State of Vermont
Agency of Agriculture, Food and Markets

VERMONT
AGENCY OF AGRICULTURE, FOOD & MARKETS

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Vermont Regulations for Control of Pesticides
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PREAMBLE

The goal of these pesticide regulations is to encourage the use of the most environmentally responsible approach to effective pest management. The Department of Agriculture, Food and Markets believes that with the knowledge and use of integrated pest management (IPM) skills and soil/water conservation techniques currently available this goal will be achieved.

SECTION I

DEFINITIONS

Earth should be understood to mean; Soil, defined as; a three-phase system comprised of various combinations of naturally derived solids including fine to coarse-grained rocks and minerals, organic matter (including living organisms), weathered rock and precipitates.

Secondary containers and service containers are similar, but there are some minor differences, and different terms are used in different settings. A secondary container is used to apply and/or store an EPA-registered pesticide and, when it holds the pesticide, is neither sold nor distributed. Secondary containers are most commonly used in institutional settings for concentrated products that are diluted prior to use, or to hold pesticides filled from a larger container to be used or stored prior to application. Often secondary containers are filled by end users at the site where the product will be used.

Service containers are containers that are filled with an EPA-registered pesticide by an applicator and usually transported to a use site where the pesticide will be applied by the applicator. Although a product may be temporarily stored in a service container, the container is not intended for long-term storage. The term "service container" is often used in the agricultural setting and by pest control operators. Service containers also are not used to sell or distribute the pesticide.
1.01 Accident means any release of a pesticide or pesticide mix from its container or application equipment which is contrary to a label instruction for use of that pesticide, or which violates these regulations.

1.02 Aerial Application means a pesticide application from a motorized vehicle used for flight, including, but not limited to, fixed-wing aircraft, rotary aircraft, and unmanned aerial vehicles.

1.03 Agency means the Vermont Agency of Agriculture, Food and Markets.

1.04 Agricultural Commodity means any plant, fungus, or algae, or part thereof, or any animal or animal product produced by a person (including, but not limited to, farmers, ranchers, vineyardists, apiarists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by a man or animal.

1.05 Anti-Siphon Device means any equipment designed and constructed to prevent the accidental backflow or siphoning of a pesticide into any water supply or to prevent contamination by a pesticide of another material being injected at the same time, such as a fertilizer or other pesticides.

1.06 Applicator means any individual using a pesticide. An applicator may be certified as a commercial, non-commercial, or private applicator as defined in FIFRA or may be a noncertified applicator.

1.07 Application means the dispersal of a pesticide on, in, at, or directed toward a target site.

1.08 Appurtenance means any equipment which is connected to a bulk storage container or pesticide application equipment for the purposes of transferring a pesticide and includes all valves, pumps, fittings, pipes, hoses, metering devices, mixing containers, and dispensing devices which are connected to a storage container, or which are used to transfer liquid pesticide or pesticide rinsate into or out of a storage container.

1.09 Bulk Pesticide: means liquid pesticide in a container larger than 210 gallons (795 liters) or dry pesticide in undivided quantities greater than 100 pounds (45 kilograms), and includes mini-bulk pesticide containers, except as otherwise specified.

1.10 Bulk Storage Container means a container used for the fixed storage of bulk pesticide, which may include a rail car, nurse tank, portable container of mini-bulk pesticide or other similarly mobile container which is used for the fixed storage of bulk pesticide for more than 15 consecutive days. A Bulk Storage Container does not include a container which is used solely for emergency storage of a leaking pesticide container which is 55 gallons or smaller.

1.11 Certified Commercial Applicator means any person certified pursuant to the requirements of this regulation who applies a pesticides onto the lands or homes of another whether for remuneration or gratis.

1.12 Certified Noncommercial Applicator means a noncommercial applicator who has been certified under the standards and categories of Section VIII, Vermont Regulations for Control of Pesticides pursuant to the requirements of this regulation. A certified noncommercial applicator may purchase, use or supervise the application and use of restricted and Class "B" pesticides in the course of their employment. Certified noncommercial applicants are exempt from the company licensing requirements. Certified noncommercial applicators shall comply with all other requirements of these regulations.
1.13 Certified Private Applicator means: a private applicator who has been certified pursuant to the requirements of Section IX, Vermont Regulations for Control of Pesticides, and who may Certified private applicators may purchase, use, or supervise the use of a restricted use pesticides. Certified private applicators may not supervise the use of federally restricted use pesticides.

1.14 Chemigation means: any the injection or process whereby a pesticide(s) is (are) mixed with into applied through water and applied through an irrigation system to land and/or crops, crops including, but not limited to, agricultural, nursery, turf, golf course, ornamental or greenhouse sites through an irrigation system.

1.15 Class A Pesticide means a pesticide that is classified as federally restricted- or state restricted- or by permit only product.

1.16 Class B Pesticide means a pesticide that the Agency the Secretary classifies as a controlled sale product.

1.17 Class C Pesticide means a pesticide that the Agency the Secretary classifies as a homeowner or specialty product.

1.18 Commercial Applicator means a person who applies uses a pesticides to on the lands or homes of another whether for remuneration or gratis under the direct supervision of a certified commercial applicator.

1.19 Company License; means a license issued by the Agency the Secretary Department of Agriculture to a business entity which applies uses any a pesticides to on the lands or homes of another person for remuneration or gratis.

1.20 Competency means having the practical knowledge, skills, experience, and judgment necessary to perform functions associated with a restricted use pesticide application without causing an unreasonable adverse effect, where the nature and degree of competency required relate directly to the nature of the activity and the degree of independent responsibility. No person or business entity may contract to use any pesticide on the lands of another without first obtaining a company license. A company license does not exempt a commercial applicator from applicable certification requirements. The regulations pertaining to the company license became effective January 1, 1981, and can be found in Section VI of these regulations.

1.21 Conspicuous Point of Access means: the usual and customary entrance or entrances where people are likely to enter a treated area, and observe warning signs pursuant to Section IV &.

1.22 Container means a portable device in which a pesticide is stored, transported, treated, disposed of, or otherwise handled but excludes pesticide application equipment.

1.23 Dealer means: any person who distributes takes orders for sale, offers for sale or sells pesticide from an establishment.

1.24 Dealer Outlet means any establishment location where a pesticide is distributed within or into the State.

1.25 Direct Supervision means physical, on-site supervision of a pesticide application use by a certified applicator who is capable of calibrating ion of equipment, prescribing selecting a pesticides, calculating an application rate, calculating volumes of a pesticides to be applied, and dealing responding with to an emergency situation an emergency which might occur. Direct supervision is not permitted for use of a federally restricted use pesticide.
1.26 Discharge means a spill, leak, accidental or intentional release, or other emission of a pesticide from a storage container, container, or appurtenance, and includes a discharge release into secondary containment. Discharge shall not mean a fully contained transfer of bulk pesticide which is made pursuant to sale, storage, or distribution or releases that are in accordance with label directions.

1.27 Distribute means: to import, consign, sell, offer for sale, solicit an order for sale, or otherwise supply a pesticide for sale or use in this State through any means, including sales outlets, catalogues, the telephone, the Internet, or any electronic means.

1.28 Earth should be understood to mean: Soil, defined as a three-phase system comprised of various combinations of naturally derived solids including fine to coarse-grained rocks and minerals, organic matter (including living organisms), weathered rock, and precipitates.

1.29 Economic Poison means: any substance produced, distributed, or used for preventing, destroying, or repelling any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living humans or other animals, which the Commissioner Secretary shall declare to be a pest, or any substance produced, distributed, or used as a plant regulator, defoliant, or desiccant.

