2)(3)
  - 1. Within 30 days of employment;
  - 2. By providing the employee's name, social security number and a one inch by one inch color photo;
  - 3. By submitting verification of training;
  - 4. Paying a \$30 initial registration fee.
- B. Training Requirements Non-certified employees must complete a training program within 30 days of employment and before registration with the Department. The training program must include the following subjects:
  Page 91 of the Regulations, Section .04 B(1)

Page 91 of the Regulations, Section .04 B(1

- 1. Pesticide laws and regulations;
- 2. Label comprehension;
- 3. Safety and emergency procedures;
- 4. Proper pesticide handling and storage;
- 5. Pest identification and control recommendations;
- 6. Pesticide application techniques;
- 7. Environmental and health concerns; and
- 8. Integrated pest management principles.
- C. A registered employee shall carry the identification card and show it to anyone upon request. Upon termination of employment, the registered employee shall return the identification card to MDA. Page 91 of the Regulations, Section .04 C(1)
- D. If an employee has not successfully completed training they cannot apply pesticides unless a certified applicator or registered employee is physically present at the time and place of the application. Page 91 of the Regulations, Section C(2)

### IV. Requirements for Storing Pesticides

- A. At a minimum non-bulk pesticides shall be stored according to the following requirements: Pages 93 and 94 of the Regulations, Section .06 A(1)-(9)
  - 1. The storage area shall be secured or locked to prevent unauthorized access;
  - 2. Pesticides shall be stored in a separate building, or at a minimum, shall be separated by a physical barrier from living and working areas and from food, feed, fertilizer, seed, and safety equipment;
  - A warning sign shall be placed on the exterior of the storage area;
  - 4. Pesticides shall be stored in a dry, ventilated area;
  - 5. The pesticide storage area shall be kept clean;
  - 6. A supply of absorbent material sufficient enough to absorb a

spill of the largest container in storage shall be kept in the storage area;

- 7. Pesticide containers must be properly labeled and free of leaks;
- 8. An appropriate fire extinguisher must be available; and
- 9. Pesticides shall be stored at least 50 feet from any water well, or be stored in secondary containment.
- B. During transport, pesticide containers and application equipment shall be secured to prevent shifting or release of pesticides. Pesticides may not be placed, or carried, in the same compartment as the driver, food, or feed, unless it is in a manner that provides adequate protection for the safety and health of the passengers. Page 94 of the Regulations, Section .06 B(1)(2)
- C. Pesticide Service Containers. Page 94 of the Regulations Section .06 C(1)(2)
  - 1. Concentrate If pesticide concentrate is temporarily stored or transported its container must have a securely attached label with the following information:
    - a. Common, or chemical name, of the pesticide;
    - b. U.S. EPA registration number;
    - c. Signal word (Danger, Warning or Caution);
    - d. Percent concentration.
  - 2. End-Use Dilutions If a pesticide that does not require further dilution is stored or transported, its container (excluding application equipment) must have a securely attached label with the following information:
    - a. Common, or chemical name, of the pesticide preceded by the words "Diluted" or "End-Use Concentrate";
    - b. U.S. EPA registration number;
    - c. Signal word (Danger, Warning or Caution);
    - d. Percent concentration.
- A pesticide container may not be used for any purpose other than containing the originally labeled product unless the label states otherwise. Page 94 of the Regulations, Section .06 D
- V. Pesticide Licensing and Certification Requirements
  - A. Private Applicator Issued to a farmer, nurseryman, etc., who applies a restricted use pesticide on their own property for the purpose of producing an agricultural commodity and is at least 18 years old. Obtained by: Pages 95 and 96 of the Regulations, Section .07 A,B,C(1)(2),D, E(1)(2)(3)
    - 1. Passing an examination;
    - 2. Paying a \$7 fee;
    - 3. Renewing every 3 years by participating in a training session within 12

months before expiration of the current certificate.

- B. Pest Control Applicator, Pest Control Consultant and Public Agency Applicator Certificates. Obtained by: Pages 96, 97, 98 and 99, Section .08 A(1)-(11),B(1)(2),C(1)(2)
  - 1. Being at least 18 years old and having one year of experience acceptable to the Department;
  - 2. Passing examinations;
  - 3. Paying a \$75 fee plus \$25 for each additional pest control category;
  - 4. Renewing each year on July 1 by participating in a training session or reexamination. Pest control consultant certificates are renewed each year on January 1.
- C. Pesticide Business License Required of each business performing pest control work. Obtained by: Page 100 of the Regulations, Section .10 A(1),B(1)(2)(3), C(1)(2),D(1)
  - 1. Completing an application;
  - 2. Designating a certified pest control applicator;
  - 3. Providing proof of insurance;
  - 4. Paying a \$150 fee;
  - 5. Renewing annually on July 1.
- D. Pest Control Consultant License Issued to a business providing pest control consultation (identifying pests; recommending pesticides). Obtained by: Page 100 of the Regulations, Section .10 A(2),B(1)(2)(3), D(2)
  - 1. Completing an application;
  - 2. Designating a certified pest control consultant;
  - 3. Paying a \$150 fee;
  - 4. Renewing annually on January 1.
- E. Not-For-Hire License Issued to a person who performs, or employees, performs pest control on property that is owned by the person and open to the public. Obtained by: Page 100 of the Regulations, Section .10 A(3),B(1)(2)(3), D(3)
  - 1. Completing an application;
  - 2. Designating a certified pest control applicator;
  - 3. Paying a \$150 fee;
  - 4. Renewing annually on July 1.
- F. Public Agency Permit Required of any public agency (unit of local, state or federal government) whose employees apply any pesticides. Obtained by: Page 100-1 of the Regulations, Section .11 A,B,C,D
  - 1. Completing an application;
  - 2. Designating a certified public agency applicator;
  - 3. Renewing annually on July 1.

