333 CMR 10.00: CERTIFICATION AND LICENSING OF PESTICIDE APPLICATORS

Section

10.01: Purpose
The purpose of 333 CMR 10.00 is to establish the standards, requirements and procedures for the certification and licensing of pesticide applicators.

10.02: Definitions
For the purposes of 333 CMR 10.00, the definitions set forth in 333 CMR 13.00: Standards for Application apply, unless the context or subject matter requires a different interpretation.

Certified Pesticide Applicator - an individual who is certified by the Department under the provisions of M.G.L. c. 132B, § 10 and authorized to use or supervise the use of any pesticide which is classified by the Department as being for restricted use.

Contamination and Pollution - mean the presence in the environment (air, land, water or food) of one or more pesticides, degradation products of pesticides or formulation constituents or combinations thereof in such concentration and of such duration as to cause an unreasonable adverse effect on the environment as determined by the Department.

Damage and Injury - as used in 333 CMR 10.00, shall mean to cause an unreasonable adverse effect on the environment.

Department - the Department of Agricultural Resources.

General Use Pesticide - a pesticide that can be purchased by any individual and applied without any license, permit, or certification, subject to any other restrictions set forth in M.G.L. c. 132B.

Protected Areas - for the purposes of 333 CMR 10.03(32), shall be defined as:
(a) any residential, commercial, municipal, hospital, school and other buildings where people gather and the area 100 feet surrounding these structures provided that such defines Protected Areas shall not exceed the property line;
(b) developed recreation areas open to public accommodation, including developed public or commercial campgrounds, developed picnic areas, developed park and recreation facilities, playgrounds, school bus stops, and other areas developed for organized recreation.
10.02: continued

**Restricted Use Pesticide** - a pesticide which, when used in accordance with directions for use, warnings and cautions and for the use for which it is registered, or for one or more such uses, may cause, without additional restriction, unreasonable adverse effects on the environment, including injury to the applicator. This classification also includes all pesticides that are registered by the United States Environmental Protection Agency (EPA) pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), that are classified as restricted, and those pesticides that are individually reviewed and classified as such by the Pesticide Board Subcommittee.

**State Limited Use Pesticide** - a restricted use pesticide that is also registered by the Pesticide Board Subcommittee with additional restrictions that:
(a) is restricted to certain individuals or groups;
(b) requires permission from the Department prior to each use; or
(c) requires further restriction, in any other manner.

**Supervising Certified Applicator** - an individual certified by the Department under M.G.L. c. 132B, § 10 who supervises the use of any pesticide classified as restricted use and meets the requirements for direct supervision of a non-certified applicator set forth in 333 CMR 10.07.

**Use of a Pesticide** - shall mean any act of handling a pesticide, releasing of a pesticide, or exposing of man or woman or the environment to a pesticide, including, but not limited to:
(a) Application of a pesticide including mixing or loading of equipment and any supervisory action in or near the area of application.
(b) Storage actions relative to pesticides and pesticide containers carried out or supervised by an applicator.
(c) Disposal actions relative to pesticides and pesticide containers carried out or supervised by an applicator.
(d) Transportation actions relative to pesticides and pesticide containers except those by carriers and dealers.

10.03: Categorization of Commercial Applicators of Pesticides

Every commercial applicator who uses or supervises the use of a restricted or state limited use pesticide in any of the following categories must be certified for that category or subcategory. The categories and subcategories for commercial applicators are:

(1) **Agricultural Pest Control** - includes applicators who make or supervise applications of pesticides useful in the production of agricultural commodities and includes bulk application of fertilizer pesticide mixtures and treatments applied to grasslands and non-crop agricultural lands. Also included are applicators of pesticides to farm and domestic animals or to structures or areas in or on which such animals are confined. Doctors of Veterinary Medicine unless engaged in the business of applying pesticides for hire, publicly holding themselves out as pesticide applicators, or engaged in large scale use of pesticides are excluded from this category.

(2) **Forest Pest Control** - includes applicators who make or supervise applications to forest, forest nurseries or forest seed producing areas; including governmental employees operating on public or private lands.

(3) **Ornamental and Turf Pest Control**
   (a) **Shade Trees and Ornamentals** - includes applicators, (including those who make application to recreational areas, golf courses, parks, arboretums, or for governmental agencies, or business entities or projects operation on public or private lands), who take or supervise applications to ornamental trees, shrubs or flowers.
   (b) **Turf** - includes applicators who make or supervise applications to grassed areas including those who make applications to the areas and in the situations enumerated above under Shade Trees and Ornamentals.
10.03: continued

(c) **Interior Landscaping** - includes applicators who make pesticide applications to maintain plants indoors in such areas as public and private buildings.

(4) **Seed Treatment** - includes those commercial applicators who use or supervise the use of pesticides to treat seeds to be used in plant propagations.

(5) **Aquatic Pest Control** - includes applicators who use or supervise the use of pesticides applied to running, standing or stored water mainly for vegetation control or to water treatment areas to control vegetation and certain insects. This category includes applications of pesticides for fish population control, but excludes applications made to water as part of a public health pest or nuisance control program such as for mosquito control.

(6) **Right-of-way Pest Control** - includes applicators who use or supervise the use of pesticides for vegetation control along public roads, pipelines, power lines, substations, railway rights of way, or similar areas both publicly and privately owned.

(7) **Industrial, Institutional, Structural and Health Related Pest Control** - includes commercial applicators using or supervising the use of pesticides in, or around food handling establishments, human dwellings, institutions, such as schools and hospitals, industrial establishments, including warehouses and grain elevators, and any other structures and adjacent areas, public or private; and for the protection of stores, processed, or manufactured products. 333 CMR 10.03(7) is subdivided as follows:

(a) **General** - includes applicators such as pest control operators (exterminators) and employees of food handling establishments, hospitals, schools, residential complexes, and public institutions of all types who use pesticides, mainly indoors.