1.30 Environmentally Sensitive Areas means those areas which are:
   (a) significant wetlands as defined in 10 V.S.A. Chapter 037;
   (b) necessary wildlife habitat as defined in 10 V.S.A. Chapter 151; or
   (c) contain endangered or threatened species as defined in 10 V.S.A. Chapter 123, or threatened species (10 V.S.A. Section 5401(6) and (7)). Establishment means a fixed, permanent facility.

1.31 Experimental Use means the use of an unregistered pesticide or the use of a registered pesticide for an unregistered use conducted under a permit.

1.32 Federally Restricted Use Pesticide means a pesticide classified for restricted use under the provisions of Section 3(d) of The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and 40 CFR part 152, subpart I.

1.33 Fraud means the intentional misrepresentation through a verbal or written statement, the media, a falsified record, an invoice or report, or a false statement on an application for a license or certificate.

1.34 KOC means the soil organic carbon-water partitioning coefficient: a measure of the tendency of a pesticide to be strongly attached, by chemical or physical bonds, to soil particle surfaces.
1.39 Label or Labeling means:
(a) the written, printed, or graphic matter on, or attached to, the pesticide, or the immediate container thereon;
(b) the outside container or wrapper of the retail package, if there is one, of the pesticide; and
(c) written printed or graphic matter which is incorporated into the label by reference.

Loading means: any act of transferring a pesticide to or from any storage container or to any mobile application equipment.

Managed and Native Pollinators means

1.40 Loading means any act of transferring a pesticide to or from any storage container, or to any application equipment. Manufacture means to process, manufacture, formulate, prepare, compound, package, repackage, or label a pesticide.

1.41 Manufacture means to process, produce, formulate, prepare, compound, package, repackage, or label a pesticide.

1.42 Mini–bulk container means either:
(a) a storage container, designed for ready handling and transport, which holds more than 55 gallons (208 liters) but not more than 350 gallons (1,325 liters) of liquid fertilizer or liquid pesticide; or
(b) A container that holds more than 100 pounds (45 kilograms) but not more than 2,500 pounds (1,136 kilograms) of dry fertilizer.
(e) a container that holds more than 100 pounds (45 kilograms) but not more than 1,000 pounds (454 kilograms) of dry pesticide.

1.43 Misuse means an application not made in compliance with the pesticide label or these is regulations, including but not limited to:
(a) Pre-application activities involving mixing and loading the pesticide;
(b) Applying the pesticide, including, but not limited to, supervising the use of a pesticide by a noncertified applicator;
(c) Other pesticide-related activities, including, but not limited to, transporting or storing pesticide containers that have been opened, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other pesticide-containing materials; or
(d) Recommending the use of a pesticide.

1.44 Mixing means: the act of combining a pesticides with another pesticide, or a pesticide with and/or solvents or a diluents for the purpose of application.

1.45 Noncertified Applicator means a person who is not certified under this Rule and uses a pesticide.

1.46 Noncommercial Applicator means: a person who uses or applies a Class A or Class B pesticides in the course of their employment on their employer’s property. It is anticipated by these regulations that in most instances the use of pesticides will comprise only a portion of the applicator's duties and that other employment responsibilities will be unrelated to pesticide application. Noncommercial applicators are exempt from the company licensing requirements. Noncommercial applicators without certification may apply only Class "C" pesticides in the course of their
employment. Persons without certification who are hired as independent contractors for the exclusive purpose of applying Class "C" pesticides shall have the burden of proof in any departmental hearing to rebut the presumption that they are commercial applicators.

Ornamental means plants such as flowers, shrubs, and trees used for decorative purposes, shade, or other landscape purposes.

BE SURE to INCLUDE LANDSCAPE

1.47 Person means:

(a) any individual, partnership, corporation, association, unincorporated organization, trust, or other legal or commercial entity, including a joint venture or affiliated ownership; or

(b) a municipality or state agency; or

(c) individuals and entities affiliated with each other for profit, consideration, or any other beneficial interest derived from agricultural management, including lessors and lessees; or, organization of persons whether incorporated or not, including any municipality, state, or federal agency or subdivision of any state.

(d) a farmers, ranchers, vineyardists, apiarists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons.

1.48 Pesticide means economic poison as defined in 6 V.S.A. § Section 911 and Section Definition of the Regulations For the Control of Pesticides this regulation.

1.49 Practical Knowledge means the possession of pertinent facts and comprehension sufficient to properly perform functions associated with the use of a restricted use pesticide, including properly responding to reasonably foreseeable problems and situations.

1.50 Pest control activities means

1.51 Prescreened Pesticide List means: a list of pesticides that, based on their human and ecological toxicity, which due to their relative immobility, and limited persistence in the environment (as measured by parameters such as, but not restricted to, solubility, KOC, and half-life) are deemed unlikely, under normal conditions and acceptable use, to leave established turf grass and center surface and/or ground water.

1.52 Private Applicator means any person who uses or supervises the use of any non-restricted use pesticide other than those classified restricted use on property owned or rented by the applicator that is residential in nature or on property owned or rented by the applicator or the applicator's employer for the production of an agricultural commodity. Private applicators may apply a pesticides to the property of a neighboring producers of an agricultural commodities, providing that the applicator receives no compensation other than the trading of personal services between the applicator and their neighbor.

48. Private Non Residential Property means: property open to the public and which is not a residence, such as an athletic field.

49. Public Non Residential Property: means property open to the public and which is not a residence, such as a commercial business.

1.53 Public Water System means: the same as it is defined in the Agency of Natural Resources Department of Environmental Conservation’s Environmental Protection
Rules Chapter 21 Water Supply Rule, any system or combination of systems owned or
controlled by a person which provides piped drinking water to the public which has: a) has at least ten service connections, or b) serves at least an average of at least twenty-five individuals for at least 60 days a year. Public water system shall also mean any part of a piped system which does not provide drinking water, if such use of such a part could affect the quality or quantity of the drinking water supplied by the system.

1.54 Residential Dwelling Unit means any room or group of rooms located within a structure and forming a single habitable unit with facilities which are used, or are intended to be used, for living, sleeping, cooking, and eating.- This definition includes a building or structure or part of a building or structure that is used for a home or residence by one or more persons who maintain a household. It also means a mobile home regardless of ownership of the land. This definition does not include a guest room at a hotel or motel.

1.55 Restricted Use Pesticide means a pesticide classified as state or federally restricted and is synonymous with a Class A pesticide.

1.56 Right-of-way means: an interest in real property, above, on, or below the ground, which entitles the holder of the interest to pass over the land for the purpose of carrying, transmitting, or transporting liquids, gases, electricity, communications, vehicles, or people. For the purpose of these regulations, this Regulation, it is immaterial whether the right-of-way is owned, leased, or an easement. The term "right-of-way" includes properties owned or leased by utilities where that property is used as a right-of-way.

Secondary Containers and service containers are similar, but there are some minor differences, and different terms are used in different settings. A secondary container is used to apply and/or store an EPA-registered pesticide and, when it holds the pesticide, is neither sold nor distributed. Secondary containers are means a container that is most commonly used in an institutional settings for a concentrated products that are diluted prior to use, or to hold pesticides filled from a larger container to be used or stored prior to application. Often a secondary container is filled by end users at the site where the product will be used. A secondary container is used to apply and/or store an EPA-registered pesticide and, when it holds the pesticide, is neither sold nor distributed.

1.57 Secretary means the Secretary of the Agency of Agriculture, Food and Markets, and their her or his-designees.

1.58 Service Containers means are containers that are filled with an EPA-registered pesticide by an applicator and usually transported to a use site where the pesticide will be applied by the applicator. Although a product may be temporarily stored in a service container, the container is not intended for long-term storage. The term "service container" is often used in the agricultural setting and by pest control operators. Service containers also are not used to sell or distribute the pesticide. means any container, other than an original container that is filled with an EPA-registered pesticide, used to hold, or transport a pesticide concentrate or a pesticide use-dilution preparation prior to application. A service container is neither used to distribute or store a pesticide nor does the definition include pesticide application equipment used.
1.59 Simple Dilution Analysis means an analysis involving the dilution of a chemical with an expected volume of precipitation available for infiltration within a watershed or hydrologic unit. Simple Dilution Analysis is used to assess the potential for a contaminant to be transported to groundwater through the process of infiltration.

