

**DELAWARE**  
**DEPARTMENT OF AGRICULTURE**  
PESTICIDES SECTION  
**PESTICIDE RULES AND REGULATIONS**  
EFFECTIVE JUNE 1, 2004



**DEPARTMENT OF AGRICULTURE  
PESTICIDES SECTION**

**Pesticide Rules and Regulations**

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**DEPARTMENT OF AGRICULTURE**  
**Pesticides Section**  
**Statutory Authority: 3 Delaware Code,**  
**Section 1237 (3 Del.C. §1237)**

**Pesticide Rules and Regulations**

**1.0 General**

1.1 Scope

1.1.1 These regulations establish general operating rules and procedures for the enforcement of the Delaware Pesticide Law, including but not limited to the certification of users of restricted and general use pesticides.

1.1 Authority

1.2.1 These regulations are issued under the authority of Title 3 Part II Chapter 12 of the Annotated Code of Delaware.

1.3 Effective Date

1.3.1 These regulations were amended on June 1, 2004, in accordance with Title 29, Chapter 101, Annotated Code of Delaware

**2.0 Declaration of Policy**

2.1 3 Del.C. Chapter 12, Section 1237, places the enforcement of the Delaware Pesticide Law with the Department of Agriculture and empowers the Department to establish regulations.

2.2 By virtue of the authority vested in me as Secretary of Agriculture by 3 Del.C. Chapter 12, I, Michael T. Scuse, Secretary of Agriculture, do hereby promulgate the following rules and regulations governing the sale, use and application of pesticides in Delaware.

**3.0 Definitions**

The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise. All terms defined by the Delaware Pesticides Law (3 Del.C. Chapter 12) are hereby incorporated by reference in this regulation.

**“Accident”** means an unexpected, undesirable event resulting in the presence of a pesticide that adversely affects man or the environment.

**“Brand”** means any word, name, symbol, device, or any combination thereof, which serves to distinguish a pesticide product manufactured, distributed, sold, or offered for sale by one person from that manufactured, distributed, sold, or offered for sale by any other person.

**“Certification”** means the recognition by the Department that a person has met the qualification standards established under Section 8 or Section 9 of these regulations and has been issued a written certificate from the Department authorizing them to use pesticides for the specified type(s) of pest control.

**“Competent”** means properly qualified to perform functions associated with pesticide application, the degree of capability required being directly related to the nature of the activity and associated responsibility.

**“Fumigant”** means a gaseous or readily volatilizable chemical (such as hydrogen cyanide or methyl bromide) used as a pesticide.

**“Fumigation”** means the application of a fumigant to one or more rooms in a structure, or to the entire structure, or to a localized space within a structure or outside a structure, such as a box car, aircraft, truck, ship or any object sealed or covered. Excluded is the use of a fumigant in or on the soil.

**“Grade”** means a formulation of a pesticide, except that the addition of pigments solely for coloration shall not constitute a change in formulation such as to constitute a new grade requiring registration.

**“Handle pesticides”** means to mix, load, apply, or dispose of pesticides.

**“Hazardous waste”** has the same meaning as found in 7 Del.C. Chapter 63.

**“Law”** means the Delaware Pesticide Law, 3 Del.C. Chapter 12.

**“Regulated pest”** means a specific organism considered by the state or by a Federal Agency to be a pest requiring regulatory restrictions, regulations or control procedures in order to protect man or the environment.

“Service vehicle” means any vehicle used by a licensee to transport pesticides for the purpose of their application.

#### 4.0 Registration

##### 4.1 Product Registration

- 4.1.1 Every pesticide which is distributed within the State or delivered for transportation or transported in intrastate commerce or between points within this State through any point outside this State shall be registered with the Secretary subject to the provisions of this law. Registration is not required if a pesticide is shipped from one plant or warehouse to another plant or warehouse operated by the same person and used solely at such plant or warehouse as a constituent part of a pesticide which is registered under the provision of an experimental use permit issued by the U.S. Environmental Protection Agency.
- 4.1.2 An applicant for registration for a pesticide which is federally registered shall file a statement with the Secretary which shall include:
  - 4.1.2.1 The name and address of the applicant and the name and address of the person whose name will appear on the label, if other than the applicant's.
  - 4.1.2.2 The name of the pesticide.
  - 4.1.2.3 Other necessary information required for completion of the Department's application for registration form.
  - 4.1.2.4 A complete copy of the labeling accompanying the pesticide and a statement of all claims to be made for it, including the directions for use.
  - 4.1.2.5 The use classification as provided in the "Federal Insecticide, Fungicide and Rodenticide Act", as amended.
  - 4.1.2.6 The EPA product registration number.
- 4.1.3 The applicant desiring to register a pesticide shall pay a biennial registration fee of seventy dollars (\$70.00) to the Delaware Department of Agriculture for each brand or grade of pesticide to be registered for the applicant. All registrations shall continue in effect until June 30 of the year in which they expire. Applications received between January 1 and June 30 shall be registered for the upcoming two year period. Applications received between July 1 and December 31 will be registered for a two year period beginning July 1 of the year in which the application was received.
- 4.1.4 Any registration approved by the Secretary and in effect on June 30, for which a renewal application has been made and the proper fee paid, shall continue in full force and effect until suspended, or otherwise denied in accordance with the provisions of Section 1205 of the Law. Forms for registration shall be mailed to registrants at least forty-five days prior to the due date.
- 4.1.5 If it appears to the Secretary that the composition of the pesticide warrants the proposed claims for it and if the pesticide and its labeling and other material required to be submitted comply with the requirements of these regulations, he shall register the pesticide.
- 4.1.6 Pesticide products that are discontinued by a registrant shall be registered for a period of two years. Said two year limit covers the year in which the item is declared to be discontinued by the registrant and an additional year to permit time to dispose of shelf stock. Should the registrant provide the Department with written notification that shelf stocks of the product are depleted, the products shall be exempt from the two year continued registration period.

##### 4.2 Employee Registration

- 4.2.1 Licensees shall register with the Department all employees who handle pesticides. Registration shall be made when making an application for a license or within 30 days after employment. The fee for registering an employee shall be \$25.00. However, the employee registration fee shall be waived the employee is certified under the Law.
- 4.2.2 Licensees shall be responsible for insuring that all employees handling pesticides (other than a certified applicator) have successfully completed a training program approved by the Department. This training shall be completed within 30 days of employment and before the employees are registered with the Department.
  - 4.2.2.1 The Department will not approve any training program that does not include the following subjects:
    - 4.2.2.1.1 Pesticide Law and Regulations;
    - 4.2.2.1.2 Label comprehension;

- 4.2.2.1.3 Safety and emergency procedures;
  - 4.2.2.1.4 Proper pesticide handling, storage and disposal;
  - 4.2.2.1.5 Pest identification and control procedures;
  - 4.2.2.1.6 Pesticide application techniques;
  - 4.2.2.1.7 Environmental and health concerns; and
  - 4.2.2.1.8 Integrated pest management principles
- 4.2.2.2 Upon request by the Department, each licensee shall provide written verification that an employee has completed an approved training program.
- 4.2.3 The name and address of employees who have been trained according to this Section shall be provided to the Department by the licensee. The Department shall issue a registration card bearing the employee's name and the licensee's name, address and license number. The employee registration shall become null and void upon termination of employment with the licensee. This card is to be carried by the employee during working hours and is to be displayed upon request.
- 4.2.4 The licensee shall provide the Department written notification of a registered employee's employment termination within 30 days of the effective date of termination.
- 4.2.5 The Department, after due notice, and opportunity for a hearing may deny, suspend or revoke an employee registration, if the Department finds the registered employee has committed any violations of the Law.
- 4.2.6 The Department, after due notice and opportunity for a hearing, may deny an application for employee registration, if the applicant has committed any violations under the Law.