(b) **Fumigation** - includes applicators who are especially trained and equipped to use volatile pesticides in sealed spaces.

(c) **Site Sanitation** - includes applicators whose specialty is complete vegetation control at such sites as industrial complexes, railroad yards, and utility substations.

(d) **Termite and Structural Pest Control** - includes pest control operators and other applicators trained and equipped for the specialized use of pesticides to protect structures from termite attack, or attack by other wood destroying organisms.
10.03: continued

(e) **Food Processing Pest Control** - includes applicators who use or supervise the use of pesticides in food processing establishments to control pests, which pests may contaminate or destroy food products or which are nuisances created by the processing of food products.

(f) **Vertebrate Pest Control** - includes applicators who use or supervise the use of pesticides for the control of all vertebrate animals except rats and mice.

(g) **Wood Preservative** - includes applicators who supervise the use of pesticides for the purpose of wood preservation.

(8) **Public Health Pest and Nuisance control** - includes applicators who use or supervise the use of pesticides to water or as residual and space treatments on public and private lands, by governmental agency employees, to control pests considered to be serious nuisances or as potential disease carriers and thus of public health or medical importance.

   (a) **General** - includes applicators who control rodents, ticks, mites and other disease vectors, except those in 333 CMR 10.03(8)(b).

   (b) **Mosquitoes and Biting Flies** - includes applicators who control mosquitoes, tabanids, black flies and other diptera.

(9) **Regulatory Pest Control** - includes all governmental employees who use or supervise the use of pesticides to control pests subject to quarantine or other regulation.

(10) **Demonstration and Research Pest Control** - includes persons such as University of Massachusetts Cooperative Extension Service and Massachusetts Experiment Station personnel; representatives of pesticide manufacturers, distributors and other commercial firms; and other persons who demonstrate pesticide uses and methods of applications.

(11) **Aerial Application** - includes persons who apply pesticide by means of aircraft including helicopters and fixed wing aircraft. Aerial applicators applying restricted and state limited use pesticides must successfully complete an examination for each applicable category or subcategory in addition to meeting the general and aerial application standards.

10.04: Standards for Certification of Commercial Applicators

Competence in the use and handling of pesticides shall be determined on the basis of written examinations, and, as appropriate, performance testing, based upon standards set forth 333 CMR 10.04(1) through (3) and which are approved by the Administrator. Such examination and testing shall include the general standards applicable to all categories, the specific standards identified for each category or subcategory (if any) in which an applicator is to be classified and standards for supervision of non certified applicators. Those who apply or supervise the application by non-certified applicators of pesticides aerially, shall be required to take an additional examination on aerial application safety, calibration and techniques.

(1) **General Standards for All Categories and Subcategories of Commercial Applicators.** All commercial applicators must demonstrate a practical knowledge of principles and practices of pest control and safe use of pesticides. Examination is to be based upon training materials and training session content related to problems and situations associated with the categories or subcategories in which the applicant wishes to be certified including the following areas:

   (a) **Label and Labeling Comprehension**

   1. General format and terminology;
   2. Understanding of instructions, warnings, terms symbols, and other information commonly appearing on pesticide labels;
   3. Product classification - general or restricted;
   4. Necessity for use consistent with label except as otherwise allowed by interpretations or regulations.
(b) **Safety** - Factors such as:
1. Toxicity, hazard to humans, common exposure routes;
2. Types and causes of common accidents with pesticides;
3. Precautions necessary to prevent injury to applicators; and other persons nearby or in treated areas;
4. Need for use of protective equipment;
5. Symptoms of pesticide poisoning;
6. First aid and other procedures to follow;
7. Proper identification, storage, transport, handling, mixing procedures and disposal methods for pesticides and used containers, including precautions to be taken to prevent children from having access to pesticides or containers.

(c) **Environment** - Potential environmental consequences of use or misuse as influenced by factors such as:
1. Terrain, soil or other substrate types;
2. Presence of fish, wildlife and other non-target organism;
3. Sensitive non-target vegetation;
4. Drainage patterns;
5. Weather and climatic conditions;

(d) **Pests**
1. Common features of pest organisms and characteristics of damage helpful in identification;
2. Recognition of relevant pests;
3. Pest development and biology as relevant to problem recognition and control.

(e) **Pesticides**
1. Types of pesticides (herbicides, rodenticide, etc.);
2. Types of formulations (dust, wettable powders, baits, etc.) and their relative potential for environmental hazard;
3. Compatibility, synergism, persistence, and animal and plant toxicity of formulations;
4. Hazards and residues associated with use;
5. Factors influencing effectiveness or which lead to such problems as resistance;
6. Dilution procedures.

(f) **Equipment**
1. Types, advantages and limitations of each;
2. Uses, maintenance and calibration.

(g) **Application Techniques**
1. Procedures used to apply various formulations, solutions, and gases, including knowledge of which techniques to use in a given situation;
2. Interrelationship of discharge and placement of pesticides to proper use, unnecessary use, and misuse;
3. Procedures to minimize drift and undesired effects on the environment.

(h) **Applicable State and Federal Laws and Regulations**
1. Federal Insecticide, Fungicide and Rodenticide Act as amended and relevant regulations;
2. Massachusetts Pesticide Control Act and relevant regulations;
3. Other appropriate statutes and regulations.

(i) **Non-chemical Alternatives**. Non-chemical procedures or sets of procedures where available that could substitute for a pesticide or decrease the amount required.

(j) **Impact on Human Health**.