1.60 Spray Drift means the movement of pesticide dust or droplets through the air at the time of application or soon after, to any site other than the area intended.

1.61 State Restricted Use Pesticide means a pesticide classified by the Secretary as Class A but does not bear labeling as Restricted Use does not bear labeling indicating Restricted Use.

1.62 Storage means the storageholding of a pesticide by a person who uses for use or distribution in an area other than the sales floor of a licensed retailerself-service sales, manufactures, or distributes a pesticide.

1.63 Bulk Storage Container means: a container used for the fixed storage of bulk pesticide; a rail car, nurse tank, a portable container of mini bulk pesticide or other mobile container which is used for the fixed storage of bulk pesticide for more than 15 consecutive days. It does not include a container which is used solely for emergency storage of leaking pesticide containers which are 55 gallons or smaller.

1.64 Surface Water means all rivers, streams, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border the state or any portion of it. Any river, stream, creek, brook, reservoir, pond, lake, spring and any other body of surface water, whether natural or artificial.

1.65 Turf means a covering of mowed grass vegetation growing together with an upper soil stratum of intermingled roots and stems.

1.66 Use of a pesticide means any of the following:
   (a) Pre-application activities involving mixing and loading the pesticide;
   (b) Applying the pesticide, including, but not limited to, supervising the use of a pesticide by a noncertified applicator;
   (c) Other pesticide-related activities, including, but not limited to, transporting or storing a pesticide container that has been opened, cleaning equipment, and disposing of any excess pesticides, spray mix, equipment wash waters, a pesticide containers, and other pesticide-containing materials; or
   (d) Recommending the use of a pesticide.

Accidents, sabotage, or the purposeful release of a pesticide to a human or the environment including, but not limited to:
   a. application of a pesticide, which includes mixing or loading of equipment and any required supervisory action in or near the areas of application;
   b. storage of pesticides and pesticide containers;
   c. disposal of pesticides and pesticide containers; and
   d. recommendation of pesticide applications.
Utility means a privately, publicly, or cooperatively owned line, facility, or system for producing, transmitting, or distributing communications, cable television, power electricity, light, heat, gas, oil, crude products, water, steam, waste, stormwater not connected with the highway drainage or any other similar commodity, including any fire or police signal system or highway lighting system, which directly or indirectly serves the public. The term “utility” also shall mean the utility company inclusive of any wholly owned or controlled subsidiary, means: a highway worker, a railroad company, a pipeline operator, a communication company, or electric company, whether public or privately owned, or any employee of the company.

Vapor Drift means the movement of a pesticide in the form of a volatilized gas through the air following application to any site other than the area intended.

Vegetation means:

a. herbaceous plants: species that do not develop woody stems;

b. brush: woody species of shrubs, trees, vines, and brambles generally not exceeding ten feet in height; and

c. trees: woody species generally reaching a height of ten feet at maturity.

Vermont Act 31: the State law enacted by the General Assembly of Vermont on May 3, 1985, relating to Community and Worker Right-to-Know; Sec. 1. 18 V.S.A. Chapter 36.

Water Supplies: any developed source of water whether public or privately owned, that is intended for human consumption. Supply means a drinking water source that intersects the water table and provides water through pipes or other conveyances and includes drilled wells, dug driven point wells, and natural springs.

Agricultural commodity: any plant, or part thereof, including but not limited to sod and ornamental tree production, or animal or animal product produced by persons (including farmers, ranchers, vineyardists, nurserymen, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by man or animals.

Aircraft: a motorized device used for flight.

Anti-siphon device: any equipment designed and constructed to prevent the accidental backflow or siphoning of pesticide into any water supply or to prevent contamination by a pesticide of other materials being injected at the same time such as fertilizers or other pesticides.

Application sites or treatments for rights-of-way means:

a. Foliar: The placing of a pesticide upon the leaves of growing plants.

b. Basal: The placing of a pesticide upon the stem at the base of a growing tree or shrub.

c. Stump: The placing of a pesticide upon the cut surface of a stump.

d. Soil: The placing of a pesticide upon the ground for uptake by plants in the immediate vicinity.

Application of a pesticide: the placement for effect of any pesticide at or on the site where pest control or other response is desired.

Applicators regulated in Vermont are defined as follows:

a. Certified commercial applicator: any person certified under the categories and standards of Section VIII, Vermont Regulations for Control of Pesticides.
b. Commercial applicator: a person who applies pesticides to the lands or homes of another whether for remuneration or gratis under the direct supervision of a certified commercial applicator.

c. Private Applicator: any person who uses or supervises the use of any pesticide other than those classified restricted use on property owned or rented by the applicator that is residential in nature or on property owned or rented by the applicator or the applicator’s employer for the production of an agricultural commodity. Private applicators may apply pesticides to the property of neighboring producers of agricultural commodities without a commercial applicator’s certificate, providing that the applicator receives no compensation other than the trading of personal services between the applicator and his neighbor.

d. Certified private applicator: a private applicator who has been certified under the requirements of Section IX, Vermont Regulations for Control of Pesticides. Certified private applicators may purchase, use or supervise the use of restricted use pesticides.

e. Noncommercial Applicator: a person who uses or applies pesticides in the course of employment. It is anticipated by these regulations that in most instances the use of pesticides will comprise only a portion of the applicator’s duties and that other employment responsibilities will be unrelated to pesticide application. Noncommercial applicators are exempt from the company licensing requirements. Noncommercial applicators without certification may apply only Class “C” pesticides in the course of their employment. Persons without certification who are hired as independent contractors for the exclusive purpose of applying Class “C” pesticides shall have the burden of proof in any departmental hearing to rebut the presumption that they are commercial applicators.

f. Certified Noncommercial Applicator: a noncommercial applicator who has been certified under the standards and categories of Section VIII, Vermont Regulations for Control of Pesticides. A certified noncommercial applicator may purchase, use or supervise the application and use of restricted and Class “B” pesticides in the course of their employment. Certified noncommercial applicators are exempt from the company licensing requirements. Certified noncommercial applicators shall comply with all other requirements of these regulations.

8. Appurtenance: all valves, pumps, fittings, pipes, hoses, metering devices, mixing containers, and dispensing devices which are connected to a storage container, or which are used to transfer liquid pesticide or pesticide rinsate into or out of a storage container.

9. Brownout: foliar discoloration resulting from the application of pesticides or other vegetation control methods.

10. Bulk pesticide: liquid pesticide in a container larger than 210 gallons (.795 liters) or dry pesticide in undivided quantities greater than 100 pounds (45 kilograms). It includes mini-bulk pesticide containers, except as otherwise specified.

11. Chemigation: any process whereby a pesticide(s) is (are) mixed with water and applied through irrigation systems to land and/or crops including, but not limited to, agricultural, nursery, turf, golf course, ornamental or greenhouse sites through an irrigation system.

12. Commissioner: the Commissioner of Agriculture, Food and Markets of the State of Vermont or a duly authorized agent.

13. Company license: a license issued by the Department of Agriculture to business entities which apply any pesticides to the lands or homes of another person for remuneration. No person or business entity may contract to use any pesticide on the lands of another without first
obtaining a company license. A company license does not exempt a commercial applicator from applicable certification requirements. The regulations pertaining to the company license became effective January 1, 1981, and can be found in Section VI of these regulations.