## **5.0 Licensing**

- 5.1 Applicants for a business license shall complete a signed and notarized application form prescribed by the Department.
- 5.2 All business license applicants shall pay an annual fee of \$50.00, or a biennial fee of \$100.00.
- 5.3 No license shall be issued to any person, nor shall it remain valid, unless such person is certified or has a certified applicator in his employ at all times.
- 5.4 For applicants or holders of a license in categories 7.1.1, 7.2, or 7.7.1.1 - 7.7.1.3, at least one person designated as a certified applicator under the license shall meet the experience requirement of §1207(c)(1) of the Law.
- 5.5 All pest control business license numbers shall appear on all service vehicles used by persons holding a commercial pesticide applicators license with the exception of categories: 7.1.1 Agriculture Plant Pest Control; 7.1.2 Agriculture Animal Pest Control; 7.2 Forest Pest Control; 7.4 Seed Treatment; 7.5 Aquatic Pest Control; 7.8 Public Health Pest Control; 7.9 Regulatory Pest Control; 7.10 Demonstration and Research Pest Control. The license number shall be in bold readable numbers not less than 2 inches or more than 6 inches high. The full name of the business licensee shall be displayed on the vehicle.

## **6.0 Restricted Use Pesticides Classification**

Restricted use pesticides shall be classified in the State of Delaware to conform to the current listing of pesticides classified by the EPA as Federally Restricted Use Pesticides.

## **7.0 Categorization of Commercial Applicators**

Categories and subcategories of applicators (other than private applicators) who use or supervise the use of pesticides are identified below.

- 7.1 Agricultural Pest Control Category
- 7.1.1 Agricultural Plant (1A). - This subcategory includes commercial applicators using or supervising the use of pesticides in the production of agricultural crops, including without limiting the following: feed grains, soybeans, forage, vegetables, small fruits and tree fruits; as well as on grasslands and non-crop agricultural lands.
- 7.1.2 Agricultural Animal (1B). - This subcategory includes commercial applicators using or supervising the use of pesticides on swine, sheep, horses, goats, poultry and livestock, and to places on or in which animals are confined. Doctors of Veterinary Medicine engaged in the business of applying pesticides for hire, or publicly holding themselves out as pesticide applicators or engaged in large scale use are included in this category.

- 7.1.3 Fumigation of Soil and Agricultural Products (1C). - This subcategory includes commercial applicators using or supervising the use of pesticides for soil fumigation in the production of an agricultural commodity and/or for fumigation of agricultural products in storage or transit.
- 7.2 Forest Pest Control Category (02)
  - 7.2.1 This category includes commercial applicators using or supervising the use of pesticides in forests, forest nurseries, and forest seed producing areas.
- 7.3 Ornamental and Turf Pest Control Category (03)
  - 7.3.1 This category includes commercial applicators using or supervising the use of pesticides to control pests in the maintenance and production of ornamental trees, shrubs, flowers and turf.
- 7.4 Seed Treatment Category (04)
  - 7.4.1 This category includes commercial applicators using or supervising use of pesticides on seeds.
- 7.5 Aquatic Pest Control Category
  - 7.5.1 Aquatic Weed (5A). - This subcategory includes commercial applicators using or supervising the use of any pesticide purposefully applied to standing or running water, excluding applicators engaged in public health related activities.
  - 7.5.2 Antifouling Paint (5B). - This subcategory includes commercial applicators using or supervising the use of any anti-fouling paints for the protection of boat hulls. This subcategory also includes applicators using or supervising the use of anti-fouling paints on containers that they sell, lease, or use for the purpose of harvesting shellfish.
  - 7.5.3 Mosquito Control (5C). - This subcategory includes applicators using or supervising the use of pesticides for the management and control of mosquitoes.
- 7.6 Right-of-way Pest Control Category (06)
  - 7.6.1 This category includes commercial applicators using or supervising the use of pesticides in the maintenance of roads, electric power lines, pipelines, railway rights-of-way or similar areas.
- 7.7 Industrial, Institutional, Structural and Health Related Pest Control Category
  - 7.7.1 This category includes commercial applicators using or supervising the use of pesticides in, on, or around food handling establishments, including warehouses and grain elevators, and any other structures and adjacent areas, public or private; human dwellings, institutions, such as schools and hospitals, industrial establishments; and for the protection of stored, processed or manufactured products. This category contains the following subcategories:
    - 7.7.1.1 General Pest Control (7A). This subcategory includes commercial applicators who use or supervise the use of pesticides to control household pests, including pests that infest structures, stored products, and residential food preparation areas, and pests that infest or contaminate food and any stage of processing in food processing facilities. This includes treatment of food processing areas and control of vertebrate structural invaders. This category does not include control of wood-destroying pests, or the use of fumigants.
    - 7.7.1.2 Wood Destroying Pest Control (7B). This subcategory includes commercial applicators using or supervising the use of pesticides, other than fumigants, in or around structures for the prevention, suppression, or control of wood destroying organisms.
    - 7.7.1.3 Fumigation Pest Control (non-agricultural, 7C). This subcategory includes commercial applicators using or supervising the use of fumigant pesticides to control pests in structures other than soils and agricultural products/commodities.
    - 7.7.1.4 Wood Preservatives (7D). This subcategory includes commercial applicators using or supervising the use of pesticides for the preservation of wood or wood products. This would include, but not be limited to, the pressure treatments, non-pressure treatments, or brush-on applications with wood preservatives. Commercial applicators certified in another category of pest control and who use or supervise the use of wood preservatives on an incidental basis may apply these products under their current certification. Private applicators using wood preservative products for purposes related to agricultural production may also apply wood preservatives under their current certification.
    - 7.7.1.5 Institutional and Maintenance Pest Control (7E). Except as otherwise provided in these regulations, this subcategory includes any individual using pesticides on a property they own, or are employed or otherwise engaged to maintain, including but not limited to janitors, general maintenance personnel, sanitation personnel, and grounds maintenance personnel. This subcategory does not include private applicators as defined in Section 9 below,

individuals who use anti-microbial pesticides, or individuals who use pesticides which are not classified as “restricted use pesticides” in or around their dwelling.

- 7.7.1.6 Cooling Tower Pest Control (7F). This subcategory includes commercial applicators using or supervising the use of pesticides to control microbial and other pests in cooling towers or related areas.
- 7.7.1.7 Miscellaneous Pest Control (7G). This subcategory includes commercial applicators using or supervising the use of pesticides in a category not previously covered in these regulations.
- 7.8 Public Health Pest Control Category (08). This category includes, but is not limited to, State, Federal and other governmental employees who use or supervise the use of pesticides in public health programs for the management and control of pests having medical or public health importance.
- 7.9 Regulatory Pest Control Category (09). This category includes State, Federal and other governmental employees who use or supervise the use of restricted use pesticides in the control of regulated pests.
- 7.10 Demonstration and Research Pest Control Category (10).
  - 7.10.1 This category includes:
    - 7.10.1.1 Individuals who demonstrate to the public the proper use and technique of application of a restricted use pesticide or supervises such demonstrations, and/or
    - 7.10.1.2 Persons conducting field research with pesticides, and in doing so, use or supervise the use of restricted use pesticides. Included in the first group are persons such as extension specialists and county agents, commercial representatives demonstrating pesticide products, and those individuals demonstrating methods used in public programs. The second group includes State, Federal, commercial and other persons conducting field research when utilizing pesticides.

## **8.0 Standards for Certification of Commercial Applicators**

### **8.1 Determination of Competency.**

- 8.1.1 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 below and which are approved by the Secretary. Examination and testing shall include the general standards applicable to all categories and the additional standards specifically identified for each category or subcategory (if any) in which an applicator is to be certified. All examinations shall be administered as closed book examinations.
- 8.1.2 Applicants for examination shall register at least one (1) week before the scheduled examination date.
- 8.1.3 Exams shall be scheduled quarterly during the calendar year and shall be given at such times and places as the Secretary may direct.
- 8.1.4 Correctly answering 70% or more of the questions shall be considered to be satisfactory evidence of competence.
- 8.1.5 Failure to answer at least 70% of the questions correctly shall be grounds for denial of certification. Applicants may apply for one (1) reexamination scheduled at least thirty (30) days after their initial examination. No person shall be permitted to be examined in the same category or subcategory more than twice in any twelve (12) month period.