(k) **Beneficial Organisms**. Commercial applicators shall demonstrate a knowledge of beneficial insects and other beneficial organisms, the role they play in limiting pest populations, and the susceptibility of beneficial organisms to the various pesticides.
(2) **Specific Standards for Each Category and Subcategory of Commercial Applicator.** Commercial applicators in each category and subcategory shall be particularly qualified with respect to the specific standards elaborated below:

(a) **Agricultural Pest Control.** Applicators shall demonstrate a knowledge of crops grown and important pests against which they may be using restricted use pesticides. Factors such as the extensive areas involved, quantities of pesticides needed, and ultimate use of commodities as food and feed indicate the importance of competency in these applicators. Also, there are other important considerations such as soil and water problems, pre-harvest intervals, re-entry intervals, phytotoxicity, proximity of other crops and human occupancy, potential for environmental contamination and non-target injury. Applicators shall also demonstrate a practical knowledge of the animals to be treated and their usual pests. A practical understanding for undesirable or illegal residues in food products. The applicator must know the relative hazards associated with formulations, methods of application, age of the animals, stresses and extent of treatment. In making application to structures or areas in or on which animals are confined, residues in animal feed and in food products become important. Applicators shall also demonstrate a knowledge of the role of beneficial insects in controlling pests. Applicators shall further demonstrate a knowledge of how resistance to a pesticide develops and ways to minimize this occurrence.

(b) **Forest Pest Control.** Applicators shall have a practical knowledge of forest-types in this state, the pests involved, the cyclic occurrence and population dynamics of certain pests as a basis for programming treatment. Practical knowledge of natural control agents and their vulnerability to projected pesticide applications is required. The commercial applicator shall demonstrate a practical knowledge of forests as including natural aquatic and other wildlife habitats and the possible consequences of pesticide use. Therefore, applicators shall demonstrate an understanding of the importance of considering materials, methods of application, weather conditions, and adjacent areas in minimizing the possibility of secondary problems.

(c) **Ornamental and Turf Pest Control.** Applicators certified in either subcategory shall demonstrate a practical knowledge of pest problems associated with the maintenance and production of a great variety of plants applicable to the subcategory in which they are to be certified, and a knowledge of the potential for plant injury, drift, and persistence beyond the time necessary for pest control. They shall also show an understanding of methods which will minimize or prevent hazards to humans, pets and other domestic animals.

1. **Shade Trees and Ornamentals.** Applicators certified in this subcategory shall demonstrate a practical knowledge of the information set forth in 333 CMR 10.04(2)(c), as it applies to the protection of trees and shrubs maintained for shade and aesthetic purposes.
2. **Turf.** Applicators certified in this subcategory shall demonstrate a practical knowledge of the information set forth in 333 CMR 10.04(2)(c), as it applies to the protection of grassed areas maintained for sports use or aesthetic purposes.
3. **Interior Landscaping.** Applicators certified in the subcategory shall demonstrate a practical knowledge of the information set forth in 333 CMR 10.04(2)(c), as it pertains to the protection of indoor plants maintained for aesthetic purposes. Certified applicators in this subcategory shall demonstrate a practical knowledge of the proper use and handling of pesticides labeled for use on indoor plants to minimize exposure to non-applicators.

(d) **Seed Treatment.** A very small number of applicators are involved in this phase of pest control in this state. Any applicators who require certification shall demonstrate a practical knowledge of types of seeds requiring protection and factors such as seed coloration, carriers and surface active agents which may affect germination or effectiveness. Also they shall demonstrate a knowledge of hazards associated with handling, sorting, mixing and inadvertent misuse or unsafe disposal of treated seeds.
10.04: continued

(e) **Aquatic Pest Control.** Commercial applicators who are certified in this category must demonstrate a practical knowledge of secondary effects that may be caused by improper application rates, wrong formulations and poor application techniques; also a knowledge of various water use situations and downstream effects. These applicators shall demonstrate practical knowledge of the principles of limited area treatments and the potential for adverse effects on fish, birds, beneficial insects, and other non-target organisms that may be present.

(f) **Right-of-Way Pest Control.** Rights-of-way traverse many types of terrain, including waterways. Applicators certified in this category shall demonstrate a practical knowledge of problems of run-off, drift, excessive defoliation and ability to recognize target organisms. They must have an understanding of herbicides and the need for restricting these pesticides to right-of-way areas because of the possible impact of improper applications on adjacent areas and communities.

(g) **Industrial, Institutional, Structural and Health Related Pest Control.** Applicators certified in any of the subcategories of this category must demonstrate, as applicable, a practical knowledge of a wide variety of pests including their life cycles, types of formulations appropriate for their control and methods of application that avoid contamination of food, damage and contamination of habitat and exposure of people and pets. Since human exposure, including babies, children, pregnant women, and elderly people, is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this category. Because health related pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions particularly related to this activity.

1. **General.** The varied situations in which applications are made and the necessity for treatments to places where people live, eat, sleep and play, and where food and feed is stored, make it important for applicators to demonstrate a sound practical knowledge of a wide variety of pests, including identification, life cycles, effective formulations and safe methods so as to avoid contamination of food and feed, damage to property and exposure of people and pets. Applicators who are certified in this subcategory shall demonstrate an understanding of factors such as continuous exposure and the presence of babies, pregnant women or elderly people, which may create hazardous situations.

2. **Fumigation.** Applicators who are certified in this subcategory shall demonstrate a practical knowledge of the pests associated with situations requiring this control procedure, the pesticide utilized, the equipment and precautions necessary to prevent human exposure and illegal residues in food or feed.

3. **Site Sanitation.** Applicators who are certified in this subcategory shall demonstrate an understanding of environmental effects since applications are made outside buildings with associated run-off, drift and potential contamination of adjacent areas.

4. **Termite and Structural Pest Control.** Applicators who are certified in this subcategory shall demonstrate a practical knowledge of habitats, effective pesticides, methods of applications and conditions leading to potential problems such as type of soil, proximity of wells and desirable vegetation and backsiphoning of pesticide mixture into water supply. Applicators shall also demonstrate a knowledge of the information, regarding hazards of the pesticide to be employed, which should be conveyed to occupants of the structure to be treated. This shall include information on general precautions which should be taken to minimize exposure. Applicators shall further demonstrate sufficient knowledge about the hazards of the pesticides to be applied to enable them to give adequate warning regarding exposure to occupants who may be particularly vulnerable to those hazards (e.g., pregnant women, persons on anticoagulant medications, persons with respiratory problems, etc.).
5. **Food Processing Pest Control.** Applicators shall demonstrate a practical knowledge of pests associated with food processing plants. Applicators shall also demonstrate an understanding of the importance of preventing the contamination of food products with pesticides as a result of their operations and of the procedures necessary to prevent such contamination. They shall further demonstrate a practical knowledge of the specialized equipment necessary to protect themselves and other employees during and after pesticide applications, especially fumigation operations.