- VI. Recordkeeping Requirements Pages 100-1 and 101 of the Regulations, Section .12 A L
  - A. Pest Identifications, Pesticide Recommendations, Pesticide Applications Records must be held for 2 years and be available to the Department on request. The following must be recorded, when applicable:
    - 1. Name of applicator or consultant;
    - 2. Date of application, recommendation, or pest identification;
    - 3. Type of plant, animal or structure and pest;
    - 4. Acreage or numbers of plants or animals or a description of, or square footage, cubic footage or linear footage of structures;
    - 5. Address of treated property;
    - 6. Name of owner or tenant of property;
    - 7. Common name and EPA registration number of pesticide or pesticides used or recommended;
    - 8. Rate and concentration of pesticide used or recommended;
    - 9. Total amount of pesticide used;
    - 10. Type of equipment used;
    - 11. Time of day of application; and
    - 12. The direction and estimated velocity of the wind at the site of application unless the application consists of baits in bait stations or is made within 3 feet of a structure.
- VII. Enforcement
  - A. Violative Acts The Department may issue a civil penalty, suspend, revoke, or deny any license, certificate, permit, or registered employee identification card for violating any provision of the Maryland Pesticide Applicators Law and Regulations, or the Federal Insecticide, Fungicide and Rodenticide Act. Pages 102-7 and 102-8 of the Regulations, Section.18 A(1)-(17),B,C
  - B. Civil Penalties The Secretary of Agriculture may impose a penalty of not more than \$2,500 for a first offense and a penalty of not more than \$5,000 for a repeat offense and it may not exceed \$25,000. This can be in lieu of or in addition to suspension of the license, permit, certificate, or registered employee identification card. Page 102-9 of the Regulations, Section .20 A,B(1)-(6),C,D
- VIII. Additional Requirements For further information on these requirements you must check the Regulations.
  - A. Dealers of Restricted Use Pesticides Pages 101 and 102 of the Regulations, Section .13 A,B(1)-(5),C,D(1)(2), E(1)-(5)
  - B. Standards for Inspection for Pests Pages 102, 102-1 and 102-2 of the Regulations, Section .14 A(1)-(4),B
  - C. Posting of Signs Pages 102-2, 102-3 and 102-4 of the Regulations, Section .15 A,B(1)-(8),C,D(1)(2)(3),E,F,G
  - D. Pesticide Information for Customers Page 102-5 of the Regulations, Section .16 A(1)-(6)(a)(b)(c),B(1)-(3),C,D

E. List of Pesticide Sensitive Individuals - Pages 102-6 and 102-7 of the Regulations, Section .17 A(1)(2)(3),B(1)-(6),C(1)(2)

# THIS SYNOPSIS IS INTENDED TO PROVIDE A QUICK REFERENCE OF THE REGULATIONS THAT WILL PERTAIN TO REGISTERED EMPLOYEES. IT DOES NOT TAKE THE PLACE OF THE REGULATIONS

Rev 12/10

# STUDY MATERIAL SUPPLIERS FOR PESTICIDE CERTIFICATION EXAMINATIONS

Applicants for certification as a Pest Control Applicator, Public Agency Applicator or Pest Control Consultant are responsible for obtaining the study material. The following is a listing of the study material used in conjunction with Maryland's pesticide certification examinations. This listing, by pest control category, provides the title of the appropriate manual and the name of the supplier. Contact information for each of the suppliers is listed at the end of this document. The **Core** is not considered a Category of Pest Control, but everyone seeking initial certification in Maryland must take and pass the Core examination in order to become certified, except for the following categories where Core material is contained within the study material: Wood Treatment and Sewer Root Control (Categories 11 A and 11 C). Should you have any further questions regarding the manuals used for the pesticide certification examinations, or the certification process, please contact the Maryland Department of Agriculture (MDA), Pesticide Regulation Section, at (410)841-5710. **Note:** The Regulations Pertaining To The Pesticide Applicators Law are also part of the materials used for the certification examination over the internet a copy of the regulations should have been provided at that time. In the event you obtained your application over the internet a copy of the regulations can be obtained from MDA, or they are also available through a link on the internet at the Department's website - www.mda.maryland.gov.

Category or Subcategory	<u>Title</u>	Source	
Core	Maryland Pesticide Application Series Core Manual COR-1-B	University of Maryland	
Agricultural - Plant (1 A)	Maryland Pesticide Application Series - Agricultural Manual	University of Maryland	
Agricultural - Animal (1 B)	Agricultural - Animal	Cornell University	
Agricultural - Grain Treatment (1 C)	Stored Grain Pest Control Publication MISC 0157	Washington State University	
Forest (2)	Forest	Cornell University	
Ornamental Plant - Exterior (3 A)	Maryland Pesticide Application Series - Ornamentals & Turf Manual	University of Maryland	
Ornamental Plant - Interior (3 B)	Interior Plantscape Pest Control Publication MISC 0176	Washington State University	
Turf (3 C)	Maryland Pesticide Application Series - Ornamentals & Turf Manual	University of Maryland	
Seed Treatment (4)	Seed Treatment Publication MISC 0199	Washington State University	
Aquatic (5)	Maryland Pesticide Applicator Series - Aquatic Pest Control AQU-1-A	University of Maryland	
Right-of-Way and Weed (6)	Right-of-Way	Cornell University	
General Pest Control (7 A)	Structural and Rodent	Cornell University	
Wood Destroying Insects (7 B)	Termite	Cornell University	
Wildlife Control (7 C) *	Wildlife Control	Maryland Dept. of Agriculture	
Rodent Control (7 D) *	Rodent Control	Maryland Dept. of Agriculture	
Fumigation (7 E)	Fumigation	Cornell University	