14. Conspicuous point of access: the usual and customary entrance(s) where people are likely to enter a treated area and observe warning signs pursuant to Section IV.

15. Demonstration: to conduct or supervise field research or exhibitions with old, new or experimental use pesticides or pesticide application methods or equipment or to exhibit, sell or recommend pesticides to the general public, pesticide applicators or pesticide dealers.


17. Direct supervision: on-site supervision of pesticide application by a certified applicator who is capable of calibration of equipment, prescribing pesticides, calculating volumes of pesticides to be applied, and dealing with emergency situations which might occur.

18. Discharge: a spill, leak, accidental or intentional release, or other emission of pesticide from a storage container, container or appurtenance, and includes a discharge into secondary containment. It does not include a fully contained transfer of bulk pesticide which is made pursuant to sale, storage or distribution or releases that are in accordance with label directions.

19. Distribute: to import, consign, sell, offer for sale, solicit orders for sale, or otherwise supply pesticide for sale or use in this State.

20. Drift: the airborne movement of a pesticide during or immediately after its use or application to a site unintended for its use or application.

21. Dry pesticide: pesticide which is in solid form prior to any application or mixing for application and includes, but is not limited to, formulations such as dusts, wettable powders, dry flowable powders and granules.

22. Economic poison: any substance produced, distributed or used for preventing, destroying, or repelling any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living humans or other animals, which the Commissioner shall declare to be a pest or any substance produced, distributed or used as a plant regulator, defoliant or desiccant.

23. Enterprise: any form of doing business, including, but not limited to, sole proprietorships, partnerships, joint ventures and corporations.

24. EPA: the United States Environmental Protection Agency.

25. Equipment: any mechanical device used to apply pesticides.

26. Environmentally Sensitive Areas: include those areas which are significant wetlands as defined by the Vermont Wetlands Act, necessary wildlife habitat (10 V.S.A. Section 6001(12) and which contain endangered or threatened species (10 V.S.A. Section 5401(6) and (7).

27. FIFRA: the Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136 et seq.

28. Forest trees: plants which are primarily used for wood, watershed protection, land stabilization purposes, or wildlife habitat.

29. Fruit and crop plants: plants which are primarily used to produce food, forage, or seed.

30. Full-time employee: an employee who works 35 hours minimum per week. A full-time employee does not include seasonal personnel.

31. Golf Course: any contiguous area upon which the game of golf is played, including such supporting operations as practice greens, tees and driving areas, whether existing or proposed.

32. Golf Course – existing: a golf course, after construction, when it has been opened for play.
33. Golf Course—proposed: a golf course, including expansions of existing courses, which is in the design, permit or construction stage and has not been open for play.

34. Ground water: water below the land surface which occurs in a saturated zone of the soil.

35. Half-Life: the time required for disappearance of one half of the pesticide residue present.

36. KOC: a measure of the tendency of a pesticide to be strongly attached, by chemical or physical bonds, to soil particle surfaces. The higher KOC values have a stronger attachment to soil and a lesser tendency for the pesticide to move off-site except with sediment movement.

37. Loading: any act of transferring pesticide to or from any storage container or to any mobile application equipment.

38. Liquid pesticide: pesticide in liquid form and includes, but is not limited to, solutions, emulsions, suspensions, and slurries.

39. MSDS: Material Safety Data Sheet is a document required for each hazardous chemical including pesticides by the Occupational Health and Safety Act. It contains health and safety data as well as physical properties pertinent to the chemical which will aid in an emergency situation. MSDS can be obtained through the distributor or the manufacturer of the pesticide.

40. Manufacture: to process, manufacture, formulate, prepare, compound, package, repackage or label any pesticide.

41. Mixing: the act of combining pesticides and/or solvents or diluents for the purpose of application.

42. Ornamental and flowering shrubs and plants: plants used for ornamental purposes not otherwise classified as shade trees.

43. Person: any individual, partnership, association, corporation, or organization of persons whether incorporated or not, including any municipality, state, or federal agency or subdivision of any state.

44. Pesticide: economic poison as defined in 6 V.S.A. Section 911 and Section 1-21 of the Regulations For Control of Pesticides.

45. Pesticide applicator: any person who uses any pesticide.

46. Pesticide dealer: any person who distributes, takes orders for sale, offers for sale or sells pesticides.
47. Prescreened Pesticide List: a list of pesticides which due to their relative immobility and limited persistence (as measured by parameters such as, but not restricted to solubility, KOC and half-life) are unlikely, under normal conditions and acceptable use, to leave established turf grass and enter surface and/or ground water.

48. Private Non-Residential Property: property open to the public and which is not a residence, such as an athletic field.

49. Public Non-Residential Property: property open to the public and which is not a residence, such as a commercial business.

50. Public Water System: any system or combination of systems owned or controlled by a person which provides piped drinking water to the public which has: a) has at least ten service connections, or b) serves at least an average of at least twenty-five individuals for at least 60 days a year. Public water system shall also mean any part of a piped system which does not provide drinking water, if such use of such a part could affect the quality or quantity of the drinking water supplied by the system.

51. Public (or private) Water Source Protection Area: a surface or subsurface area from or through which contaminants are reasonably likely to reach a public (or private) water source.

52. Public (or private) Water Source: any surface or ground water supply used as a source of drinking water for a public (or private) water system.

53. Restricted use pesticides: those pesticides classified under Section 3(d) of FIFRA as amended, U.S. Environmental Protection Agency or those pesticides classified by the Commissioner as Class "A".

54. Right-of-way: an interest in real property, above, on or below the ground, which entitles the holder of the interest to pass over the land for the purpose of carrying, transmitting or transporting liquids, gases, electricity, communications, vehicles or people. For the purpose of these regulations, it is immaterial whether the right-of-way is owned, leased, or an easement. The term "right-of-way" includes properties owned or leased by utilities where that property is used as a right-of-way.

55. Shade trees: plants which are primarily used for shade, aesthetic value, ornamentation or windbreak.

56. Simple Dilution Analysis: an analysis involving the dilution of a chemical with an expected volume of precipitation available for infiltration within a watershed or hydrologic unit. Simple Dilution Analysis is used to assess the potential for a contaminant to be transported to groundwater through the process of infiltration.

57. Storage: storage of pesticide by a person who uses, manufactures or distributes pesticide.
58. Storage container: a container used for the fixed storage of bulk pesticide; a rail car, nurse tank, a portable container of mini-bulk pesticide or other mobile container which is used for the fixed storage of bulk pesticide for more than 15 consecutive days. It does not include a container which is used solely for emergency storage of leaking pesticide containers which are 55 gallons or smaller.

59. Storage facility: a location at which bulk pesticide is held in storage.

60. Surface Water: any river, stream, creek, brook, reservoir, pond, lake, spring and any other body of surface water, whether natural or artificial.

61. Turf: a covering of mowed vegetation growing together with an upper soil stratum of intermingled roots and stems.

62. Turf-grass: a species or cultivar of the plant family Graminae usually of spreading or upright habitat, which is maintained as a mowed turf.

63. Use of a pesticide: any handling, release or exposure of a pesticide to a human or the environment including, but not limited to:

   a. application of a pesticide, which includes mixing or loading of equipment and any required supervisory action in or near the areas of application;

   b. storage of pesticides and pesticide containers;

   c. disposal of pesticides and pesticide containers; and

   d. recommendation of pesticide applications.

64. Utility: railroad companies, pipelines operators, communication companies and electric companies whether public or privately owned.

65. Vegetation means:

   a. herbaceous plants: species that do not develop woody stems;

   b. brush: woody species of shrubs, trees, vines, and brambles generally not exceeding ten feet in height; and

   c. trees: woody species generally reaching a height of ten feet at maturity.