6. **Vertebrate Pest Control.** Applicators who are certified in this subcategory shall demonstrate a practical knowledge of vertebrate animals usually encountered as pests. Applicators shall also demonstrate an understanding of the principles of vertebrate animal management, including mechanical, structural modification, habitat modification and other procedures which can be used to manipulate vertebrate animal population so as to make the use of pesticides a procedure to be followed only when the foregoing are not practical. They shall further demonstrate an appreciation of the effects of pesticides a procedure to be followed only when the foregoing are not practical. They shall further demonstrate an appreciation of the effects of pesticides on humans and other animals in any area in which pesticides are exposed. In addition, applicators shall demonstrate a knowledge of the information, regarding the hazard of the pesticide to be employed, which should be conveyed to occupants of the building. This shall include information on general precautions which should be taken to minimize exposure. Applicators shall also demonstrate sufficient knowledge about the hazards of the applied pesticide to enable them to give adequate warning regarding exposure to occupants who may be particularly vulnerable to those hazards (e.g. pregnant women, person on anticoagulant medications, persons with respiratory problems, etc.). Finally, applicators shall demonstrate a knowledge of how to recognize the effectiveness of the treatment.

7. **Wood Preservative.** Applicators who are certified in this subcategory shall demonstrate an understanding of the proper use and handling of the pesticides registered for wood preservation. Special emphasis will be placed upon the safest procedures that should be followed to minimize human, especially worker, exposure.

(h) **Public Health Pest and Nuisance Control.** Applicators certified in this category shall demonstrate a practical knowledge of disease transmission by vectors as relate to application programs. Applicators shall recognize the potential environmental and human exposure problems related to widespread use of pesticides applied to water and residential areas. These applicators shall also demonstrate an understanding of non-chemical methods such as water management and sanitation.

1. **General.** Applicators certified in this subcategory shall demonstrate a practical knowledge of such vectors as rodents, ticks, mites, fleas; including identification, life histories and habitats as related to control procedures.

2. **Mosquitoes and Biting Flies.** Applicators certified in this subcategory shall demonstrate a practical knowledge of such vectors as mosquitoes, tabanids, black flies and other diptera; including identification, life histories and habitats as related to control procedures.

(i) **Regulatory Pest Control.** Applicators who are certified in this category shall demonstrate a practical knowledge of regulated pests, applicable federal and state laws relative to quarantines and other regulations of pests and the impact on the environment of pesticide applications to eradicate or suppress such pests. Applicators are expected to understand the factors influencing introduction, spread and population dynamics of relevant pests. Also, they should have practical knowledge of regulated pests in other areas of the country that might become problems in this state.
10.04: continued

(j) Demonstration and Research Pest Control. Persons demonstrating the safe and effective use of pesticides to other applicators and the public will be expected to meet comprehensive standards reflecting a broad spectrum of pesticide uses. Many different pest problem situations will be encountered in the course of activities associated with demonstration, and practical knowledge of problems, pests, and population levels occurring in each demonstration situation is required. Further, they should demonstrate an understanding of pesticide organism interactions and the importance of integrating pesticide use with other control methods. In general, it would be expected that applicators doing demonstration pest control work possess a practical knowledge of all of the general standards detailed in 333 CMR 10.04(1). In addition, they shall meet the specific standards required for 333 CMR 10.04(2)(a) through (g) as may be applicable to their particular activity and detailed in 333 CMR 10.04(2). Persons conducting field research on method improvement with restricted use pesticides should be expected to know the general standards detailed in 333 CMR 10.04(1). In addition, they shall be expected to know the specific standards detailed in 333 CMR 10.04(2)(a) through (i) applicable to their particular activity.

(3) Aerial Examination Standards. Aerial applicators, in addition to meeting general and applicable specific standards, shall demonstrate a practical knowledge of federal and state regulations concerning aerial application of pesticides, hazards of pesticides to those making aerial applications and related protective devices. Applicators shall also demonstrate a practical knowledge of environmental considerations peculiar to aerial application in the areas of water contamination, spills, bee kills, noise and the potential for similar nuisances. Applicators shall further demonstrate a knowledge of aircraft dispersal systems and their calibration, swath patterns and drift. Finally, they shall demonstrate a knowledge of aeronautics as they apply to aerial applications.

10.05: Standards for Certification of Private Applicators

Every private applicator who uses or supervises the use of a restricted or state limited use pesticide for purposes of producing any agricultural commodity on property owned or rented by him or his employer or on the land of another without compensation other than trading of personal services between producers of agricultural commodities must be certified. As a minimum requirement for certification, a private applicator shall demonstrate a practical knowledge of pest problems and control practices associated with his agricultural operations, proper storage, use, handling and disposal of pesticides and containers, and an understanding of laws and regulations relating to his use of pesticides. Examinations for private applicators will emphasize the principle commodity area in which they are engaged. This knowledge should include the ability to:

(1) Recognize common pests and their damage.

(2) Read and understand labels and labeling information including the commonly used name of pesticides he has applied, pests controlled, timing and methods of application, safety precautions, and preharvest or re-entry restrictions, any specific disposal directions and any specific hazards to the environment.

(3) Apply pesticides as directed in labeling, including preparation of the proper concentration, and taking into consideration such factors as area to be treated, speed at which equipment will be driven and quantity dispersed per unit of time.

(4) Recognize local environmental situations to be considered to avoid contamination of adjacent crops, water or other features.