### STUDY MATERIAL SUPPLIERS (con't)

Category or Subcategory	<u>Title</u>	<u>Source</u>
Public Health (8) *	Maryland Pesticide Applicator Manual Public Health	Maryland Dept. of Agriculture
Regulatory (9)	Maryland Pesticide Application Series - Agricultural Manual	University of Maryland
Demonstration and Research (10) *	Demonstration and Research	Maryland Dept. of Agriculture
Wood Treatment (11 A) * +	Wood Preservation and Wood Products Treatment	Maryland Dept. of Agriculture
Sewer Root Control (11 C) +	Sewer Line Root Control	Cornell University
Aerial (13)	Aerial Application PEP 25	Penn State University

\* **Note:** The Maryland Dept. of Agriculture will continue to provide copies of these study materials until further notice. They will be provided upon approval of the application.

+ The following categories are not required to take the Core examination since the Core material is contained within the Category study material: Wood Treatment and Sewer Root Control (Categories 11 A and 11 C).

### STUDY MATERIAL SUPPLIERS

University of Maryland University Book Center Adele Stamp Student Union, Bldg. 163 College Park, MD 20742 Telephone: (301)314-2718 Internet: http://umcp.bncollege.com/webapp/wcs/stores/servlet/ TBWizardView?catalogid=10001&langId=-1&storeId=15551 **NOTE:** See Attached Sheet On Ordering

Cornell University The Cornell Store 135 Ho Plaza Ithaca, NY 14853 Telephone: (607)255-4111 Internet: https://store.cornell.edu

Washington State University Bulletin Office Cooper Publications Building P.O. Box 645912 Pullman, WA 99164-5912 Telephone: (800)723-1763 Internet: https://pubs.wsu.edu Maryland Department of Agriculture Pesticide Regulation Section 50 Harry S. Truman Parkway Annapolis, MD 21401 Telephone: (410)841-5710

The Pennsylvania State University Publications and Distribution Center 112 Agricultural Administration Building University Park, PA 16802-2602 Telephone: (1-877)345-0691 Internet: www.pested.psu.edu/applicators/ packets.shtml

Rev 5/14

### UNIVERSITY of MARYLAND MANUALS FOR PESTICIDE APPLICATORS SEEKING CERTIFICATION

Individuals who need to use pesticides to become certified to work for a Pest Control Business, Public Agency, or Pest Control Consultant must show that they are competent to apply pesticides by passing a certification examination administered by the Maryland Department of Agriculture. Manuals in the Pesticide Applicator Training Series are used to provide self-help training for applicators studying to take certification exams in Maryland. The following Maryland Pesticide Applicator manuals are available as described in the section below:

- Core Manual for Private Applicators
- o Core manual for Commercial Applicators
- Agricultural Manual
- o Ornamentals & Turf Manual
- o Aquatic Pest Control Manual

For manuals to help prepare for other categories, visit the Maryland Department of Agriculture website.

# How to Obtain Manuals -- Commercial Applicators

Manuals for Commercial Applicators may be purchased directly from the University of Maryland Book Center (the official bookstore for University of Maryland, College Park) either on-line or through the mail.

• TO PURCHASE ON-LINE WITH CREDIT CARD – Access the University Book Center

(<u>http://umcp.bncollege.com/webapp/wcs/stores/servlet/TBWizardView?catalogId=10001&langId=-1&storeId=15551</u>) and make selections as described below:

- 1. TERM Leave this choice as it appears on the site.
- 2. DEPARTMENT Select ENTM (Entomology).
- 3. COURSE Select the manual you want from the drop-down list:
  - AGRIC (Agricultural Manual)
  - AQUATIC (Aquatic Pest Control Manual)
  - CORE (Core Manual for Commercial Applicators)
  - ORN & TURF (Ornamentals and Turf Manual)
- 4. SECTION Select MANUAL.
- 5. To add another manual, repeat the process on another line.
- 6. When you have finished selecting the manual(s) you want to purchase, click on the button FIND MATERIALS.
- 7. On the next screen, at SELECT FORMAT, choose BUY NEW. (<u>Note</u>: For textbooks for regular courses on campus, the Bookstore offers a default choice of "buy used" at a default discounted rate; however, *there are no used manuals for pesticide applicators*.)
- 8. Click on the button ADD ITEM(S) TO CART.
- 9. On the next screen, check to make sure the item(s) listed is/are correct. To change your order, click on EDIT (in red, at the top right-hand corner of each item). You will then be able to update the quantity (fill in the number you want and click on UPDATE) or remove an item (click on REMOVE and then choose OK).

### How to Obtain Manuals -- Commercial Applicators (con't)

- 10. Click on CHECKOUT and follow the directions on-line to complete your purchase. Note that you may choose to set up an account, or you may simply continue as a guest.
- TO PURCHASE THROUGH THE MAIL WITH CHECK OR MONEY ORDER -
  - 1. Write a letter identifying the title and quantity of the manual(s) you want:
    - Core Manual for Commercial Applicators
    - Agricultural Manual
    - Ornamentals and Turf Manual
    - Aquatic Pest Control Manual
  - 2. Include your check or money order for the correct amount. If you have Internet access, you can follow the procedures above to determine the cost of the manual(s), including tax plus shipping. If you do not have Internet access, or you cannot determine the final cost, call the Book Center at 301-314-2718.
  - 3. Be sure to include your mailing address and a contact number.
  - 4. Mail your letter and your check or money order to:

Atttn: Textbook Manager / Pesticide Applicator Manuals University Book Center Adele Stamp Student Union, Bldg. 163 University of Maryland College Park, MD 20742

- CONTACT NUMBER FOR QUESTIONS
  - For questions about purchasing Commercial Applicator Manuals, or to check on your order, call the Book Center textbook manager at 301-314-2718.