### **8.2 General Standards for All Categories of Certified Commercial Applicators.**

- 8.2.1 All commercial applicators shall demonstrate practical knowledge of the principles and practices of pest control and safe use of pesticides. Testing shall be based on examples of problems and situations appropriate to the particular category or subcategory of the applicator's certification and the following areas of competency:
  - 8.2.1.1 Label & Labeling Comprehension
    - 8.2.1.1.1 The general format and terminology of pesticide labels and labeling;
    - 8.2.1.1.2 The understanding of instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels;
    - 8.2.1.1.3 Classification of the product, general or restricted; and the necessity for use consistent with the label.
  - 8.2.1.2 Safety
    - 8.2.1.2.1 Pesticides toxicity and hazard to man and common exposure routes;
    - 8.2.1.2.2 Common types and causes of pesticides accidents;

- 8.2.1.2.3 Precautions necessary to guard against injury to applicators and other individuals in or near treated area;
- 8.2.1.2.4 Need for and use of protective clothing and equipment;
- 8.2.1.2.5 Symptoms of pesticide poisoning;
- 8.2.1.2.6 First aid and other procedures to be followed in case of a pesticide accident; and
- 8.2.1.2.7 Proper identification, storage, transport, handling, mixing procedures and disposal methods for pesticides and used pesticide containers, including precautions to be taken to prevent children from having access to pesticides and pesticide containers.
- 8.2.1.3 Environment
  - 8.2.1.3.1 The potential environmental consequences of the use and misuse of pesticides as may be influenced by factors such as:
    - 8.2.1.3.1.1 Weather and other climatic conditions;
    - 8.2.1.3.1.2 Types of terrain, soil or other substrate;
    - 8.2.1.3.1.3 Presence of fish, wildlife and other non-target organisms; and
    - 8.2.1.3.1.4 Drainage patterns.
- 8.2.1.4 Pests
  - 8.2.1.4.1 Factors such as:
    - 8.2.1.4.1.1 Common features of pest organism and characteristics of damage needed for pest recognition;
    - 8.2.1.4.1.2 Recognition of relevant pests; and
    - 8.2.1.4.1.3 Pest development and biology as it may be relevant to problem identification and control.
- 8.2.1.5 Pesticides
  - 8.2.1.5.1 Factors such as:
    - 8.2.1.5.1.1 Types of pesticides;
    - 8.2.1.5.1.2 Types of formulations;
    - 8.2.1.5.1.3 Compatibility, synergism, persistence and animal and plant toxicity of the formulations;
    - 8.2.1.5.1.4 Hazards and residues associated with use;
    - 8.2.1.5.1.5 Factors which influence effectiveness or lead to problems such as resistance to pesticides; and,
    - 8.2.1.5.1.6 Dilution procedures.
- 8.2.1.6 Equipment
  - 8.2.1.6.1 Factors including:
    - 8.2.1.6.1.1 Types of equipment and advantages and limitations of each type; and
    - 8.2.1.6.1.2 Uses, maintenance and calibration.
- 8.2.1.7 Application Techniques
  - 8.2.1.7.1 Factors including:
    - 8.2.1.7.1.1 Methods or procedures used to apply various formulations of pesticides, solutions, and gases, together with a knowledge of which technique of application to use in a given situation;
    - 8.2.1.7.1.2 Relationship of discharge and placement of pesticides to proper use, unnecessary use, and misuse; and
    - 8.2.1.7.1.3 Prevention of drift and pesticide loss into the environment.
- 8.2.1.8 Laws and Regulations
  - 8.2.1.8.1 Factors including:
    - 8.2.1.8.1.1 Applicable State and Federal laws and regulations.
- 8.3 Specific Standards for Competency for Each Category of Commercial Applicators
 

Some of the factors referenced in this section are of particular importance because of the different types of activities carried out by the applicators in each category. For example, practical knowledge of drift problems should be required of agricultural applicators but not seed treatment applicators. The latter, however, should be particularly knowledgeable of the hazards of the misuse of treated seed and the necessary precautionary techniques. Commercial applicators in each category shall be particularly qualified with respect to the practical knowledge standards elaborated below.

  - 8.3.1 Agricultural Pest Control Category

- 8.3.1.1 Agricultural Plant Pest Control Subcategory
  - 8.3.1.1.1 Applicators must demonstrate practical knowledge of crops grown and the specific pests of those crops on which they may be using restricted use pesticides. The importance of competency is amplified by the extensive areas involved, the quantities of pesticides needed, and the ultimate use of many commodities as food and feed. Practical knowledge is required concerning soil and water problems, pre-harvest intervals, re-entry intervals, phytotoxicity, and potential for environmental contamination, non-target injury and community problems resulting from the use of restricted use pesticides in agricultural areas.
- 8.3.1.2 Agricultural Animal Pest Control Subcategory
  - 8.3.1.2.1 Applicators applying pesticides directly to animals must demonstrate practical knowledge of animals and their associated pests. A practical knowledge is also required concerning specific pesticide toxicity and residue potential, since host animals will frequently be used for food. Further, the applicator must know the relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.
- 8.3.1.3 Fumigation of Soil and Agricultural Products Subcategory
  - 8.3.1.3.1 Applicators must demonstrate knowledge of application techniques appropriate to soil fumigation and agricultural product fumigation. This includes the use of personal protective clothing and equipment, and general safety procedures such as posting, reentry, aeration, and accident procedures.
- 8.3.2 Forest Pest Control Category
  - 8.3.2.1 Applicators shall demonstrate practical knowledge of types of forests, forest nurseries, and forest seed production in Delaware and the pests involved. They should possess practical knowledge of the cyclic occurrence of certain pests and specific population dynamics as a basis for programming pesticide applications. A practical knowledge is required of the relative biotic agents and their vulnerability to the pesticides to be applied. Because forest stands may be large and frequently include natural aquatic habitats and harbor wildlife, the consequences of pesticide use may be difficult to assess. The applicator must, therefore, demonstrate practical knowledge of control methods which will minimize the possibility of secondary problems such as unintended effects on wildlife. Proper use of specialized equipment must be demonstrated, especially as it may relate to meteorological factors and adjacent land use.
- 8.3.3 Ornamental and Turf Pest Control Category
  - 8.3.3.1 Applicators shall demonstrate knowledge of pesticide problems associated with the production and maintenance of ornamental trees, shrubs, plantings, and turf, including cognizance of phytotoxicity due to a wide variety of plant material, drift, and persistence beyond the intended period of pest control. Because of the frequent proximity of human habitations to application activities, applicators in this category must demonstrate practical knowledge of application methods which will minimize or prevent hazards to humans, pets, and other domestic animals.
- 8.3.4 Seed Treatment Category
  - 8.3.4.1 Applicators shall demonstrate practical knowledge of types of seeds that require chemical protection against pests and factors such as seed coloration, carriers, and surface-active agents which influence pesticide binding and may affect germination. They must demonstrate practical knowledge of hazards associated with handling, sorting and mixing, and misuse of treated seed such as introduction of treated seed into food and feed channels, as well as proper disposal of unused treated seeds.
- 8.3.5 Aquatic Pest Control Category
  - 8.3.5.1 Aquatic Weed. Applicators shall demonstrate practical knowledge of the secondary effects which can be caused by improper application rates, incorrect formulations, and faulty application of pesticides used in this subcategory. Further, they must have practical knowledge concerning potential pesticide effects on plants, fish, birds, beneficial insects and other organisms which may be present in aquatic environments. These applicators shall also demonstrate practical knowledge of the principles of limited area application.