(5) Recognize poisoning symptoms and to follow proper procedures in case of a pesticide accident.
10.05: continued

(6) Demonstrate a practical knowledge of Federal and State supervisory requirements including labeling regarding the application of restricted use pesticides by non-certified applicators. This requirement is limited to private applicators whose activities include a supervisory role.

10.06: Standards for Licensing Non-certified Applicators

Every non-certified applicator who for hire uses or supervises the use of a general use pesticide on land not owned or controlled by the applicator or his or her employer must be licensed. As a minimum requirement for licensing, an applicator must demonstrate a practical knowledge of principles and practices of pest control and safe use of pesticides. This knowledge shall include at least those areas set forth as "general standards" for commercial applicators in 333 CMR 10.04(1).

10.07: Standards for Supervision of Non-certified Applicators

(1) Prior to supervising any non-certified applicator, Supervising Certified Applicators must have a practical knowledge of federal and state supervisory requirements set forth by the Department in accordance with M.G.L. c. 132B and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

(2) There shall be a minimum of one Supervising Certified Applicator for each company location that shall supervise non-certified applicators that apply State Limited Use and Restricted Use Pesticides employed by that company at that location. A Supervising Certified Applicator shall supervise no more than 12 non-certified applicators. Upon request, the Supervising Certified Applicator shall provide to the Department, the names and license number of all non-certified applicators under their direct supervision.

(3) A Product Application Guidance Sheet must be developed by a Supervising Certified Applicator for each State Limited Use and Restricted Use Pesticide used by the company. Product Application Guidance Sheets shall include, but not be limited to, the following and shall be maintained in each service vehicle:
   (a) Pesticide product name and EPA Registration Number;
   (b) Mixing instruction;
   (c) Precautions on Environmental and Human hazards that is specific to that product;
   (d) Accident instruction;
   (e) Sites allowed by company and label where product use is preferred;
   (f) Preferred application method allowed by company and label for product;
   (g) Product limitations set by company and label; and
   (h) Copyright date of Label Summary Sheet.

(4) Supervising Certified Applicators shall review State Limited Use and Restricted Use Pesticide label directions and Product Application Guidance Sheets on a yearly basis, or sooner if the product label changes, with all individuals under their supervision, and a record shall be kept of each label review conducted. Records of the label review must be maintained for a period of three years and shall be made available to the Department upon request. Records shall include the following:
   (a) Date;
   (b) Name and Signature of certified applicator conducting review;
   (c) Name of applicator(s) present for label review;
   (d) Pesticide Name;
   (e) Pesticide EPA Registration Number; and
   (f) Copy of Label and Product Application Guidance Sheet that was reviewed.

(5) For all State Limited Use and Restricted Use Pesticide applications, detailed written instructions must be provided to the non-certified applicator using the State Limited Use and Restricted Use Pesticides. Detailed written instruction shall include the Product Application Guidance Sheet and prior identification on the application record/work order that a State Limited Use and Restricted Use Pesticides may be used at a specific address.
10.07: continued

(6) Supervising Certified Applicators must respond to non-certified applicators within 30 minutes of notification of issues concerning State Limited Use or Restricted Use Pesticide applications, either in person or via electronic communication media.
   (a) In the event that the non-certified applicator cannot reach his or her supervising Certified Applicator, the non-certified applicator must discontinue the use of the Restricted Use or State Limited Use Pesticide(s) until communication has been made and the issue resolved.
   (b) The following details of the communication shall be part of the pesticide applicator's record:
       1. Date and time of communication;
       2. Name and license number of applicator initiating communication;
       3. Name of supervising certified applicator and certification number; and
       4. Detail description of communication.

(7) Pesticide applicators must maintain a daily vehicle inventory log of all Restricted Use Pesticides and State Limited Use Pesticides. Daily vehicle inventory log must be made available to the Department upon request and shall be maintained for three years. Daily vehicle log shall include the following:
   (a) Date;
   (b) Vehicle identification number;
   (c) List of Restricted Use Pesticide(s) and State Limited Use Pesticide(s);
   (d) EPA Registration Number(s); and
   (e) Signature and license number of applicator confirming inventory in the vehicle prior to the beginning of each work shift.

(8) Prior to authorizing a subsurface termiticide application, the Supervising Certified Applicator must:
   (a) Conduct an in person site inspection unless an onsite inspection is not practical in which case, pictures that show unique features of the site must be reviewed by the supervising certified applicator.
   (b) Develop a site graph with supporting photographs.
   (c) Review a description of the site, including but not limited to area of concern, i.e. foundation type and condition.

(9) Restricted Use and State Limited Use Pesticide Application Records. In addition to records required pursuant to 333 CMR 10.14, the following must maintained by the Supervising Certified Applicator:
   (a) Records require by 333 CMR 10.07(8), when applicable;
   (b) Description of specific site treated;
   (c) Signature and license number of supervising Certified Applicator confirming review of pesticide application records. Review of application records must be complete within 72 hours of completed pesticide application; and
   (d) Summary of any corrective action necessary by supervising Certified Applicator.

10.08: Procedure for Certification and Licensing of Applicators

(1) Applicants. Any individual seeking commercial certification license and non-certified license must be 18 years of age or older as of the date of the examination. In addition, applicants for commercial certification license must have at least two years relevant experience. Previous work experience or academic studies consistent with 333 CMR 10.08(2)(h) may be substituted at the discretion of the Department.

(2) Examination. The Department shall conduct written examinations, and, as appropriate, performance testing, to determine applicator competence in the use and handling of pesticides. No certification or license shall be issued by the Department to an individual applicant unless he shall have satisfactorily passed a written, and if necessary, a performance, examination. The examination shall be based upon, but shall not be limited to the appropriate standards set forth in 333 CMR 10.04 through 10.07.
10.08: continued

(a) **Application for Examination.** Application shall be made on forms supplied by the Department and shall contain such information as the Department requires. The application shall be filed in person or by mail at the offices of the Department. The required examination fee shall accompany the application. Applications must be received by the Department five business days prior to the test date. No one will be allowed to take the test if his or her application and fee is received after the applicable cutoff date, unless this requirement is waived by the Department. Late or incomplete applications will be returned to the applicant.