66. Vermont Act 31: the State law enacted by the General Assembly of Vermont on May 3, 1985, relating to Community and Worker Right-to-Know; Sec. 1. 18 V.S.A. Chapter 36.

67. Water Supplies: any developed source of water whether public or privately owned, that is intended for human consumption.
2.01 Issuance of Licenses, Certificates, and Permits
   The Secretary may issue licenses, certificates, and permits.

2.02 Denial, Amendment, Suspension, or Revocation of Licenses, Certificates, or Permits
   (a) The Commissioner may deny, amend, suspend, or revoke any license, certificate or permit for failure to comply with 6 V.S.A. Chapter 87 or any rule or regulations adopted under its authority or for being subject to a final order imposing a civil penalty under 7 U.S.C. Section 136(j) or for being convicted under 7 U.S.C. Section 136(j) on due notice to the licensee or holder of the certificate or permit, with an opportunity for hearing if a written request is filed with the Secretary within five (5) days of receipt of a notice of violation.
   (b) If the Commissioner finds that public health, safety, or welfare imperatively requires emergency action and the Commissioner incorporates a finding to that effect in his order, summary suspension of a license, permit or certificate may be ordered, pending proceedings for revocation or other action.

2.03 Restriction and Regulation of Ineffective and Hazardous Products or Devices
   (a) The Secretary may restrict, or regulate, deny any pesticide product or device which is deemed to be ineffective or which constitutes an undue hazard to the public or the environment.
   (b) Any person aggrieved by a decision of the Secretary under this section may request a hearing within fifteen (15) days of the receipt of notice of the decision. The hearing shall be for the purpose of reviewing evidence pertaining to the ineffectiveness of the product or the hazard presented to the public from its use.

2.04 Pesticide Cease and Desist Order
   (a) The Secretary may issue a cease and desist order for failure to comply with 6 V.S.A. Chapter 87 or any rule or regulation adopted under its authority with an opportunity for hearing if a written request is filed with the Secretary within five (5) days of receipt of the cease and desist order.
   (b) It shall be unlawful to violate a cease and desist order.

2.05 Right of Entry
   The Secretary, in furtherance of the purpose of 6 V.S.A. Chapter 87 and the regulations adopted pursuant to this chapter, enter the business premises, public or private, including application job sites, to inspect records, equipment, or obtain pesticide samples of any licensed company, certified applicator, or persons using pesticides to inspect records, equipment or obtain pesticide samples as may be necessary to carry out the provisions of 6 V.S.A. Chapter 87 and this regulation, including pesticide
application sites, to inspect records, inspections, equipment, or obtain pesticide samples of 6 V.S.A. Chapter 87 and this Rule.

The Commissioner may enter any job site at which a certified applicator is employed or where pesticides are used to request information regarding pesticide use at that site, to test equipment or to obtain samples of pesticides or other samples including, but not limited to: soil, water, air, food, plant material and animal tissue, from both treated and untreated areas.

2.046 Reciprocal Agreements:

(a) The Secretary Commissioner may enter into a reciprocal agreement with officials of other states and federal agencies and grant tissue certificates to a certified applicator of another state on a reciprocal basis provided that:

1) the certification requirements are substantially the same as those required by Vermont;
2) the certified applicator knows and abides by Vermont's pesticide control law and regulations;
3) the certified applicator pays all appropriate fees; and
4) the certified applicator is a resident of and has a valid pesticide applicator license or certificate issued by a state which has established a reciprocal agreement with Vermont.

(b) The certified applicator's reciprocal certificate is valid for an entire calendar year.

(c) Applicants with certificates which expire on dates other than December 31 of each year shall provide confirmation that their certificate has been renewed by their state of residence within forty-five (45) days from the date of expiration.

(d) Failure to provide confirmation will result in the revocation of reciprocal certificates.

(e) The certified applicator shall notify the Agency when their state’s certification is terminated.

2.6 Variances. DAVE help.

In addition to authority conferred by these regulations, the powers of the Commissioner include all statutory authority vested in the Commissioner, now or in the future, to enforce state pesticide laws and regulations. The Commissioner shall develop and implement policies and strategies for the management of pesticide use and the protection of ground and surface water resources.

SECTION II—LICENSES, CERTIFICATES, AND PERMITS ISSUED BY THE AGENCY 20. AGENCY OF AGRICULTURE, FOOD AND MARKETS

Section 3. Licenses, Certificates, and Permits Issued by the Agency

1. Licenses - The following licenses are issued by the Department:

3.01(a) Company License
a(a4) — A business entity which uses a pesticide on the land or home of another person for remuneration or gratis shall obtain a company license which shall expire on December 31st of the year in which the license was obtained. Company license: shall be obtained by business entities which apply pesticides to the lands and homes of others for remuneration. See Section VI.

SECTION VI - COMPANY LICENSE.

1. Any enterprise applying pesticides to the land or home of another for remuneration must be licensed by the Department. (b2) Exceptions. The following persons are exempted from the requirement of section 3.01(a): to the company license requirement shall be:

(1A) a— A Doctors of Medicine and Doctors of Veterinary Medicine applying a pesticide as a drug or medication during the course of practice.

b(2B)— Applicators certified under Category 10 research, demonstration, or sales programs only making, making recommendations and applying a pesticide in research, demonstration, or sales demonstration or research programs.

c(3C)— Private applicators who apply pesticides to a neighbor's property the property of neighboring producers of agricultural commodities, providing that the applicator receives no compensation other than the trading of personal services between the applicator and their neighbor, in exchange for services.

d(4D)— Certified and noncertified Noncommercial applicators.

2. The company license shall be renewed yearly. The license shall extend from January 1 through December 31.

3. A fee of forty dollars ($40.00) shall be charged for a company license.

4. The Commissioner may deny an application for a company license when the applying company is owned, controlled, or operated by persons or their employees who have been determined to have violated Vermont's pesticide laws, or any rule or regulation adopted under its authority, or any order of the Commissioner under 6 V.S.A. Chapter 87 within two years preceding the date of application.

5. Applicants who are denied a company license may request a hearing to review the decision within fifteen days of receipt of the denial.

6.(cE) Business entities required to obtain a company license shall:

(1) Licensed companies and those requiring licensing shall be responsible for ensuring that they only employ pesticide applicators that are properly certified under these regulations prescribed by the Commissioner in Section VIII and that applicators employed by them remain certified for the duration of their employment with the company, except that those employees working under the direct supervision of a certified applicator need not be certified.
Licensed companies shall supply the Department with a list of all certified commercial applicators they employ. They shall send written notice to the Department within thirty (30) days whenever a certified commercial applicator is hired or leaves their employment.

(F) Licensed companies shall

| 2 | send written notice to the Agency the Secretary within 30 days whenever a certified commercial applicator is terminated from their employment; and: |

| 3 | Companies shall renew the company license annually |

3.02(b) Dealer License Classifications

- are issued in the following categories:

1. Classes

   (a) Any dealer who distributes a pesticide shall obtain the appropriate dealer license:

   (1) A person who distributes a Class "A" pesticides shall be obtained by persons who sell restricted use pesticides a Class A license and, employ a full-time employee that has the appropriate license for the pesticide class being distributed, which also entitles the licensee to sell Class "B" and Class "C" pesticides. See Section X.

   (2B) A person who distributes a Class "B" pesticides shall be obtained a Class B license by persons who sell Class "B" pesticides, which also entitles the licensee to sell Class "C" pesticides. See Section X.

   (3C) A person who distributes a Class "C" pesticides shall be obtained a Class C/Retail/Class C/Class C license and is exempt from the examination requirements of Section 3.03, by stores or other sales outlets which sell Class "C" pesticides. See Section X.