- 8.3.5.2 Antifouling Paint. Applicators in this subcategory shall demonstrate practical knowledge of the labeling instructions, safety precautions and environmental concerns associated with the use of marine anti-fouling paints. They shall demonstrate practical knowledge of the term “acceptable release rate” as it applies to organotin paints; knowledge of the types of paints approved for specific hull types; knowledge of the types of anti-fouling paints approved for use on equipment or containers used for the harvesting of shellfish; knowledge of potential environmental consequences from the use/misuse or improper disposal of pesticides; safety precautions necessary to avoid exposure of workers to anti-fouling paints; proper storage, handling, and disposal methods of paint chips and dusts suspected of containing organotin compounds; marine pests and relevant life cycles which are controlled through the application of anti-fouling paints; methods, procedures, and equipment used in applying organotin and anti-fouling paints; applicable State and Federal laws and regulations; and recordkeeping requirements under the Delaware Pesticide Law.
- 8.3.5.3 Mosquito Control. Applicators shall demonstrate a practical knowledge of the principles associated with the management of mosquitoes, including all of the following: their life cycle; types of formulations appropriate for their management; methods of application; possible effects on water quality; and, the potential health effects on humans in the target area.
- 8.3.6 Right-of-way Pest Control Category
- 8.3.6.1 Applicators shall demonstrate a practical knowledge of a wide variety of environments, since right-of- ways can traverse many different terrains, including waterways. They shall demonstrate practical knowledge of problems on runoff, drift, and excessive foliage destruction and ability to recognize target organisms. They shall also demonstrate practical knowledge of the nature of herbicides and the need for containment of these pesticides within the right-of-way area, and the impact of their application activities in the adjacent areas and communities.
- 8.3.7 Industrial, Institutional, Structural and Health Related Pest Control Category
- 8.3.7.1 Applicators in this category must demonstrate a practical knowledge of a wide variety of pests including their life cycles, types of formulation appropriate for their control, and methods of application that avoid contamination of food, contamination of habitat, and the 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 that may lead to a hazardous condition including continuous exposure. Because health related pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions particularly related to this activity.
- 8.3.7.1.1 General Pest Control Subcategory
- 8.3.7.1.1.1 Applicators must demonstrate knowledge of household pests including but not limited to: pests that invade or infest structures, stored products, and residential food preparation areas; pests that infest or contaminate foods and foodstuffs at any stage of processing in the food manufacturing and processing areas of operation including but not limited to: flour mills, bakeries, bottling plants, dairies, canneries, meat packing plants, supermarkets, convenience stores, rest homes, hospitals, ships, vehicles, restaurants, cafeterias, and snack bars; conditions conducive to infestations and selection of appropriate control procedures, other than fumigation for each situation; and hazards associated with pesticides in food manufacturing and processing.
- 8.3.7.1.2 Wood Destroying Pest Control Subcategory
- 8.3.7.1.2.1 Applicators must demonstrate knowledge of organisms that destroy structures made of wood including but not limited to beetles, termites and fungi, and conditions conducive to infestation; selection, calibration, and use of appropriate control procedures and their related equipment including: rodding and trenching, topical application of pesticides and local injection of specially labeled liquid or pressurized aerosol pesticides into infested wood; hazards involved in the handling and use of these pesticides.
- 8.3.7.1.3 Fumigation (Non-agricultural) Subcategory

- 8.3.7.1.3.1 Applicators must demonstrate a practical knowledge of the conditions requiring the application of fumigants, and the selection of the most appropriate fumigation methods to use; equipment used in fumigation including but not limited to application, monitoring, testing, calculating, and personal protective devices; release, distribution, and maintenance of the correct fumigant concentrations for the product being used and the structure being fumigated under differing conditions; and hazards involved in the use of fumigants.
- 8.3.7.1.4 Wood Preservative Subcategory
  - 8.3.7.1.4.1 Applicators must demonstrate a practical knowledge of the pests involved with wood products, including their life cycles, wood degradation, the pesticides available for controlling such problems, and methods of application including pressure, non-pressure and brush-on treatments. Since there is concern regarding the potential for environmental contamination as well as acute and chronic health problems from applicator exposure when using certain woodtreating pesticides, specific emphasis will be placed upon demonstrating a practical knowledge of the product use, precautions which are required and found on the labels and labeling of these pesticides and include protective clothing and equipment, sanitation procedures, disposal procedures and environmental precautions. Since treated wood products present potential environmental problems and acute and chronic exposure problems to the users and the general public, whether or not they come into direct contact with the treated wood, applicators must demonstrate a practical knowledge of the consumer information covering use, site, and handling precautions which are found in the Consumer Information Sheets of products registered for pressure treatment and in the labeling for products registered for sap and stain control, ground line treatment of utility poles, and home and farm use (including railroad tie repair).
  - 8.3.7.1.5 Institutional and Maintenance Subcategory
    - 8.3.7.1.5.1 Applicators in this subcategory must demonstrate a practical knowledge of a wide variety of pests for the purpose of providing structural pest control or lawn pest control in and around schools, hospitals, nursing homes, child day-care centers, and apartment buildings. Since children and elderly people have a potentially higher sensitivity to pesticides, applicators in this subcategory should be particularly knowledgeable in avoiding applications which may lead to a hazardous condition, including continuous exposure.
  - 8.3.7.1.6 Cooling Tower Subcategory
    - 8.3.7.1.6.1 Applicators shall demonstrate a practical knowledge of the labeling instructions, safety precautions and environmental concerns associated with the use of pesticides to treat the waters of cooling towers. They must demonstrate an understanding of the following: the effects of tower operation upon cooling water composition; the importance and potential harm of discharge of exhaust water into environment waters, the steps that can be taken to minimize water-caused problems, the importance of diligence and control in the execution of cooling water treatment programs.
  - 8.3.7.1.7 Miscellaneous Subcategory
    - 8.3.7.1.7.1 Applicators must demonstrate knowledge appropriate to their specific field of pest control.
- 8.3.8 Public Health Pest Control Category
  - 8.3.8.1 Applicators shall demonstrate practical knowledge of vector-disease transmission as it relates to and influences application programs. A wide variety of pests are involved, and it is essential that they be known and recognized, and appropriate life cycles and habitats be understood as a basis for control strategy. These applicators shall have practical knowledge of a great variety of environments ranging from streams to those conditions found in buildings. They should also have practical knowledge of the importance and employment of non-chemical control methods such as sanitation, waste disposal, and drainage.

### 8.3.9 Regulatory Pest Control Category

8.3.9.1 Applicators shall demonstrate practical knowledge of regulated pests, applicable laws relating to quarantine and other regulation of pests, and the potential impact on the environment of restricted use of pesticides used in suppression and eradication programs.

8.3.9.2 They shall demonstrate knowledge of factors influencing introduction, spread, and population dynamics of relevant pests. Their knowledge shall extend beyond that required by their immediate duties, since their services are frequently required in other areas where emergency measures are invoked to control regulated pests and where individual judgments must be made in new situations.

### 8.3.10 Demonstration and Research Pest Control Category

8.3.10.1 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 pesticides 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 standards detailed in section 8.02 above. In addition, they shall meet the specific standards required for categories (1) through (7) of this section as may be applicable to their particular activity.

8.3.10.2 Persons conducting field research or method improvement work with restricted use pesticides should be expected to know the general standards detailed in 8.2 above. In addition, they shall be expected to know the specific standards required for paragraph 8.3.1.1 through 8.3.1.9 of this section, applicable to their particular activity, or alternatively, to meet the more inclusive requirements listed under "Demonstration".

## 8.4 Commercial Applicator Certification Fees, Renewal, and Expiration

### 8.4.1 Certification Fees

8.4.1.1 Commercial applicators shall pay an annual certification fee of \$20.00. All certifications shall continue in full force until December 31st of each year whereupon they shall become invalid unless renewed, except that a certification for which a renewal application has been submitted to the Department by November 30th, shall remain in full force and effect until such time as the Department gives notice to the applicant of renewal or denial. Applications for renewal shall be mailed to all certified applicators by the Department before October 1st of each year.

8.4.1.2 Federal, State or Local government employees who are certified under this law are exempt from this fee. This exemption shall remain valid only when applying or supervising the application of pesticides for such governmental agencies.

### 8.4.2 Certification Renewal

8.4.2.1 Commercial applicators shall be required to be reexamined through a written test prior to their annual certification renewal.