(b) **Examination Fee.** A fee shall be charged for each core, class, category or subcategory examination. The fee shall be paid by check or money order payable to the Commonwealth of Massachusetts.

(c) **Written Examination Rules.** The following examination rules will prevail and violation of any part will be considered grounds for disqualification of the applicant:

1. Time allowed for examinations will be set forth in the instructions to examinees.
2. The copying of questions or the making of notes relative thereto is prohibited.
3. No applicant shall be permitted to remove from the examination room copies of the examination prior to or subsequent to the examination.
4. Examinees shall not leave the examination room for any reason until they have turned in to the proctor conducting the examination the complete examination papers.
5. Exams shall be closed book, the use of books or notes will not be allowed.
6. Additional rules the Department deems necessary.

(d) **Performance Testing.** In certain cases, the Department may require an actual demonstration by the applicant in the presence of a qualified member of the program staff. This form of examination may be utilized where calibration of equipment must be extremely accurate as in certain phases of aquatic pest control or aerial applications over residential areas in public health pest control. Performance testing might be required following an accident involving pesticide application or where handling and use of a certain pesticide for which the applicant desires certification poses unusual hazards for the applicator, other persons or the environment as in fumigation, applications in greenhouses or areas adjacent to waterways. Use of safety equipment is another area where performance testing may become necessary in several categories.

(e) **Notification of Results.** Results of the examination shall be mailed to the applicant within a reasonable time.

(f) **Re-examination.** After a failed examination, an applicant may file an application for the next available date for re-examination in that area with the appropriate fee. An applicant who fails any exam twice must wait three months before applying for that exam. If an exam candidate fails any exam three times, the candidate will be required to wait one year before applying for it again.

(3) **Certification and Licensing.**

(a) **Application for Certification or License.** An applicant who has been notified of passing the examination must file an application for certification or licensing within one year from the date of notification. The application shall be made on forms supplied by the Department, shall contain such information as the Department shall require and shall be accompanied by the appropriate certification or license fee. If an application is not made within the specified period of time, the applicant shall be required to file a new application for examination, pay the prescribed fee and satisfactorily pass the examination, prior to being certified or licensed. The time limit may be waived by the Department for good cause.

(b) **Fee.** A fee of $50 for certified commercial applicators, $25 for certified private applicators and $25 for non-certified commercial licensed applicators shall be paid at the time of each annual renewal. Fees shall be paid by check or money order payable to the Commonwealth of Massachusetts.
(c) **Duration of Certification or License.** An initial certification or license shall be valid for a period beginning with the actual date of issuance and ending on December 31\textsuperscript{st} unless it has been modified, revoked or suspended prior thereto by the Department. Thereafter, the certification or license year will extend from January 1\textsuperscript{st} to December 31\textsuperscript{st} and each certification or license must be renewed annually by January 1\textsuperscript{st}. In the event that an individual files with the Department an application to renew a certification or license which is in effect on the date of an application for renewal and pays the appropriate fee therewith, such certification or license shall be deemed to be in effect until the earlier of the following two events shall occur: 90 days have elapsed after the certification or license was scheduled to expire; or the Department notifies the applicant that the certification or license has been renewed, modified or denied.

(d) **Restrictions of Certification or License.** Any certification or license may at any time be further limited or restricted as the department deems necessary.
10.08: continued

(e) Renewal of Certification or License. Forms for the renewal of a certification or license will be mailed to holders at least 30 days prior to the due date. Certification and licenses may be renewed annually for up to three years without re-examinations or retraining provided,

1. The conditions under which the original certification or license was issued have not changed, and that the certification or license has not been allowed to lapse, unless the lapse has been waived by the Department for good cause.
2. The Department may at any time require additional instruction or examination to meet new criteria relating to any pesticide use, handling or disposal; new restricted materials which have new and greater precautionary requirements in their labeling which became available for use in the class, category or subcategory in which they are certified or in such cases as the Environmental Protection Agency or the Department make such new and greater precautionary requirements a condition of use.
3. The Department may furthermore require recertification, relicensing or additional instruction whenever necessary to protect human health and the environment.

(f) Retraining Requirements. All certified applicators, and licensed applicators must, at the end of a three year period be recertified either by reexamination or by attendance, within the three year period, at training programs approved by the Department, to:

1. Ensure that they continue to meet the requirements of changing technology covering uses for which they are certified,
2. Ensure that they maintain a continuing level of competence and ability to use pesticides safely and properly; and,
3. Ensure that they are familiar with changes in federal and state statutes and regulations.

(g) Contact Hours. A standard number of contact hours will be required within a three year period for recertification by attendance at department approved training programs. The number of contact hours will be broken down as follows:

<table>
<thead>
<tr>
<th>Certification Type</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Certification</td>
<td>12 hrs. (per category)</td>
</tr>
<tr>
<td>Private Certification</td>
<td>12 hrs. (per category)</td>
</tr>
<tr>
<td>Commercial Applicator License</td>
<td>six hrs.</td>
</tr>
</tbody>
</table>

A contact hour will equal 50 consecutive minutes of training.

(h) Standards for Continuing Education. The following standards will assist the licensed or certified pesticide applicator in selecting an appropriate program and the provider of education in planning and implementing continuing education programs. The over-riding consideration in determining whether a specific program qualifies as acceptable continuing education is that it be a planned program of learning which contributes directly to the professional competence of a licensed pesticide applicator.

1. Amount
   a. 50 consecutive clock minutes is equivalent to one contact hour.
   b. One continuing education credit unit (CEU) equals ten contact hours.
   c. One semester hour equals 15 contact hours.