5/22/14

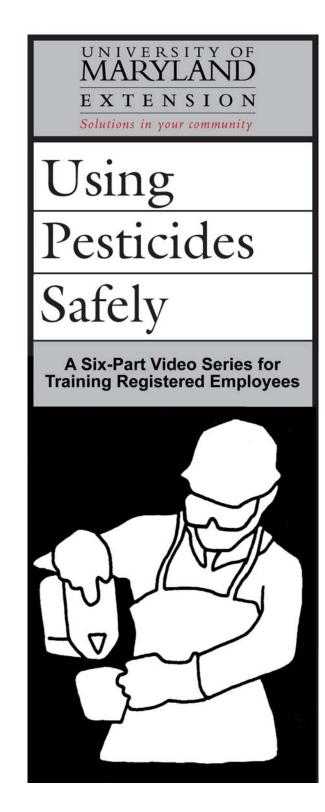
### **Educating People to Help Themselves**

University of Maryland Extension programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.

This DVD is copyrighted material from the University of Maryland Extension and is intended for educational use only. Unauthorized distribution is strictly prohibited.

Produced in cooperation with U.S. EPA and EPA Region 3.

revised November 2010



University of Maryland • College Park

College Park, Maryland 20742

University of Maryland Extension

deal for educating new employees as well as for updating experienced applicators, this fast-paced series is packed with essential information and standards on pesticide safety. Each module is professionally narrated and recreates application situations that are crucial for every employee to handle correctly. The series is available in either Spanish or English.

Shot on location, this tightly edited series is designed to hold the attention of viewers. A special preview prompted the following comments:

"A lot of information in a short film."

"Easy to pay attention to."

"Well done and useful overall."

"Very well put together ... straightforward ... very clear with good explanations."

Among the many points covered are the important role of EPA regulations and laws, understanding and using the label, the types of safety equipment required for most jobs, and safe methods for transporting, mixing, and storing pesticides. You also learn how to clean up pesticide spills, minimize worker exposure, and avoid contaminating the environment.

On-screen self-tests, printed questions and answers, and a discussion guide help employers make sure their employees understand essential information.

#### Module 1:

Time: 9:32

# **D**esticide Laws and Regulations

Covers FIFRA; the roles of EPA, FDA, and state and local governments; and the principles of Right-to-Know laws. The written discussion guide also provides information about state laws and regulations using Maryland as a model; other states can substitute their own information.

# Module 2:

Time: 12:02

### The Pesticide Label

Presents how and when to read the label, and identifies the various components of the label.

### Module 3:

Time: 13:05

### **D**rotecting the Pesticide Handler

Explains the routes of exposure; potential adverse health effects, including acute and chronic effects as well as sensitivity; selection, use, and cleaning of protective gear; and emergency procedures.

Module 4: **videlines for Proper Pesticide Handling** 

**U** Shows correct procedures for storing, transporting, mixing, applying, and disposing of pesticides. Examines a storage facility and describes triple rinse disposal.

Module 5:

Time: 10:55

Time: 10:48

# **D**esticides and the Environment

**I** Focuses on how poor work habits with pesticides can contaminate our environment. Shows a pesticide spill and what actions to take to clean it up. Explains the importance of using safe practices to protect wildlife and endangered species.

### Module 6:

Time: 11:20

# Integrated Pest Management

**L** Explains the components of Integrated Pest Management (IPM). Shows monitoring for pests and beneficial insects and explains the concept of economic and aesthetic thresholds.

**Project Director** Amy E. Brown, Ph.D. Pesticide Safety Education Coordinator





Name		
Company		
Address		
City		
State	Zip	
Phone		
Each DVD includes	all 6 modules.	\$120.00/DVD
English(quantity)	Spanish_	(quantity)
	Total Paymer	nt

To order your copies, send check or money order payable to University of Maryland to:

Administrative Assistant Department of Entomology 4112 Plant Sciences Building University of Maryland College Park, MD 20742 (301) 405-3913

Or order online at: http://pesticide.umd.edu/order

MARYLAND DEPARTMENT OF AGRICULTURE
OFFICE OF PLANT INDUSTRIES AND PEST MANAGEMENT
PESTICIDE REGULATION SECTION



50 Harry S. Truman Parkway Annapolis, Maryland 21401 Telephone: 410/841-5710 FAX: 410/841-2765

FOR DEPARTMENTAL USE ONLY				
Date Appl. Received _				
Date Fees Received _				
Fees Submitted :				
Check No	Cash:			
Acct. No	Ref. No			
Date Mailed				

# **EMPLOYEE REGISTRATION AND I.D. CARD REQUEST**

Complete the following information to register a new employee and to request an I.D. card. Effective January 1, 2011 there is a \$30 fee for registering each new employee (fees do not apply to ID cards issued for public agencies, certified applicators or replacement ID cards). Submit appropriate fees with application. Make checks payable to the Maryland Department of Agriculture. Please note, the Pesticide Regulation Section does not have the authority to prorate fees. Employee Registrations will expire June 30, regardless of the date issued.

**NOTE:** This form *does not serve* as a Change In Status form for a Certified Applicator when there is a change in employment.