8.4.2.2 The reexamination requirement may be satisfied without taking a test, if the commercial applicator provides the Department with evidence that he has completed a specified minimum number of hours attending approved education courses, seminars or programs during the three calendar years preceding certification renewal. The specified number of hours for each category are listed in paragraph 8.4.2.4 below. This exemption from reexamination does not apply to a person holding a lapsed certificate, as described in paragraph 8.4.3 below.

8.4.2.3 A commercial applicator shall be exempt from the reexamination requirement for the first two certification renewals following his original certification in Delaware.

8.4.2.4 The number of hours of training required to fulfill paragraph 8.4.2.2 are specified as follows:

<u>Category of Pest Control</u>	<u>Hours</u>
Agricultural Plant (1A)	8
Agricultural Animal (1B)	4
Fumigation of Soils and Agricultural Commodities (1C)	4
Forest (02)	4
Ornamental & Turf (03)	8
Seed Treatment (04)	2
Aquatic (5A)	4
Antifouling Paint (5B)	2
Mosquito (5C)	4
Right-of-Way (06)	4
Industrial, Institutional, Structural & Health Related (07)	
General Pest Control (7A)	18
Wood Destroying Pest Control (7B)	18
Fumigation Pest Control (non-agricultural) (7C)	4
Wood Preservatives (7D)	4
Institutional and Maintenance (7E)	18
Cooling Towers (7F)	4
Miscellaneous (7G)	4
Public Health (08)	4
Regulatory (09)	4
Demonstration & Research (10)	8

#### 8.4.3 Expiration

8.4.4.1 A certificate shall have a ninety (90) day grace period after the date of expiration. When the grace period expires, the certificate shall be considered to have lapsed.

8.4.3.2 A person holding a lapsed certificate must be examined as described by paragraph 8.1, in order to receive a new certificate.

8.4.3.3 An applicator may not purchase, use or supervise the use of a restricted use pesticide during the ninety (90) day grace period following the expiration date on his certificate.

#### 8.5 Exemptions

8.5.1 The above standards do not apply to the following persons for the purposes of these regulations:

8.5.1.1 Persons conducting laboratory type research involving restricted use pesticides; and

8.5.1.2 Doctors of Medicine, Doctors of Osteopathy, and Doctors of Veterinary Medicine applying pesticides as drugs or medication during the course of their normal practice.

8.5.1.3 Owners and employees of any child day-care center which is operated within a private home.

### 9.0 Standards for Certification of Private Applicators

9.1 As a minimum requirement for certification, a private applicator must show that he possesses a practical knowledge of the pest problem and pest control practices associated with his agricultural operations and his related legal responsibility. This practical knowledge includes ability to:

9.1.1 Recognize common pests to be controlled and damage caused by them.

9.1.2 Read and understand the label and labeling information - including the common name of pesticides he applies; pest(s) to be controlled, timing and methods of application; safety precautions; any pre-harvest or re-entry restrictions; and specific disposal procedures.

9.1.3 Apply pesticides in accordance with label instructions and warnings, including the ability to prepare the proper concentration of pesticide to be used under particular circumstances taking into account such factors as area to be covered, speed at which application equipment will be driven, and the quantity dispersed in a given period of operation.

9.1.4 Recognize local environmental situations that must be considered during application to avoid contamination.

- 9.1.5 Recognize poisoning symptoms and procedures to follow in case of a pesticide accident.
- 9.2 The competence of each private applicator shall be verified through the administration of a private applicator certification system here described which ensures that the private applicator is competent, based upon the standards set forth above, to use the restricted use pesticides under limitations of applicable State and Federal laws and regulations. One or more of the following options will be employed to certify private applicators:
- 9.2.1 General Certification
- 9.2.1.1 This option certifies the private applicator as competent to apply any restricted use pesticide which he would normally expect to use in his particular agricultural operations. Competency determination shall reflect all aspects of the private applicator standards and shall be broad enough to test the private applicator's ability to apply general principles to specific problems associated with the restricted use pesticides required for the production and protection of his crops.
- 9.2.2 Pesticide Class Certification
- 9.2.2.1 This option certifies the private applicator as competent to apply any restricted use pesticide products and all different formulations of a pesticide used for the same purpose, use, or application. Examples include, but are not limited to, preemergence herbicides for vegetable crops, foliar insecticides on corn, rodenticides in fruit orchards, nematicides in fields prior to planting, ground application of fungicides on vegetables, seed treatments for plant diseases, and livestock dips for insect control.
- 9.2.2.2 Competency determination shall reflect the full range of the private applicator standards, but with special emphasis placed on the particular characteristics of the pesticide class, as well as the nature of the application or use.
- 9.2.3 Commodity/Crop/Site Certification
- 9.2.3.1 This option certifies the private applicator as competent to apply any restricted use pesticide needed for specific crops or sites that the applicator would be expected to deal with in his agricultural operations. This would include any pesticide products (different pesticide classes, active ingredients, and formulations) used on a specific line or class designation. Examples include: single crop such as corn, apples, or wheat; single site class such as poultry houses or dairy barns; single livestock line, such as beef cattle, swine, or turkeys; crop classes such as forage crops or small fruits, site class such as barns or greenhouses; and livestock class such as poultry.
- 9.2.3.2 Competency determination shall reflect the full range of the private applicator standards, with emphasis placed on the particular characteristics of the specific crop or site, or crop/site class concerned and the pests involved.
- 9.2.3.3 A private applicator may wish to be certified for a specific crop or site (such as corn or beef cattle) or for a crop or site class (such as forage crops, livestock, small grain crops).
- 9.2.4 Single Product Certification
- 9.2.4.1 This option certifies as competent the private applicator for one or more uses of a single product or related products with the same active ingredient and with a similar formulation and uses. Competency determination shall reflect all appropriate uses of these products for the agricultural area where he will be expected to make pesticide application.
- 9.2.5 Single Products/single Use Authorization (Emergency Program)
- 9.2.5.1 This option would authorize the private applicator to make single use application(s) of a restricted use product (or other products of the same formulation). This option will be used only as an emergency provision to accommodate situations such as an unexpected pest problem that requires immediate certification of a previously uncertified private applicator or one whose particular type of certification would not cover the product needed to deal with the problem.
- 9.3 Determination of Competency for Private Applicators
- 9.3.1 Competence in the use and handling of pesticides by private applicators shall be determined by written examinations with questions based upon study materials made available by the Department. Correctly answering 70% or more of the questions shall be considered to be satisfactory evidence of competence.

9.3.2 Failure to answer at least 70% of the questions correctly shall be grounds for denial of certification. The applicant may apply for reexamination, which shall be scheduled by the Department at least 30 days after the applicant's initial examination.

9.3.2.1 Upon showing of hardship, an applicant for private applicator certification may appeal to the Secretary for an exception to paragraphs 9.3.1 and 9.3.2. At his discretion, the Secretary may provide for an alternative means of examination, to include but not be limited to oral examination. Oral examinations shall cover the same material included in the written examination.

9.3.2.2 Upon showing of hardship, an applicant for private applicator certification may appeal to the Secretary for an exception to paragraphs 9.3.1 and 9.3.2. At his discretion, the Secretary may provide for an alternative means of examination, to include but not be limited to oral examination. Oral examinations shall cover the same material included in the written examination.

9.3.2.3 Upon showing of hardship, an applicant for private applicator certification may appeal to the Secretary for an exception to paragraphs 9.3.1 and 9.3.2. At his discretion, the Secretary may provide for an alternative means of examination, to include but not be limited to oral examination. Oral examinations shall cover the same material included in the written examination.

#### 9.4. Private Applicators Certification Fees and Renewal

9.4.1 A private applicator's certification shall continue in full force until December 31st of the third year following his original certification.

9.4.2 A private applicator shall be required to be reexamined prior to certification renewal.

9.4.3 The reexamination requirement may be satisfied without taking a test, if the applicator provides the Department with evidence that he has attended a minimum of three (3) hours of approved education courses, seminars or programs during the three (3) calendar years preceding certification renewal.

9.4.4 In accordance with **Title 3**, Delaware Code, Section 1218, there is no fee for Private Applicator Certification.

#### 9.5 Expiration

9.5.1 A certificate shall have a ninety (90) day grace period after the date of expiration. When the grace period expires, the certificate shall be considered to have lapsed.