2. Continuing Education Provider Standards
   a. Learner Objectives: Objectives shall be written and be the basis for determining content, learning experience, teaching methodologies, and evaluation.
   b. Subject Matter: Appropriate subject matter for continuing education purposes shall include, but not be limited to, one or more of the following:
      i. Applicable State and Federal Laws and Regulations
      ii. Integrated Pest Management
      iii. Non-chemical Alternatives
      iv. Groundwater Protection
      v. Endangered Species
      vi. Pesticide Impact on Human Health
      vii. Pesticide Label and Labeling Comprehension
      viii. Acute and Chronic Toxicity
      ix. Biological Control
      x. Subject matter which improves competency and is not specified on the foregoing list
c. Employees orientation or in-service presentations concerning standard operating procedures specific to the employing agency shall not be accepted for continuing education purposes.
d. Subject matter shall be described in outline form and shall include learner objectives, content, time allotment, teaching methods, faculty and evaluation format.
e. Continuing Education Providers must notify the Department seven days in advance of offering contact hours, location(s) and contact person.

(i) Methods of Obtaining Contact Hours. Workshops, lectures and seminars are acceptable for obtaining continuing education contact hours. Continuing education contact hours may also be obtained from an academic institution, self-study or correspondence course and for teaching and/or publishing activities provided the following standards are adhered to:

1. Academic Course: The course must be within the framework of a curriculum that leads to an academic degree in entomology, botany, plant pathology, agriculture, pest control, toxicology, public health or is relevant to pesticide use, or any course within that curriculum that is necessary to an individual's professional growth and development.

2. Self-Study or Correspondence Course: The course should:
   a. be developed by a professional group such as an educational corporation or professional association;
   b. follow logical sequence;
   c. involve the learner by requiring active response to module materials and providing feedback;
   d. contain a test to indicate progress and verify completion of module; and
   e. supply a bibliography for continued study.

3. Teaching or Publication: Continuing education hours may be earned by teaching a particular course, seminar series, or workshop for the first time, delivering a paper or lecture, or publishing an article or book in pesticide use. As provided above, a course, seminar, or book may be considered for up to nine continuing education hours; a published article may be considered the equivalent of up to five hours; and a lecture or paper may be considered the equivalent of up to three hours.

(j) Education Methods.
1. Learning experiences and teaching methods should be appropriate to achieve the objectives of the program.
2. Principles of adult education should be used in the design of the program.
3. Time allotted for each activity should be sufficient for the learner to meet the objectives of the program.

(k) Faculty Qualifications. Faculty should possess knowledge of the principles of adult education and should provide documentation to the provider/learner illustrating competency in the content of the planned learning experience.

(l) Evaluation
1. Provision must be made for evaluating the participant's attainment of the stated learner objectives/outcomes.
2. Participants must be given the opportunity to evaluate faculty, learning experiences instructional methods, facilities and educational resources used for the offerings/programs.

(m) Specific Conditions Regarding Continuing Education Requirement. Certificate or non-certified applicators taking courses for the purpose of obtaining a baccalaureate or higher degree in the biological sciences will be considered to have met the continuing education requirements specified in this section provided such courses equal at least the required number of hours. Other academic degree programs may qualify at the discretion of the Department. Individuals must maintain transcripts of courses and hours for a period of three years following license renewal for purposes of verification.
10.09: Certification and License Documents

The Department shall issue certification and license documents only after the applicant has successfully complied with the procedure set forth in 333 CMR 10.08. The certification and license documents shall include, at least, the following information: name; address; certification or license number; class, category or subcategory covered by the certification or license; any limitations on the right to purchase, possess or apply pesticides; the departmental validation and the applicator's signature. The document shall be on the applicator's person at all times he is using a pesticide. This document will also be utilized as a means of identification for his purchase of restricted or state limited use pesticides.

10.10: Modification, Suspension and Revocation

The Department may suspend any certification or license, pending a preliminary inquiry for no longer than ten days, and after affording the certificate or license holder notice and an opportunity for a hearing may suspend, deny, revoke or modify the provisions of any certification or license, if it finds,

(1) That the terms or conditions thereof are being violated or are inadequate to avoid unreasonable adverse effects on the environment, or

(2) That the holder of or applicant for the certification or license has made a false or misleading statement in the application, or

(3) That the holder of a certification or license has violated any provision of the Massachusetts Pesticide Control Act, or FIFRA, or any regulations, standards, orders, certification, license or permit issued under either, or

(4) That the holder or applicant for said certification or license is not competent with respect to the use and handling of pesticides or the use and handling of the pesticide or class of pesticides covered by said individual's certification or license, or

(5) That the holder of or applicant for a certification or license does not have in effect or fails to maintain in effect liability insurance in the amounts specified in 333 CMR 10.13.

10.11: Certification of Federal Employees

Certifications or licenses may be granted to any federal employee who has been certified or licensed under an approved federal agency plan which has standards no less stringent than those of the Department. If the Department determines that a federal plan does not meet its standards, such applicants shall be required to apply for certification or licensing according to the procedure set forth in 333 CMR 10.08.

10.12: Reciprocity with Other States

The Department may, at its discretion, certify or license any person possessing a valid certification, license or equivalent rating issued by the pesticide control agency of any other state, provided:

(1) Certification and license requirements are no less stringent than those required by Massachusetts.

(2) The pesticide control agency of that state extends similar privileges to persons certified or licensed by Massachusetts.

(3) Applicants for reciprocal certification submit proof to the Department of having successfully completed all necessary certification or license requirements in that state.

(4) Applicants for reciprocal certification must complete all requirements of the Department relative to certification and licensing with the exception of taking the examination, including payment of all appropriate fees.
10.12: continued

(5) All grantees of reciprocal certification or licenses shall be familiar with and bound by the provisions of the Massachusetts Pesticide Control Act and regulations adopted thereunder and any lawful order of the Department.

(6) Whenever a person's certification or license is denied, suspended, revoked or modified in that state, the reciprocal certification or license, granted by the Department, shall be at least similarly denied, suspended, revoked or modified.