SECTION XI - PESTICIDE DEALER LICENSES

1(b2) Class "A" and Class "B" licenses - Dealer Outlets

a (1A) No store or other retail sales outlet shall sell or distribute a pesticides into or within the state pesticides restricted use or Class "B" pesticides without the appropriate license.

(2B) Outlets that distribute a Class A or Class B pesticides shall employ a unless a licensed dealer is a full-time employee that has the appropriate licensure license for the pesticides class being distributed, of the store or retail sales outlet. A full-time employee shall be a person who works at least 32 hours per week on a year-round basis.

(3C) Outlets that distribute only Class C pesticides shall obtain a Retail/Class C/Class C license.

(3.03 3) Dealer Licensure Examination Requirements
Persons who pass the tests required for Class "A" or Class "B" dealer licenses shall be entitled to sell the following classes of products:

1. Class "A" license: Licensees may sell any pesticide registered in the State of Vermont, subject to the limitations imposed by these regulations. Generally, Class "A" licensees may sell restricted use, Class "B" and Class "C" pesticides.

2. Class "B" license: Licensees may sell any Class "B" or Class "C" pesticides registered in the State of Vermont.

b.(A)—(ai) Candidates for Class A and B licenses shall submit to a written examination covering competency standards and recordkeeping requirements, including, but not limited to, Prior to the issuance of a license, a pesticide dealer must apply for a license to the Commissioner and then pass a written and/or oral examination conducted by the Commissioner to show that the applicant possesses adequate knowledge of: regulations, Vermont classification of pesticides, pesticide labels, safe handling, hazards, spill cleanup, and proper disposal and disposal of pesticides which will be sold or recommended for use.

(ii) Class C licenses are issued to retail outlets, entitling the licensee to sell Class C pesticides from that location. No examination is required. Class C licenses are issued upon payment of the required fee.

(bii) A candidate shall have a maximum of three opportunities to achieve a passing score on the certification examination during a 12-month period. This 12-month period shall begin on the date the candidate takes the first examination. After an initial failing score, a candidate must wait at least seven days to retake the examination. If a candidate fails twice, there shall be at least a 28-day waiting period before taking the exam for the third time. After an initial failing score a candidate must wait at least seven days to retake the examination. If a candidate fails twice, there shall be at least a 28-day waiting period from the first examination date before taking the exam for the third time.

(cB) Licensed

c. Holders of Class "A" and Class "B" dealer licenses are required to notify the Agency the Secretary, in writing, the Department within thirty (30) days of termination or a change of employment, including a change from one branch store location to another.

(dE) A license may be renewed without examination provided that the conditions under which the original license was issued have not changed. However, the Secretary may determine that additional instruction or examination is necessary to meet new criteria relative to any pesticide use, handling, or disposal and require re-examination or training prior to renewal.

(ef) A license not renewed in 365—days shall be considered lapsed and shall require re-examination prior to any re-issuance.

3.041(e) Applicator Certificates

(4a) Commercial and non-commercial applicator certificates.

(1A) A person who uses or supervises the use of a pesticides to the lands and homes of
2. Class "C" licenses are issued to retail outlets, entitling the licensee to sell Class "C" pesticides from that location. No examination is required. Class "C" licenses are issued upon payment of the required fee.

3. All sales and technical field representatives of commercial companies recommending or demonstrating pesticides to "agricultural type" company stores and individuals shall be certified under Section VIII, Demonstration and Research Pest Control, and shall make annual reports of sales of pesticides classified for restricted use plus materials used for demonstrations.

4. Salesmen for wholesale companies operating in Vermont and selling to institutions, governmental subdivisions and retail sales outlets other than "agricultural type" company stores shall be licensed according to the classification of the pesticide sold. Salesmen selling only Class "C" pesticides are exempted from this provision.

5. License classification, renewals and fees
   a. A pesticide dealer's license shall state the classification of pesticides the dealer is qualified to sell and will be considered as one category for fee assessment purposes.
   (1) Pesticide dealers shall be classed as follows:
      (a) Class "A" dealer refers to a dealer licensed to sell restricted use pesticides, Class "B" pesticides, special permit pesticides and Class "C" pesticides. Class "A" dealers shall not sell restricted use pesticides or special permit pesticides to Class "B" or Class "C" dealers.
      (b) Class "B" dealer refers to a dealer licensed to sell Class "B" and Class "C" pesticides. Class "B" dealers shall not sell Class "B" pesticides to Class "C" dealers.
      (c) Class "C" dealer refers to a dealer licensed to sell Class "C" pesticides only.
   (2) A license fee of twenty dollars ($ 20.00) will be assessed for the issuance of a Class "A" or Class "B" license; a fee of ten dollars ($ 10.00) will be assessed for the issuance of a Class "C" license as provided under Section 1109 by 6 V.S.A. as amended in 1989.
   b. The license year will extend from January 1 through December 31 and the license must be renewed annually by January 1 of each year. Licenses may be renewed without examination provided the conditions under which the original license was issued have not changed. However, the Commissioner may determine that additional instruction or examination is necessary to meet new criteria relative to any pesticide use, handling or disposal.
   others whether for remuneration or gratis shall obtain certification as a Commercial Applicator.
   (2B) A person who uses or supervises the use of a Class A or Class B pesticides in the course of their employment on their employer’s
property shall obtain certification as a noncommercial Applicator.

(Cb) Private applicator certificate. A person who uses or supervises the use of a Class A pesticide on property owned or rented by the person for the production of an agricultural commodity shall obtain certification as a Private Applicator.

(Dc) Exemptions.

1. A Doctor of Medicine or Doctor of Veterinary Medicine who applies a pesticide as a drug or medication during the course of practice is exempt from the certification requirement pursuant to Section 3.1(cb)(11)(A)-(C).

2. Any person conducting laboratory research involving a pesticide.

(dE) A person who strictly retails or distributes a Class A or Class B pesticide directly to an end user in this state, and who is not employed at a dealer outlet, shall obtain certification in the category of products sold.

(e) Any applicator who uses a federally restricted use pesticide under the provisions of FIFRA shall be certified under this regulation in the appropriate category and sub-categories. A noncertified applicator may not use a federally restricted use pesticide under direct supervision.

(2) General Requirements for Applicator Certification

(A)-(a) A candidate for certification shall be at least 18 years of age.

(bB) A candidate for certification shall submit to a written examination(s) covering the applicable competency standards described in Sections 8 and 9.

(cC) 1. All noncommercial applicators who use other than Class "C" pesticides and all commercial applicators who use pesticides shall be certified in accordance with the applicator standards established in these regulations, or work under the direct supervision of a certified commercial or certified noncommercial applicator. (See definition of "direct supervision", Section I.)

Exceptions: Persons conducting research in laboratories, or Doctors of Medicine or Doctors of Veterinary Medicine applying pesticides as drugs or medication during the course of their normal practice are exempt from the certification requirement.

2. The candidate for certification shall satisfactorily meet standards prescribed by the Commissioner in Section VIII.

3. Candidates for certification shall take a written examination covering general standards and specific standards required for each category an individual expects to operate under. A candidate for certification must be certified in each specific category and sub-category, if applicable, in which they intend to work.

(dD) a. A candidate for certification shall have a maximum of three opportunities to achieve a passing score on the certification examination during a twelve (12)-month period which. This twelve (12)-month period
shall begin on the date the candidate takes the first examination. After an initial failing score, a candidate must wait at least seven (7) calendar days to retake the examination. If a candidate fails twice, there shall be at least a twenty-eight (28)-calendar-day waiting period from the first examination date before retaking the exam for the third time.

4.(3) Any certificate issued in any category may be further restricted by the CommissionerSecretary as a condition of issuance, when the CommissionerSecretary determines that the restrictions are necessary to protect human life or the environment. For example, a certain category certificate may be restricted to allow only the use of specific pesticides in that type of work.