9.5.2 A person holding a lapsed certificate must be examined as described by paragraph 9.2, in order to receive a new certificate.

9.5.3 An applicator may not purchase, use or supervise the use of a restricted use pesticide during the ninety (90) day grace period following the expiration date on his certificate.

### **10.0 Standards for Supervision of Non-certified Applicators by Certified Private and Commercial Applicators**

10.1 Certified applicators whose activities indicate a supervisory role must demonstrate a practical knowledge of federal and state supervisory requirements, including labeling, regarding the application of restricted use pesticides by non-certified applicators.

10.2 The availability of the certified applicator must be directly related to the hazard of the situation, the complexity of the application or the ability to readily communicate with the non-certified applicator. In many situations, where the certified applicator is not required to be physically present, "direct supervision" shall include verifiable instructions to the competent person, as follows:

10.2.1 Detailed guidance for applying the pesticide properly, and

10.2.2 Provisions for contacting the certified applicator in the event he is needed. In other situations, and as required by the label, the actual physical presence of a certified applicator may be required when application is made by a non-certified applicator.

### **11.0 Federal Agency Pesticide Applicators**

11.1 When an employee of any agency of the United States Government has been qualified in any category as competent to apply restricted use pesticides under the Government Agency Plan (GAP) or under other plans judged by the Secretary to be at least equal to the Delaware Plan, the employee will be

- certified by the Secretary in the same category without the need for a written examination nor for the payment of any fee.
- 11.2 Federal employees qualified under an acceptable Federal Plan to apply restricted use pesticides and who intend to apply restricted use pesticides in Delaware as a part of their agency work shall present their qualifying documents to the Secretary and, if acceptable, these documents will be endorsed or a state document will be issued which will permit the federal employee to use restricted use pesticides in Delaware.
  - 11.3 If, in an emergency situation, federal employees are brought into Delaware to control or eradicate pests and when these employees have been properly qualified to use restricted use pesticides under the plan of another state or under an acceptable federal government agency plan, these employees shall be considered to be certified in Delaware for a period of 10 days. Within this 10 day period their agency must, present qualifying credentials to the Secretary and at that time state credentials will be issued if the employees are to remain in Delaware as applicators of restricted use pesticides.
  - 11.4 The provisions of this section do not apply to non-federal employees contracted to perform pesticide application for the federal government. In an emergency, however, and with the concurrence of the Secretary, a non-certified person may apply pesticides under the direct supervision of a properly certified federal applicator. Within 10 days such person working within the state boundaries must apply for Delaware certification in the normal manner.

## **12.0 Reciprocity**

When a commercial applicator is certified under the state plan of another state and desires to operate as a commercial applicator in Delaware he shall make application to the Secretary and shall include, along with the proper fee and other details required by the Law, a true copy of his credentials certifying him as an applicator of restricted use pesticides in another state. The Secretary then may, if he approves the credentials, issue a Delaware certification to the applicator in the appropriate classification or category(ies) for which he is certified in another state without a written examination. The original certification must be made in the state where the commercial applicator resides or where he has his principle place of business.

## **13.0 Revocation**

The Department, after due notice and opportunity for a hearing, may deny, suspend, revoke or modify any application for or provision of any certification, including reciprocal certification, under the Law if the Department finds that the Certified Applicator or the applicant for Certification has committed any act or acts declared by the Law or these regulations to be unlawful.

## **14.0 Records**

### **14.1 Commercial Applicators**

- 14.1.1 Commercial applicators shall, for a period of two years from the date of application, keep records detailing the application of any pesticides to include:
  - 14.1.1.1 The brand name of the pesticide used. In the case of a Restricted Use Pesticide or a pesticide which is used under the provisions of 40 **Code of Federal Regulations**, Part 170, Worker Protection Standards, the EPA Registration Number shall also be recorded at or before the time of application.
  - 14.1.1.2 When applicable, the dilution rate of the pesticide and the amount of diluted material applied per unit (i.e. gallons/acre, lbs./acre, etc.)
  - 14.1.1.3 The date and specific area treated.
  - 14.1.1.4 The pest against which the pesticide was used.
  - 14.1.1.5 The applicator's name, and when applicable, the name of the certified applicator responsible for his supervision.
  - 14.1.1.6 When label directions advise precaution in regard to drift, on-site weather conditions to include:
    - 14.1.1.6.1 Wind velocity and direction
    - 14.1.1.6.2 Temperature
    - 14.1.1.6.3 Relative humidity
  - 14.1.1.7 In addition to the above record keeping requirements, the applicator shall have available at the site of application, a copy of the label of the pesticide being used.

Upon request, the applicator shall provide any interested person at or adjacent to the application site, with any information contained on the pesticide label.

14.2 Restricted Use Pesticides Dealers

14.2.1 Restricted use pesticide dealers shall keep and maintain for a period of two years, records on the sale or other disposition of restricted use pesticides to include the following:

14.2.1.1 The name and address of the residence or principal place of business of the certified applicator to whom the pesticide is made available for use.

14.2.1.2 The certification identification number of the purchaser or receiver of the pesticide on the document. If the receiver of the restricted use pesticide is other than a certified applicator, a form of photographic identification of the receiver must be presented at the time of delivery.

14.2.1.3 The product name and E.P.A. registration number on the label of the pesticide.

14.2.1.4 The quantity of the pesticide made available for use in the transaction.

14.2.1.5 Date of the sale or transaction.

**15.0 Financial Security Required of Licensee**

15.1 The Secretary shall not issue a license until the applicant has filed evidence of financial security with the Secretary. Evidence shall consist of a general liability insurance policy with completed operation coverage or certification thereof from an insurance company, person, or risk retention group formed under the Federal Risk Act of 1986, authorized to do business in Delaware.

15.1.1 Agriculture

15.1.1.1 Plant Pest Control

15.1.1.1.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.1.2 Agriculture Animal Pest Control

15.1.1.2.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.2 Forest Pest Control

15.1.2.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.3 Ornamental and Turf Pest Control

15.1.3.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.4 Seed Treatment

15.1.4.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.5 Aquatic Pest Control

15.1.5.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.6 Right-of-Way Pest Control

15.1.6.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury

or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.1.7 Industrial, Institutional, Structural and Health Related Pest Control

15.1.7.1 An applicant for certification in this category shall file evidence of financial security in the minimum amount of Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.2 Aerial Applicators

15.2.1 Aerial applicators applying for a license in any of the above categories or subcategories shall show evidence of financial security in the minimum of One Hundred Thousand Dollars (\$100,000) for each individual damage and Three Hundred Thousand Dollars (\$300,000) for bodily injury or death for each occurrence and One Hundred Thousand Dollars (\$100,000) for property damage resulting from the use or misuse of pesticides.

15.3 Nothing in these regulations shall be construed in any way to relieve any person from liability for any damage to the person or lands of another caused by the use of pesticides even though such use conforms to the rules and regulations of the Secretary.

**16.0 Storing and Disposal of Pesticides and Pesticide Containers**

16.1 Prohibited Acts

16.1.1 No person shall dispose of or store (or receive for disposal or storage) any pesticide, pesticide container or pesticide container residue:

16.1.1.1 In a manner inconsistent with its label or labeling;

16.1.1.2 So as to cause or allow the open dumping of pesticides or pesticide containers;

16.1.1.3 So as to cause or allow open burning of pesticide or pesticide containers.

16.1.1.4 So as to cause or allow dumping of pesticides in any stream, river, pond, lake, sewer, storm water drain, or to ground water, except in conformance with permits issued by the Delaware Department of Agriculture or other state agency having jurisdiction regarding water pollution;

16.1.1.5 So as to violate any applicable state or federal pollution control standard.

16.2 Pesticide and Pesticide Container Disposal

16.2.1 Pesticide containers shall, upon completion of use, be triple rinsed immediately by the applicator or someone under his direct supervision or cleaned by another method or procedure equivalent in residue removal effectiveness.