(7) Reciprocal certification shall remain in effect as long as certification is maintained in the other state.

(8) Reciprocal certification documents shall be issued to applicants and bear a notation distinguishing them from other certification documents.


As a condition to obtaining or renewing a license or commercial certification, an applicant shall be required by the Department to submit with his or her application an attestation by an insurance broker certifying that the insurance policy coverage in force and issued on behalf of said applicator meets or exceeds the standards set forth below, except as provided in 333 CMR 10.13(10). This attestation shall be on a form provided by the Department.

(1) **Certified Commercial Applicator.** The following minimum comprehensive general liability insurance coverage (ground application) is required:

   (a) **Bodily Injury Liability**  
       $100,000 each occurrence  
       $300,000 aggregate

   (b) **Property Damage Liability**  
       $100,000 each occurrence  
       (including completed operations)

(2) **Licensed Applicator.** The following minimum comprehensive general liability insurance coverage (ground application) is required:

   (a) **Bodily Injury Liability**  
       $50,000 each occurrence  
       $100,000 aggregate

   (b) **Property Damage Liability**  
       $50,000 each occurrence  
       (including completed operations)

(3) **Certified Commercial Applicators or Licensed Applicators who apply pesticides aerially.** The following minimum comprehensive general liability insurance coverage is required:

   (a) **Bodily Injury Liability**  
       $100,000 each occurrence  
       $300,000 aggregate

   (b) **Property Injury Liability**  
       $100,000 each occurrence  
       (including completed operations)

(4) (a) In order to satisfy the requirements of 333 CMR 10.13(1) and (2), insurance policies must include an endorsement that modifies any pollution exclusion provision written into said policies. The Department, with approval of the Board, may waive this pollution liability coverage requirement for any segment of the commercial pesticide industry that can not secure pollution liability coverage, provided that submitted documentation indicates pollution liability coverage is not available to that industry segment. For the purpose of 333 CMR 10.00, industry segment shall refer to a set of individuals, applicators, and/or companies who provide the same pest control services(s).

   (b) In order to satisfy the requirements of 333 CMR 10.13(3), insurance policies must include coverage for chemical drift resulting from legally carried out purposeful use of pesticides by commercial aerial pesticide applicators. The Department with approval of the Board may waive this chemical drift liability coverage requirement for any segment of the commercial aerial pesticide application industry that can not secure such coverage, provided that submitted documentation indicates chemical drift coverage is not available to that industry segment. For the purpose of 333 CMR 10.00, industry segment shall refer to a set of individuals, applicators, and/or companies who provide the same pest control service(s).
10.13: continued

(5) Insurance policies offered to satisfy the requirements of 333 CMR 10.13(1), (2) and (3) may be written with combined bodily injury and property damage limits so long as these combined limits equal or exceed the sum of the required individual limits.

(6) Applicators of pesticides to premises owned or otherwise controlled by their employers and to which the public is invited or to which free access is permitted are required to meet only the bodily injury requirements of 333 CMR 10.13(1), (2) and (3).

(7) Certified commercial applicators of pesticides to premises owned or otherwise controlled by their employers and to which the public is not invited or to which free access is not permitted are not required to meet either the property damage or the bodily injury requirements of 333 CMR 10.13(1), (2) and (3).

(8) Financial responsibility required by 333 CMR 10.13(1), (2) or (3) shall not be required of persons whose pesticide applicator activities are part of their duties as governmental employees, when they are working in their governmental capacity.

(9) An applicator shall notify the Department in writing when the applicator's insurance is altered, revoked or amended.

(10) If an applicator demonstrates to the satisfaction of the Department that the applicator is employed by a business entity

(a) with net assets in excess of $1,000,000 and

(b) the employer maintains in Massachusetts a registered agent for service of process, the requirements of 333 CMR 10.13(1), (2) and (3) may be waived if the applicator states in writing that the applicator's pesticide activities are performed only for the employer, and further, that the employer in writing gives the name and address of the representative on which legal process can be served.

10.14: Record Keeping Requirements

(1) All certified commercial applicators, all certified private applicators, and all licensed applicators or their employers, are required to keep true and accurate operational records containing the following information on each application of a pesticide:

(a) Place of application;

(b) Date of application;

(c) The brand or registered name of the pesticide;

(d) The EPA registration number of the pesticide;

(e) The amount of pesticide applied;

(f) The purpose for which the pesticide was applied;

(g) Method of application;

(h) The persons certified or licensed by the Department who participated in the planning and execution of the application;

(i) Accidents or incidents resulting from use of a pesticide which caused pollution;

(j) The amount of liability insurance carried and the name of the insurer;

(k) Any illnesses or injuries caused by or suspected to have been caused by pesticides and reported to the applicator.

(2) Records required by 333 CMR 10.14(1) shall be maintained for a period of at least three years from the date of application and shall be made promptly available to appropriate Department officials upon a reasonable demand.

(3) Annual reports and records may be required as deemed necessary by the Department. As a minimum, the Department will require annual submittal of all records required by 333 CMR 10.14(1)(i) and (k).
10.14: continued

(4) The Department shall require immediate notification (in no case later than 48 hours) after coming to the attention of any applicator of all significant accidents, incidents, injuries or illnesses as recorded in 333 CMR 10.14(1)(i) and (k). The Department may also cooperate in the Federal Pesticide Monitoring System and furnish details of pesticide incidents to the United States Environmental Protection Agency to help insure safer and more effective use of pesticides.

10.15: Rights of Appeal

Any person aggrieved by a determination by the Department to issue, deny, revoke, modify or suspend any certification or license may request within 21 days an adjudicatory hearing before the Board as provided for in M.G.L. c. 132B, § 13.

10.16: Penalties

Any person who violates any provision of 333 CMR 10.00 shall be subject to the criminal and civil penalties set forth in M.G.L. c. 132B, § 14.

REGULATORY AUTHORITY

333 CMR 10.00: M.G.L. c. 32B, §§ 6A and 10.