5. Fees: A fee of twenty dollars ( $ 20.00) shall be assessed for each category or sub-category certification issued. The maximum total fee charged for categories per candidate shall be seventy-five dollars ( $ 75.00). Payment of fees for persons who are employees of federal, state or municipal government and who apply pesticides as part of that employment shall be waived.

6. (4)3.06 Certification of Commercial and Noncommercial Applicators The certification year will extend from January 1 through December 31.

   (a) Certification shall expire on December 31st of the year in which the certificate was obtained.

   (b2)  a.-- Certification of noncommercial and commercial applicators may be renewed annually for up to five (5) years, after which recertification shall be required, either through training or re-examination.

   (c3) The CommissionerSecretary may furthermore require recertification whenever necessary and determine the procedure to be utilized involving either for additional training or re-examination.

   (d3d2) b.-- Certified noncommercial or commercial applicators shall send written notice to the Department Agency within thirty (30) days of termination or changing employers. The name of the new employer shall be supplied in the notice.

   (4e53) A certificate not renewed in 365 days shall be considered lapsed and shall require re-examination prior to any re-issuance.

7.(6)3.07 Certification of Private Applicators

   (a) Certification of private applicators is valid for five years, after which recertification shall be required either through training or re-examination.

   (b2) The Secretary may require recertification whenever necessary and shall determine the procedure for additional training or re-examination.

   (c7c) The Secretary shall require that private applicators obtain additional certification, regardless of the class of pesticide used, for certain use patterns, including, but not limited to, soil and commodity fumigation or aerial application.

   (d) A certificate not renewed by April 1st of the year following the expiration of the certificate shall be considered lapsed and shall require re-examination.

3.07 Certificate Revocation or Restriction
Any pesticide applicator certificate issued may be revoked or further restricted by the Secretary as a condition of issuance when the Secretary determines that the restrictions are necessary to protect human life, health or the environment.

Denial of certificate: The Commissioner may deny issuance of a certificate to any person failing to adequately demonstrate competency on any examination or who otherwise fails to participate in training required in lieu of written examination or who is currently under a suspension or revocation of certificate by the Commissioner.

2. Certificates: The following certificates are issued by the Department:

a. Commercial and noncommercial applicator certificates: shall be obtained by persons who apply or supervise the application of pesticides to the lands and homes of others whether for remuneration or gratis. Applicators who apply pesticides under the direct supervision of a certified commercial applicator are exempt from the certification requirement. Noncommercial applicators (as defined in Section I. 8.) shall be certified if they use or supervise the use of Class "B" or restricted use pesticides in the course of their employment, except when they work under the direct supervision of a certified applicator. See Section VII.

b. Private applicator certificate: shall be obtained by private applicators (as defined in Section I.) who wish to purchase and use restricted use pesticides. See Section IX.

3.0815(d) Permits – The following permits are issued by the Department:

—-(I) A person who intends to use a pesticide in any of the following areas, or manners, shall first obtain an approved permit from the Secretary:

(aA) a. Right-of-way, exclusive of terrestrial invasive plant control) Aerial application permits: shall be obtained before applying pesticides from an aircraft. Two types of aerial permits are issued: an aerial agricultural permit which is good for an entire season and special aerial permits for specific jobs. See Section IV.

(bB) b. Right-of-way application permits: shall be obtained before applying pesticides to rights-of-way, as defined in Section I. See Section IV.

(cC) c. Experimental use permits: shall be obtained to use an unregistered pesticide or to use a registered pesticide for an unregistered use. See Section IV.

(dD) d. Bird or animal control, exclusive of the phylum Chordata (families Cricetidae and Muridae) permits: shall be obtained to control bird or animal pests that may be lethally controlled by use of a pesticide under statute or declared a pest by the Commissioner. See Section IV.

(eE) e. Special permits for the sale or use of specially restricted pesticides: shall be obtained before using specially restricted compounds as established by statute or these regulations. See Section IV.

(fF) f. Golf course, and permit: shall be obtained in accordance with the provisions herein before applying pesticides to a golf course. See Section IV.

(gG) g. Mosquito larvicide.

(hH) h. Mosquito adulticide; and

(iI) Terrestrial invasive plant controls in a right-of-way.

3.0946(e) Requirements for Licenses, Certificates, and Permits
Any form required by the Secretary shall be filled out completely and accurately and any applicable fee shall be remitted to the Agency

Forms required by the Agency must be filled out completely and accurately. All applicable fees must be remitted.

a. Businesses or persons who wish to obtain a license, certificate, or permit shall:

3.1047(f) Denial, Amendment, or Revocation of Licenses, Certificates, and Permits

(a) The Secretary may deny, amend, or revoke issuance of a license, certificate, or permit to any person who:

(1) Request the appropriate application form from the Plant Industry Division of the Department of Agriculture, Food and Markets;

(2) Complete the appropriate form and return it to the Plant Industry Division;

(3) Remit any fees required by law or these regulations when the completed form is submitted;

(4) Satisfy all prerequisites established by these regulations to demonstrate competence or financial responsibility for the particular license, certificate, or permit requested:

(a) Examinations required as part of the prerequisite for a license or certificate will be maintained for a period of one year unless an active file is established; and

(b) Inactive files will be destroyed one calendar year after a holder of a license or certificate fails to renew that certificate or license.

(5) Businesses and persons proposing to store, use, or distribute pesticides are advised that the statutes and regulations administered by the Vermont Occupational Safety and Health Program may be applicable to them. For further information, write or call the Vermont Department of Labor and Industry, 7 Court Street, Montpelier, Vermont; telephone number: 802/828-2765.

SECTION III—POWERS OF THE COMMISSIONER

(1) who fails to demonstrate competency on any examination; or

(2) who is currently under a suspension or revocation by the Secretary; or

(3) who fails to provide accurate and complete information to the Agency;

(4) who fails to remit appropriate fees to the Agency; or

(5) for unreasonable adverse effects? (see FIFRA EUP language);

(b) The Secretary may amend a license, certificate, or permit to a person upon written request and from the permittee and after Agency review.

(c2) Any person whose denied license, certificate, or permit is denied, amended, or revoked may appeal the Secretary’s determination within 15 days of receiving notice of the denial, amendment, or revocation by requesting a hearing, in writing, to the Secretary.

Section 4. Classification of Pesticides and Limitations on Sale
4.01 Classification and Registration

(a) The EPA classifies all registered pesticides available to consumers as either general use or restricted use for the purposes of federal regulation. Vermont recognizes federal and state restricted use pesticides as Class A. Vermont classifies any registered pesticide used, sold, distributed, or manufactured within the state into three categories known as:

1. Class A - Restricted Use – federal and state.
2. Class B - Controlled Sale.
3. Class C - Homeowner.

(b) Any pesticide sold in Vermont shall be registered with the State under 6 V.S.A. Chapter 81.

4.02 Identification of Class A – Restricted Use, Class B – Controlled Sale and Class C – Homeowner Pesticides

(a) Class A – Restricted Use – Federal shall be those federally restricted use pesticides identified by the EPA designation "Restricted Use Pesticide" on the product label.

(b) Class A – Restricted Use – State shall be those pesticides classified as general use by the EPA and reclassified as restricted use by the Agency after consideration of the following:

1. Toxicological profile, including acute, sub chronic and chronic effects.
2. Environmental profile, including aquatic and wildlife effects.
3. Physical hazard profile, including the potential for fire, explosion and reactivity.
4. Potential for ground and surface water contamination.
5. Potential for misuse.
6. Potential for drift.
7. Container construction and size.
8. Those requiring training due to special concerns.
9. Method of application.
10. Product label statements, such as “professional use”.