16.2.1.1 The standard triple rinse procedure is as follows:

16.2.1.1.1 The emptied container shall be drained for at least thirty (30) seconds after steady flow of pesticide formulation has ceased and after individual drops are evident. Any pesticide formulation drained shall be added to the spray tank mix and shall be applied in accordance with label instructions.

16.2.1.1.2 A solvent, usually water, specified by the manufacturer and capable of removing the pesticide residue shall be added to the drained container in an amount equal to ten percent (10%) of its capacity. The container then shall be shaken, agitated, or rolled vigorously in such fashion as to dislodge residues from the top, bottom and sides. The liquid residues (rinsate) shall be added as make-up to the spray tank mix, and the container shall be allowed to drain for at least thirty (30) seconds after steady flow has ceased and after individual drops are evident.

16.2.1.1.3 The above procedure shall be performed two more times, each time allowing the container to drain at least thirty (30) seconds and adding all rinsate to the spray tank mix to be applied in accordance with label instructions.

16.2.1.2 In cases where undiluted formulations are used and rinsate cannot be added to the spray tank, the residue must be disposed of in accordance with applicable Department of Natural Resources and Environmental Control (DNREC) regulations.

16.2.1.3 Methods of rinsing or cleaning containers, other than the standard triple rinsing procedure described above, may be used provided they are shown to remove equivalent amounts of pesticide residues that can be disposed of in an environmentally safe manner.

- 16.2.1.4 In the case of containers with removable inner liners that prevent contact between the pesticide and the container, removal of the empty liner shall be considered the equivalent of triple rinsing. The removed liners must be disposed of in a sanitary landfill. Empty liners removed from pesticide containers that held pesticides listed as hazardous waste are also considered hazardous waste unless the liners are triple rinsed using a solvent capable of removing the pesticide or other method approved as equivalent by the DNREC. Once rinsed these liners may be handled and disposed of in a sanitary landfill. Rinsates shall be used in accordance with 16.2.1.1.2.
  - 16.2.1.5 Following the rinsing, cleaning or liner removal procedure, plastic or metal containers not destined for return to manufacturers or shipment to reconditioners shall be punctured prior to disposal to ensure they are empty and to prevent re-use. Glass containers are exempt from this puncture requirement.
  - 16.2.1.6 Pesticide containers labeled for commercial or farm use, which have been triple rinsed and handled in accordance with 16.2.1.1 through 16.2.1.5, shall be disposed of at a sanitary landfill or through a Department accepted recycling program.
  - 16.2.1.7 Unused or unwanted farm or commercial use pesticides that qualify as hazardous waste shall be disposed of in accordance with 7 Del.C. Chapter 63 and the Delaware Regulations Governing Hazardous Waste.
  - 16.2.1.8 Pesticides or pesticide containers which are not subject to these regulations are as follows:
    - 16.2.1.8.1 Paper, cardboard and fiberboard containers. Storage, handling and disposal must, however, be in accordance with label directions and any applicable DNREC regulations or local ordinances. This waiver applies only if all the pesticide contents have been removed from the container using practical methods.
    - 16.2.1.8.2 Empty aerosol containers and empty compressed gas cylinders, provided that the empty aerosol containers contain non-reactive propellant and are disposed of according to the product labeling and the empty compressed gas cylinders are returned for re-use.
    - 16.2.1.8.3 Pesticide containers labeled as returnable, and which are returned to the manufacturer for refill.
    - 16.2.1.8.4 Pesticides and pesticide containers which are intended solely for home and garden use, provided they are securely wrapped in several layers of paper and disposed of singly through routine municipal solid waste disposal or at a sanitary landfill.
- 16.3 Pesticide Storage
- 16.3.1 Pesticides shall be stored in such a manner so as to prevent the contamination of food, feed and/or water.
  - 16.3.2 Pesticides shall be stored out of the reach of children and so as not to present a public nuisance.
  - 16.3.3 Until such time as the Secretary shall, along with the Pesticide Advisory Committee and any other person as the Secretary may consult, promulgate more specific rules and regulations covering the storage of pesticides and pesticide containers not provided in 16.1 and 16.3 of this Section, the recommended procedures for the storage of pesticides and containers detailed in Regulations promulgated by the Administrator, United States Environmental Protection Agency shall be the recommended procedures for Delaware. The Secretary shall make copies of these procedures available to any person needing guidance for proper storage of pesticides or pesticide containers.

## **17.0 Pesticide Advisory Committee**

- 17.1 Expenses of Members Not from Government Departments. Pesticide Advisory Committee members not from governmental departments shall submit expense accounts to the Secretary. Reimbursements made to members not from governmental departments shall be made for the actual cost of lodging and meals (out of state) and for transportation according to the regulations applicable to Department employees.

## **18.0 Application and Equipment**

- 18.1 No person shall apply, dispense or use any pesticide in or through any equipment or application apparatus unless the equipment or application apparatus is in sound mechanical condition and capable

- of satisfactory operation. All pesticide application equipment shall be properly equipped to dispense the proper amount of material; all pesticide mixing, storage, or holding tanks, whether on application equipment or not, shall not leak pesticide; all spray distribution systems shall not leak pesticides and any pumps which the systems may have shall not leak pesticides and any pumps which the systems may have shall be capable of operating at sufficient pressure to assure a uniform and adequate rate of discharge; and all pesticide application equipment shall be equipped with whatever cut-off valves and discharge orifices may be necessary to enable the operator to pass over non-target areas without contaminating them.
- 18.2 All hoses, pumps or other equipment used to fill pesticide handling, storage or application equipment shall be fitted with an effective valve or device to prevent backflow of pesticides or pesticide use-dilutions into water supply systems, streams, lakes, ground water or other sources of water. Backflow devices or valves are not required for separate water storage tanks used to fill agricultural pesticide application equipment by gravity systems when the fill spout, tube or pipe is not allowed to contact or fall below the water level of the application equipment being filled and no other possible means of establishing a backsiphon or backflow exists.

### 19.0 Antifouling Paint Restrictions

- 19.1 For the purposes of this section, the following definitions shall apply:
- "Acceptable release rate"** means a measured release rate not to exceed 4.0 micrograms per square centimeter per day and as further defined in the Organotin Anti-fouling Paint Control Act of 1988, (Pub. L. - 100-333).
- "Antifouling paint"** means a coating, paint, or treatment that is applied to a vessel or any fishing gear used to catch shellfish or finfish to control fresh water or marine fouling organisms.
- "Vessel"** means every description of watercraft, other than a seaplane, used or capable of being used as a means of transportation on the water, whether self-propelled or otherwise, and includes barges and tugs.
- "Commercial boat yard"** means any facility which engages for hire in the construction, storage, maintenance, repair, or refurbishing of vessels or any licensed independent marine maintenance contractor who engages in such activities.
- "Organotin"** means any compound of tin used as a biocide in an anti-fouling paint.
- "Retail"** means the transfer of title to tangible personal property other than for resale, after manufacturing or processing.
- 19.2 Except as otherwise provided in this Section, no person shall distribute, possess, sell, or offer for sale, apply or offer for use or application any marine anti-fouling paint containing organotin.
- 19.3 No person may sell or deliver to, or purchase or receive from, another person at retail any substance containing organotin for the purpose of adding such substances to paint to create an anti-fouling paint.
- 19.4 A person may distribute or sell a marine anti-fouling paint containing organotin with an acceptable release rate to the owner or agent of a commercial boat yard. The owner or agent of a commercial boat yard may possess and apply or purchase for application an anti-fouling paint containing organotin with an acceptable release rate, however, the paint may be applied only within a commercial boat yard and only to vessels which exceed twenty-five meters (82.02 feet) in length or which have aluminum hulls.
- 19.5 A person may distribute, sell, or apply a marine anti-fouling paint containing organotin having an acceptable release rate, if the paint is distributed or sold in a spray can in a quantity of sixteen ounces avoirdupois or less and is commonly referred to as outboard or lower unit paint.