### 1. PLEASE TYPE OR PRINT LEGIBLY:

BUSINESS OR AGENCY NAME		BUSINESS OR PERMIT NUMBER	
STREET		CITY	
STATE	ZIP CODE	TELEPHONE NUMBER	
2. <u>FEES:</u>	Number of Employees To Be Registered:	Fees Submitted:	
3. <u>APPLIC</u>	ATION MUST BE SIGNED BY LICENSEE OI	R PERMIT HOLDER	
dance with	rify that the individual(s) listed on this form hav Section 15.05.01.04 <u>et seq.</u> Annotated Code o de Applicators Law.		
0	f Licensee or Permit Holder	Date	
	ification of any information could result in e your Business License, Permit or Certific	-	

4. Include a 1 inch by 1 inch color photo of each employee with the employee name printed on the back. Please list the certificate number only if the employee is currently certified. NOTE: AN ID CARD CANNOT BE ISSUED UNLESS A PHOTO ACCOMPANIES THE REQUEST.

### 5. PLEASE TYPE OR PRINT LEGIBLY:

Is this a (Check One): New Card ()	Replacement Card ()			
Employee Name:				
Employee Social Security Number:	Employee Driver's License Number& S	State:		
Date of Employment:	Certificate Number if Currently Certified:			
Date Training Program Was Completed:				
For Office Use Only: Reference No.:	Control No.:	ID No.:		
Is this a (Check One): New Card ()	Replacement Card ()			
Employee Name:				
Employee Social Security Number:	Employee Driver's License Number& S	State:		
Date of Employment:	_ Certificate Number if Currently Certified: _			
Date Training Program Was Completed:				
For Office Use Only: Reference No.:	Control No.:	ID No.:		
Is this a (Check One): New Card ()	Replacement Card ()			
Employee Name:				
Employee Social Security Number:	Employee Driver's License Number& S	State:		
Date of Employment:	_ Certificate Number if Currently Certified: _			
Date Training Program Was Completed:				
For Office Use Only: Reference No.:	Control No.:	ID No.:		
Is this a (Check One): New Card ()	Replacement Card ()			
Employee Name:				
Employee Social Security Number: Employee Driver's License Number& State:				
Date of Employment: Certificate Number if Currently Certified:				
Date Training Program Was Completed:				
For Office Use Only: Reference No.:	Control No.:	ID No.:		

# VERIFICATION OF REGISTERED EMPLOYEE TRAINING

Business/Agency Name		MDA License/Permit Number			
<u>E</u>	mployee Name	Soc. Sec. No.	Training Date	Employee Signature	Signature of Certified Applicator
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					

MARYLAND DEPARTMENT OF AGRICULTURE OFFICE OF PLANT INDUSTRIES AND PEST MANAGEMENT PESTICIDE REGULATION SECTION

50 Harry S. Truman Parkway Annapolis, Maryland 21401 Telephone: 410/841-5710 FAX: 410/841-2765

FOR DEPARTMENTAL USE ONLY

Date Received \_\_\_\_\_

Date Processed \_\_\_\_

# **TERMINATION OF REGISTERED EMPLOYEE AND / OR CERTIFIED APPLICATOR**

### PLEASE TYPE OR PRINT LEGIBLY:

Business / Public Agency Name: \_\_\_\_\_

Street: \_\_\_\_\_

City / State / Zip Code: \_\_\_\_\_

Business License / Agency Permit No.: \_\_\_\_\_ Telephone No.: \_\_\_\_\_

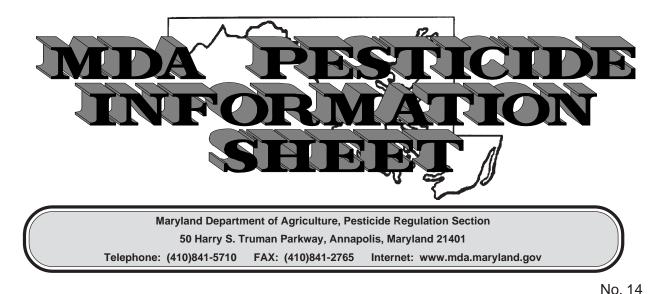
EMPLOYEE NAME	EMPLOYEE SOCIAL SECURITY NO.	INDICATE IF REGISTERED or PROVIDE CERT. NO.	DATE OF TERMINATION	INDICATE IF ID CARD IS RETURNED
1.				
2.				
3.				
4.				
5.				
б.				
7.				
8.				
9.				
10.				

Name Of Authorized Individual:

Name - Please Print

Signature of Authorized Individual:

Date:



# PESTICIDE APPLICATOR CERTIFICATION AND BUSINESS LICENSING REQUIREMENTS

A pesticide is defined as any substance used to control, prevent, destroy, repel, or mitigate any pest. Pests include insects, weeds, plant diseases, nematodes, fungi, birds, rodents, snails, and slugs. Herbicides, insecticides, fungicides, miticides, growth regulators, desiccants, and rodenticides are a few of the materials categorized as pesticides. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), administered by the United States Environmental Protection Agency (EPA), pesticides must be registered with EPA prior to their sale or distribution. As part of the registration process, pesticides are classified for either general use or restricted use. EPA bases this classification on the pesticide's potential for harm, its formulation, method of use, and site of application. A pesticide that is not likely to harm humans or the environment when used according to label directions is classified as a general use pesticide. If there is reason to believe that a pesticide may harm humans or the environment, even when used according to label directions, it will be classified as a restricted use pesticide. Restricted use pesticides can only be applied by or under the direct supervision of certified pesticide applicators.

The Maryland Department of Agriculture (MDA) is responsible for regulating the sale, use, storage, and disposal of pesticides and for enforcing the Maryland Pesticide Applicators Law. MDA is responsible for establishing guidelines and requirements for the application of pesticides, the certification of pesticide applicators and the licensing of businesses to ensure that pesticides are applied properly by competent individuals.

There are several different types of pesticide applicator certificates and licenses issued by MDA, including: private applicator certificates, pesticide business licenses, pest control applicator certificates, pest control consultant licenses, pest control consultant certificates, public agency permits, public agency applicator certificates, and "not-for-hire" business licenses and pesticide applicator certificates.

### **PRIVATE APPLICATOR**

A private applicator is a person who uses a restricted use pesticide in the **production** of an agricultural commodity on their own or leased property, such as dairy farms, orchards, nurseries, turf farms and greenhouses. In order to become certified as a private applicator, the individual must be at least 16 years of age and pass a written closed book certification examination administered by MDA with a score of 70% or higher . The examination consists of multiple choice questions on core, regulations and label interpretation. Subject matter contained in the examination is based on the Core training manual that is available from the county offices of the University of Maryland Extension (UME). The examination dates are scheduled by the county offices of the UME. The UME provides pesticide education to Maryland applicators. The county extension educators

offer optional training sessions to assist applicators in preparing for the examination. Upon completion of the certification exam, the person will be notified, in 2 to 3 weeks, of the test results and after passing the exam, the person will be instructed to submit \$7 to MDA for the certificate. The private applicator certificate runs from January 1 through December 31 and is valid for three years.

In order for a private applicator to renew their certificate, they are required to attend an MDA-approved recertification training session during the last year of the current certification period. Recertification training provides applicators with new information on pest control, health and environmental safety, pest management technology, and changes in pesticide laws and regulations to help the applicator continue to use pesticides safely and effectively. The training must consist of a minimum of 4 credits (1 credit is equal to ½ hour of training), that is the equivalent of two hours of pest or pesticide related topics as determined by MDA and UME. Attendance at initial certification training will **not** satisfy the requirements for recertification training. The required topics that must be covered in each recertification session changes as the need arises and a listing of these topics along with optional topics is available from MDA. The sponsor of a recertification session must submit a copy of the meeting agenda to MDA for approval at least two weeks prior to the recertification session. The sponsor is also responsible for providing MDA with verification of attendance for each individual seeking recertification credit. The verification form must include the participants **printed** name, address and certificate number. Upon receiving the verification of attendance, MDA will update each private applicator's training records. Renewal forms are issued in late November to applicators that have satisfied the training requirements and whose private applicator certificates are about to expire.

### **COMMERCIAL PEST CONTROL**

A pesticide business is any business that is *offering pest control services or is applying general or restricted use pesticides for hire as part of a service or contract agreement*. Pest control means engaging in, or offering to engage in, recommending, advertising, soliciting the use of, supervising the use of, or using, a pesticide or device for the identification, control, eradication, mitigation, detection, inspection, or prevention of a pest in, on, or around any house, building, water, air, land, plant, structure, or animal. This includes lawn care companies using weed and feed or organic pesticides, landscapers using Roundup or animal repellents, and firms providing structural pest control, including the use of devices using heat or freezing. A pesticide business license is required in order to provide these services.

**Licensing** - In order to obtain a pesticide business license, a firm must complete an application obtained from MDA, designate at least one person certified as a pest control applicator in the categories in which they are providing pest control services, pay a \$150 annual business license fee, and provide proof of general liability insurance as follows:

Bodily Injury - \$100,000 each person and \$300,000 each occurrence Property Damage - \$15,000 each occurrence and \$30,000 annual aggregate provision

An original copy of the current Certificate of Insurance must be kept on file with MDA. The licensing period runs from July 1 through June 30.

<u>Certification</u> - In order to become certified as a pest control applicator, an individual must be at least 18 years of age and have at least one year of practical pesticide application experience as a registered employee in the category, or categories, in which they want to become certified. A degree in a biological field such as biology, botany, horticulture, entomology, agronomy, etc., or the completion of specific courses approved by MDA can be used in lieu of experience. The individual must pass examinations administered by MDA.

In order to qualify for the examinations, an applicant must submit an application for certification obtained from MDA at least one month prior to the examination. Experience or education documentation such as the Verification of Experience Forms or college transcripts must be attached. Applications are available on MDA's web site as a PDF file at <u>www.mda.maryland.gov</u>. A listing of the manuals and suppliers used in preparation for taking the examinations is attached as part of the application form. Upon approval of the application, MDA will mail an approval letter with further information on the examination process. A notification will be mailed to the applicants home address approximately two weeks prior to the examination listing the dates and locations. MDA offers the commercial examinations every other month in Annapolis, Salisbury and Frederick.

Examinations are multiple-choice and closed book. Each applicant must pass the Core examination which covers basic pesticide information and laws and at least one specific category examination with a score of 70% or higher. Please note, that the Core is not considered a Category of Pest Control. The last page of this document provides a listing of the pest control categories and subcategories.

An individual may retake the exams as many times as is necessary. However, there is a \$10 retake fee paid at the time of reexamination for each examination that is retaken. Upon passing the exams, a \$75 annual certification fee must be paid for the initial category, and a \$25 fee for each additional main category (numeric designation) of certification. *The fees are only assessed for a category, not for subcategories (letter designation)*. There are no additional fees for certification for more than one place of business at a time. In addition, a certificate cannot be transferred to another person, and MDA must be notified immediately when a certified applicator is no longer employed by a licensee or permittee.

**Recertification** - Maryland requires *all* certified applicators (including out-of-state applicators who were certified based on reciprocity - refer to the section on reciprocity) to attend recertification training *each year* in order to renew their certificate. If applicators are certified in multiple categories they must attend recertification for each category in which they are certified. The training does not have to be held in Maryland. In order for a meeting to qualify for recertification credit, a copy of the meeting agenda must be submitted to MDA for approval. (**Note:** *Before a meeting can be advertised for recertification credit in Maryland it must be submitted to MDA at least 2 weeks prior to the meeting and be approved*). If the meeting agenda needs to be submitted by the applicator to MDA for approval. In order for an individual to become recertified, they must obtain the following credits on an annual basis: Categories 1, 3, 7, 8, 9 and 13 must receive eight credits; Categories 2, 5, and 6 must receive six credits; Category 10 must attend recertification training that pertains to the area of their work. All other categories are determined on a case by case basis. (1 credit is equal to ½ hour of training.)