### 20.0 Restricted Use Pesticide Dealer Permits

- 20.1 For the purposes of these regulations the following definitions shall apply:
- 20.1.1 The term "restricted use pesticide dealer" means any person who makes available for use any restricted use pesticide, or who offers to make available for use any such pesticide. The term excludes any person who sells or distributes pesticides only as an integral part of his pesticide application service and when the pesticides are dispensed only through equipment used during a pesticide application.
- 20.1.2 The term "make available for use" means to distribute, sell, ship, deliver for shipment, or receive, and (having so received) deliver, for use by any person. However, the term excludes transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail dealers, acting only in those capacities.

- 20.1.3 The term "dealership" means any site owned or operated by a restricted use pesticide dealer where any restricted use pesticide is made available for use, or where the dealer offers to make available for use any such pesticide.
- 20.2 Effective December 31, 1990, no person shall make available for use any restricted use pesticide unless that person has a valid Dealer Permit issued by the Department.
- 20.3 A separate Dealer Permit shall be required for each dealership owned or operated by the restricted use pesticide dealer.
- 20.4 Issuance of a Dealer Permit:
  - 20.4.1 Application for a Dealer Permit shall be made in writing to the Department on a designated form obtained from the Department.
  - 20.4.2 The Department shall issue a Dealer Permit to an applicant upon payment of a fee of \$25.00 for a calendar year or any part of a calendar year.
  - 20.4.3 All permits shall remain in full force and effect until December 31st of each year whereupon they shall become invalid unless renewed, except that a permit for which a renewal application has been submitted to the Department by November 30th shall remain in full force and effect until such time as the Department gives written notice to the permit holder of renewal or denial.
- 20.5 A restricted use pesticide dealer is responsible for the acts of his employees in the solicitation and sale of all pesticides and all claims and recommendations for the use of pesticides.
- 20.6 A dealer permit is not transferable.
- 20.7 The Department, in addition to any penalties authorized by the Law, may deny, suspend, or revoke the application or permit of a restricted use pesticide dealer if he has failed to comply with any provisions of the Law or any rules and regulations promulgated thereunder.

## 21.0 Institutional and Maintenance Pesticide Use Restrictions

- 21.1 For the purposes of these regulations, the following definitions shall apply:
  - "General use pesticide"** shall include all pesticides as defined by 3 Del.C. §1202(27), with the following exceptions:
    - Any Restricted Use Pesticides, as defined by 3 Del.C. §1202 (30);
    - Any State Restricted Use Pesticide, as defined by 3 Del.C. §1202 (31);
    - Any anti-microbial pesticide used for controlling bacteria, viruses, or other microorganisms.
  - "School"** shall mean a completed structure utilized as a public or private school, grades kindergarten through post graduate.
  - "Apartment building"** shall mean a building that contains four or more dwelling units that are rented primarily for nontransient, permanent dwelling purposes, with rental paid by intervals of one week or longer.
  - "Nursing home"** shall have the same meaning assigned by 16 Del.C. §1101.
  - "Hospital"** shall have the same meaning assigned by 16 Del.C. §1001(1).
  - "Child day-care center"** shall mean a facility, other than a school as defined elsewhere herein, which provides care, education, protection, supervision and guidance on a regular basis for children. Services are provided for part of the 24 hour day, unattended by parent or guardian, and for compensation. Provided, nevertheless, that "child day-care center" shall not include any such facility which is operated within a private home.
  - "Private home"** shall mean a non-public residence such as a house, duplex, townhouse, apartment, or mobile home where the provider of child day-care services lives and has control over the furnishings and use of space. An individual unit in public housing and university housing complexes is considered a private home.
  - "Institutional and Maintenance applicator"** means any person who: operates or maintains a school, apartment building, nursing home, hospital or child day-care center, or is an employee of a school, apartment building, nursing home, hospital, or child day-care center; and who applies general use pesticides inside the school, apartment building, nursing home, hospital, or child day-care center.
- 21.2 A person certified as an Institutional and Maintenance applicator may not engage in the business of pest control outside the scope of their employment at a school, apartment building, nursing home, hospital, or child day-care center, unless the person becomes certified as otherwise provided by the Law.

- 21.3 An owner or manager of a building that is a school, apartment building, nursing home, hospital, or child day-care center may obtain Institutional and Maintenance pest control services for the building from a person only by:
  - 21.3.1 Contracting with a business licensed pursuant to 3 Del.C. §1206;
  - 21.3.2 Having the services performed by an Institutional and Maintenance applicator with a valid certification in 7.7.1.1 or 7.7.1.5 of these regulations.
- 21.4 Records of "general use pesticide" applications made in a school, apartment building, nursing home, hospital, or child day-care center shall be kept in accordance with Section 14.1.

**22.0 Restrictions on the Use of Pesticides for the Control of Subterranean Termites**

- 22.1 This section applies to commercial pesticide applications for the control of subterranean termites. It is directed primarily towards soil treatment and does not include other treatments applied as dusts, aerosols or fumigants, nor does it address application technology such as biological control agents or baits.
- 22.2 For the purpose of this section, the following definition shall apply:
  - 22.2.1 "Termiticide" shall mean a pesticide registered pursuant to the Law and which is intended for preventing, destroying, repelling or mitigating termites.
  - 22.2.2 "Continuous chemical barrier" shall mean the application of a termiticide such that the resultant soil residue meets or exceeds the soil residue requirements currently recommended by the Association of Structural Pest Control Regulatory Officials (ASPCRO) and as those requirements may be amended in the future. Soil residue sampling shall be conducted in conformity with the current ASPCRO soil sampling protocol and as it may be amended in the future.
- 22.3 Termiticides shall be used to establish a continuous chemical barrier in all applicable areas prescribed by the label. However, where the termiticide is applied such that a continuous barrier is not achieved, or where the termiticide is not applied to all applicable areas prescribed by the termiticide label, the conditions outlined in both 22.3.1 and 22.3.2 below must be satisfied:
  - 22.3.1 One or more of the following situations is present:
    - 22.3.1.1 Specific environmental conditions are such that application of the termiticide at the full labeled concentration and volume may result in adverse environmental impact. Examples may include the presence of a well, a footing drain that empties into a water body, a high water table, etc.;
    - 22.3.1.2 Structural barriers or soil conditions or types exist that prohibit application of the labeled volume or limit access to applicable soil treatment areas;
    - 22.3.1.3 Specific customer request, or the recommendation of the certified applicator.
  - 22.3.2 Within fourteen (14) days following the termiticide application, the following information shall be furnished in writing to the customer or to the customer's agent:
    - 22.3.2.1 A full disclosure explaining the difference between full and partial applications. The disclosure shall include the termite control strategies being utilized and the reasons for those alternatives;
    - 22.3.2.2 The pesticide used, including brand name and EPA registration number;
    - 22.3.2.3 The actual volume of the termiticide applied;
    - 22.3.2.4 Specific information of sufficient detail to distinguish where treatment actually occurred, including a diagram of the structure identifying treated areas, known well heads, and sites of visible termite activity;
    - 22.3.2.5 A clear, concise statement indicating whether the application has any guarantee or warranty, and the terms of the guarantee or warranty, e.g., retreatment (full or partial), damage repair and retreatment, or no warranty.
  - 22.3.3 This information shall be furnished to the customer or customer's agent on a form approved by the Department. The applicator shall for a period of two years from the date of application, keep and maintain all completed copies of disclosure documents. These records shall be made available to authorized employees of the Department upon request.
- 22.4 Any application of termiticides, pursuant to this section, must be conducted with a commercial applicator at the site of application. This commercial applicator must be certified in category 7.7.1.2, Wood Destroying Pest Control.

- 22.5 The disclosure information and written notification specified in paragraph 22.3.2 are not required of termiticide treatments to utility poles, fence posts or tree stumps.
- 22.6 Any pre-construction termiticide application shall be applied in accordance with the termiticide product labeling and the U.S. Environmental Protection Agency, Pesticide Regulations (PR) Notice 96-7. For pre-construction treatments, PR Notice 96-7 supercedes this Section, and no pre-construction treatment shall be applied at a lower dosage and/or concentration than specified on the label, for applications prior to installation of the finished grade.