In order for a meeting to receive recertification credit it **must** cover new laws, regulations or policies along with new technology. Integrated Pest Management (IPM) principles and methodologies should be incorporated into the program along with a combination of the following topics: pesticide safety; environmental concerns; pest biology; control techniques; storage; and disposal. Sponsors of the recertification sessions must ensure that individuals needing recertification credit attend the appropriate sessions and submit documentation to MDA that each individual has satisfied the training requirements. Documentation includes each participant's name and certificate number. If the meeting was not submitted by the sponsor, documentation of attendance must be supplied to MDA by the applicator. Certificates of completion or similar documentation can be used.

Upon submission of proof of training, MDA will update the certified applicator's training records and a renewal form will be mailed to the applicator in April. If a certified applicator does not attend recertification training, or provide MDA with proof of attendance, the applicator must retake the certification examinations by June 30 in order to renew the certificate.

# *NOTE:* A business license or certificate is not considered valid until all the requirements are satisfied and MDA receives the appropriate fees and renewal forms.

### PEST CONTROL CONSULTANT

A pest control consultant license and certificate are required if a person is engaged in the business of offering or supplying technical advice or supervision, inspecting for or identifying pests, or recommending the use of specific pesticides for the purpose of controlling pests. The requirements and procedures for obtaining and maintaining a pest consultant business license and certificate are the same as that for a pesticide business license and pest control applicators certificate, except for the following differences: (1) The licensing and certification period runs from January 1 through December 31 of each year; (2) There are no insurance requirements for maintaining a consultant license; (3) A pest control consultant will be certified in Category 12 - Consulting, Note - Certification in this category is based on experience, or education, and passing the certification examinations in those categories of pest control that consulting services will be offered; (4) The annual pest control consultant license fee is \$150 and the pest control consultant certificate fee is \$75.

Those individuals certified as Consultants are required to attend recertification training each year between January 1 and December 31 in order to renew their certificate. The recertification training requirements will be based off of the categories of pest control that were originally taken for certification and in which consulting services are being offered.

### PUBLIC AGENCY

An employee of a unit of federal, state, county, or local government that performs pest control using general or restricted use pesticides (e.g., highway maintenance, weed control, structural pest control, golf courses, etc.) is classified as a public agency applicator. Each agency performing pest control must obtain a public agency permit and have at least one individual certified in the categories in which it is making pesticide applications. All of the requirements for obtaining and maintaining a public agency permit and public agency applicator certificate are the same as that of the pesticide business and pest control applicator, except there are no fees or insurance requirements associated with the public agency permit or certificate.

### **NOT - FOR - HIRE**

A Not-For-Hire license is required of facilities where pest control services are performed by the owner, or employees on the facility's property where the property is open to, or routinely used or enjoyed by members of the public. This applies to private golf courses, or country clubs, whose employees apply either a **general use and/or restricted use pesticide** in the maintenance of the golf course. In order to obtain a Not-For-Hire license the facility must employ at least one person certified as a pest control applicator. The requirements and procedures for obtaining and maintaining a Not-For-Hire license and applicator certificate are the same as that for a pesticide business license and pest control applicators certificate, except for the following difference: (1) There are no insurance requirements for maintaining a Not-For-Hire license. The annual Not-For-Hire license fee is \$150 and the certificate fee is \$75 with a \$25 fee for each additional main category of certification.

Other types of private firms, facilities or corporations (e.g., private hospitals, private schools, grain elevators, manufacturing or processing plants, apartment complexes, etc.) whose employees apply pesticides to the employers property are not required to maintain a Not-For-Hire license, or have someone certified, unless they are applying restricted use pesticides. If a restricted use pesticide is being used a Not-For-Hire license must be obtained along with having someone certified as a pesticide applicator. (However, if a corporation or business is serving as a contractor for pest control in this situation they are classified as a commercial business.)

### NON-AFFILIATED CERTIFICATE ("RED STAMP")

The non-affiliated or "Red Stamp" certificate is offered as a means for an applicator to maintain their pesticide certification once they have left the employment of a licensed business or public agency. All certificates, other than the non-affiliated certificate, have to be associated with a pesticide business license or public agency permit. A pesticide applicator's certificate is only valid for one year and if the certificate is not renewed within a year, an individual must retake the certification examinations in order to reinstate their certificate. As a result, this type of certification is offered to an individual that does not want to retake the certification examinations. However, the *non-affiliated certification does not allow an individual to offer pest control services or perform pesticide applications since it is not associated with a business license of permit.* 

Besides not being able to offer pest control services, the requirements for the non-affiliated certificate are the same as those for the pesticide applicator certificate. The certificate runs from July 1 through June 30 and must be renewed each year. The renewal fees are also the same, \$75 for the certificate and \$25 for each additional main category of certification. A certificate renewal is mailed to the certified person's home address, normally in April. In addition, all of the recertification requirements, such as training and fee submission, must be fulfilled in order to renew the certificate.

### **DEALER PERMIT**

A person or business selling, or distributing, restricted use pesticides must obtain a dealer permit from MDA. In order to obtain a permit, an application must be completed and submitted to MDA along with a \$25 permit fee. The dealer permit runs from January 1 through December 31 and is renewed annually. Currently MDA does not have any state classified restricted use pesticides and the listing of restricted use pesticides would be based off of EPA's listing. A dealer may not sell or distribute a restricted use pesticide to any person other than a permitted dealer, a certified applicator or that person's authorized representative. Proof of authorization shall be provided before the sale or distribution of a restricted use pesticide.

#### RECIPROCITY

Reciprocity is a **onetime** process for a **nonresident** of Maryland to obtain certification in Maryland based off of certification in their current state of residency. This certification is based on the applicant taking the certification examinations in their current state of residency. To become certified based on reciprocity, a copy of a current certificate from the applicant's current state of residency must be submitted along with a copy of their driver's license. Upon approval, the applicant will be notified concerning payment of the necessary fees. Once the applicator becomes certified in Maryland, they must comply with Maryland's laws, regulations and recertification training requirements. Please note, Maryland residents are not eligible for certification through reciprocity. Maryland residents must take the certification examinations.

### **REGISTERED EMPLOYEE**

Each pesticide licensee or permittee is responsible for ensuring that each employee involved in pest control sales, service, or inspections completes a training program approved by MDA on pesticide use and safety. The purpose of the training is to instruct an individual in the principles of pest control and the proper use of pesticides to ensure they are competent to identify pest problems and to handle and apply pesticides in order to prevent harm to themselves, others, animals or the environment. An employee must receive and complete the training within 30 days of a business, or agency, obtaining a business license or permit, initial employment or changing job duties that will involve pest control sales, service or inspections. The training, at a minimum, must consist of the following topics and concepts:

- D Pesticide laws and regulations;
- D Pesticide label comprehension;
- □ Safety and emergency procedures;
- D Pest identification and control recommendations;
- Pesticide application techniques;
- Environmental and health concerns; and
- □ Integrated pest management principles.

Licensees and Permittees are required to maintain written documentation verifying that each registered employee has completed the required training, including the date in which the training was completed. An employee who has not successfully completed the training requirements may not apply pesticides unless a certified applicator, or a registered employee, is physically present at the time and place the pesticide is applied. To register an employee, their name, social security number, driver's license number, date of employment and the date that they completed the training must be submitted to MDA on an I.D. Card Request Form along with a one inch by one inch color photograph with the employee's name printed on the back of the photograph and the \$30 initial registration fee for each new employee. Upon receipt of the I.D. card, a Registered Employee is required to carry the Maryland Department of Agriculture I.D. and display it to any individual requesting to see their I.D. card. A written notice from the licensee or permittee must be provided to MDA within thirty days of a Registered Employee's termination or change in employment.

An employee's registration is required to be renewed annually by submitting the Registered Employee Renewal form and submitting the \$30 annual registration fee for each employee. An employee's registration is valid from July 1 through June 30. The ID card itself will not be reissued each year. Please note, public agencies and certified applicators are exempt from the registration fees. In addition, if an ID card is lost, stolen or damaged there will not be a fee associated with issuing a replacement I.D. card.

# **PEST CONTROL CATEGORIES**

### 1 - Agricultural

- A Plant (e.g., field crops, small grains, forage, fruit and vegetables and noncrop agricultural lands)
- **B** Animal (e.g., livestock, horses, poultry and areas where they confined or housed)
- **C Grain Treatment** (e.g., pest control on, in or around stored grain to prevent insect and rodent damage, including the use of fumigants)
- 2 Forest (e.g., site preparation, release work, insect control and reforestation projects)
- 3 Ornamental & Turf
  - A Ornamental Exterior (e.g., insect, disease, control on plants in the landscape, and weed control in plant beds and around ornamental plantings)
  - B Ornamental Interior (e.g., insect or disease control on plants in interior landscapes)
  - C Turf (e.g., weed, insect or disease control to lawns)
- 4 Seed Treatment (e.g., seed protectants)
- 5 Aquatic (e.g., weed and fish control in water, includes tidal and wetland areas)
- 6 Right-Of-Way and Weed (e.g., treatment of roadsides, utilities, railroads, noncroplands, fence lines, structural perimeters, or similar areas)
- 7 Industrial, Institutional, Structural & Health Related
  - A General Pest Control (e.g., cockroaches, fleas, crickets, and other household pests found within or adjacent to a structure)
  - B Wood Destroying Insects (e.g., termites and other wood destroying insects)
  - C Wildlife Control (e.g., pest control involving birds, mammals, reptiles and other wildlife, not required if strictly performing trapping and removal. Note: all companies/ agencies performing trapping and removal must have a Maryland Department of Natural Resources Wildlife Damage Control Operators Permit)
  - D Rodent Control (e.g., rodents found in and around a structure)
  - **E Fumigation** (e.g., fumigation of commodities and structures)
- **8 Public Health -** (e.g., pest control involving mosquitos)
- **9 Regulatory** (**NOTE:** Only issued to employees of a public agency responsible for enforcement of government mandated programs e.g., noxious weeds, gypsy moth)
- **10 Demonstration & Research** (e.g., demonstration of pesticide use or application, experimental plots, etc.)
- 11 Miscellaneous (Unique or specialty areas of pest control not applicable to other categories)
  - A Wood Treatment (e.g. treatment of telephone poles, building or construction materials)
  - B Tributyltin Antifoulant Paint (TBT) (e.g. use of marine antifoulant paints containing tributyltin)
  - C Sewer Root Control (e.g., treatment of tree roots in sewer lines)
- 12 Consultant (e.g., performing pest identification, providing technical advice on pest control or making pesticide recommendations. Note: Certification in this category is based on experience, or education, and passing the certification examinations in those categories of pest control that consulting services will be offered)
- 13 Aerial (e.g., pest control performed by fixed-wing or rotary aircraft to any crop or land)