(c) Class B – Controlled Sale shall include all turf products, excluding products containing either Bacillus thuringiensis or potassium fatty acids regardless of percent of total active ingredient and does not meet Class A definition, and any pesticide that is for use outside of the home and not marketed as ready-to-use. The Secretary reserves the right to classify additional pesticides as Class B.

(d) Class C – Homeowner shall include any pesticide applied in and around the home and which are marketed as ready-to-use or have total active ingredient less than 3%. The following additional pesticides are classified as Class C:

1. Class C pesticides with a limited percentage of active ingredient include DDVP impregnated strips with concentrations not over 20% in resin strips and pet collars.
2. Class C pesticides with an unlimited percentage of active ingredients include the following:
(A) pet supplies including shampoos, dips, tick and flea collars and dusts;
(B) wood preservatives and sapstain control agents other than creosote, inorganic arsenicals, and pentachlorophenol;
(C) animal repellents;
(D) moth flakes, crystals, cakes and nuggets;
(E) indoor aquarium products;
(F) swimming pool products;
(G) pediculocides and mange cure on humans;
(H) pheromone baits and lures;
(I) premixed paints which make pesticidal claims; and
(J) animal ear tags.

(3) The Secretary reserves the right to classify additional pesticides including non-homeowner products as Class C.

4.03 State Prohibited Pesticides

The following pesticides are prohibited from use in Vermont:

(a) All uses of a pesticide cancelled or suspended under FIFRA amended at the time these regulations are adopted are hereby prohibited in Vermont.
(b) All uses of a pesticide prohibited in the future by the EPA will be prohibited in Vermont.
(c) All DDT - Dichloro-diphenyl-trichlorothane use is prohibited by 6 V.S.A. Section 1105, as of December 31, 1971.
(d) All pesticide products formulated from technical grade 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) which contain more than 0.10 ppm 2,3,7,8-tetra chlorodibenzopara-dioxin (TCDD) shall not be sold or used in the State of Vermont.

4.04 Limitations on the Sale of Pesticides

(a) Limitations on sales of Class A – Restricted Use – federal and state.

(1) Dealers shall obtain a Class A dealer's license before they may distribute a Class A - Restricted Use pesticide.
(2) A Class A pesticide shall be sold only to certified applicators and persons who produce written authorization from a certified applicator to purchase specific Class A pesticides. Written authorization shall include the certificate number of the certified applicator authorizing the purchase, as well as the name and quantity of the pesticide desired.
(3) A Class A pesticide shall not be displayed for self-service or stored in food areas.

(b) Limitations on sales of Class B pesticides.

(1) Dealers shall obtain a Class A or Class B dealer's license before they may distribute a Class B pesticide to the public.
(2) A Class B pesticide shall not be stored or displayed in food areas.

(c) Limitations on sale of Class C pesticides:
A dealer shall obtain either a Class A, Class B or Class C (retail) dealer's license before they may sell a Class C pesticide to the public.

A Class C pesticide may not be stored or displayed in food areas.

4.05 Availability of Information
The Secretary shall make available pesticide product classifications in a public format.

Subchapter 2 – General Standards for Pesticide Use; Permitting Requirements; Notification and Posting of Pesticide Applications; Maintenance of Records by Certified Applicators, Licensed Companies, Licensed Pesticide Dealers, and Pesticide Producing Establishments

1. Suspension or revocation of licenses, certificates, or permits.

a. The Commissioner may amend, suspend or revoke any license, certificate or permit for failure to comply with 6 V.S.A. Chapter 87 or any rule or regulations adopted under its authority or for being subject to a final order imposing a civil penalty under 7 USC Section 136(j) or for being convicted under 7 USC Section 136(j) on due notice to the licensee or holder of the certificate or permit, with an opportunity for hearing if a written request is filed with the Commissioner within five (5) days of receipt of a notice of violation.

b. If the Commissioner finds that public health, safety or welfare imperatively requires emergency action and the Commissioner incorporates a finding to that effect in his order, summary suspension of a license, permit or certificate may be ordered, pending proceedings for revocation or other action.

2. The Commissioner may restrict or regulate any pesticide product or device which is deemed to be ineffective or which constitutes an undue hazard to the public or the environment. Any person aggrieved by a decision of the Commissioner under this section may request a hearing within fifteen (15) days of the receipt of notice of the decision. The hearing shall be for the purpose of reviewing evidence pertaining to the ineffectiveness of the product or the hazard presented to the public from use of this product.

3. Pesticide cease and desist order.

a. The Commissioner may issue a cease and desist order for failure to comply with 6 V.S.A. Chapter 87 or any rule or regulation adopted under its authority with an opportunity for hearing if a written request is filed with the Commissioner within five (5) days of receipt of the cease and desist order.

b. It shall be unlawful to violate a cease and desist order.
4. The Commissioner may, in furtherance of the purpose of 6 V.S.A. Chapter 87 and the regulations adopted pursuant to this chapter, enter the business premises of any licensed company, certified applicator, or persons using pesticides to inspect records, equipment or obtain pesticide samples.

The Commissioner may enter any job site at which a certified applicator is employed or where pesticides are used to request information regarding pesticide use at that site, to test equipment or to obtain samples of pesticides or other samples including, but not limited to: soil, water, air, food, plant material and animal tissue, from both treated and untreated areas.

5. The Commissioner may enter into reciprocal agreement with officials of other states and federal agencies and grant certificates on a reciprocal basis provided that:

a. Certification requirements are substantially the same as those required by Vermont;

b. The certified applicator knows and abides by Vermont’s pesticide control law and regulations;

c. The certified applicator pays all appropriate fees;

d. The certified applicator is a resident of and has a valid pesticide applicator license or certificate issued by a state which has established a reciprocal agreement with Vermont; and

e. The certified applicator’s reciprocal certificate is valid for the entire calendar year. Applicators with certificates which expire on dates other than December 31 of each year shall provide confirmation that their certificate has been renewed by their state of residence within forty-five (45) days from the date of expiration. Failure to provide confirmation will result in the revocation of reciprocal certificates.

6. In addition to authority conferred by these regulations, the powers of the Commissioner include all statutory authority vested in the Commissioner, now or in the future, to enforce state pesticide laws and regulations. The Commissioner shall develop and implement policies and strategies for the management of pesticide use and the protection of ground and surface water resources.

SECTION IV-54. General Restrictions on the Use and Application of Pesticides

Standards for Pesticide Use - RESTRICIONS ON THE USE AND APPLICATION OF PESTICIDES

5.01(4) Registered and Recommended Uses of Pesticides.

(a) All pesticide uses or recommendations for use shall comply with that pesticide's label, which shall be registered with the U.S. Environmental
Protection Agency (EPA) and the Department of Agriculture, except as provided under authority for pesticide use in Sections 18 and 24(c) of FIFRA as amended.

(b) Pesticide Drift—Pesticide applicators shall use pesticides and a pesticide shall be used conduct operations under conditions known to minimize both spray and vapor drift, contamination of non-target land and water areas.

5.0(2) Standards of Operation—
All pesticide applicators and licensed companies shall:

(a) Shall use only methods and equipment which insure safe and efficient application of a pesticide;

(b) Use properly functioning equipment that is free of leaks and defects and is calibrated according to manufacturer’s calibration instructions.

(b) Shall use equipment with an effective anti-siphoning device to prevent backflow when drawing or pumping water to fill pesticide application devices;

(c) Shall use equipment with an effective anti-siphoning device to prevent backflow when drawing or pumping water to be used in chemigation operations;

(d) Shall operate in a careful manner and only when climatic, pest, or other conditions are proper for controlling pests in the locality;

(e) Shall make no false or fraudulent claims. The term "fraud" includes, but is not limited to, intentional misrepresentation through verbal or written statements, the media, falsified records, invoices or reports or false statement on applications for licenses or certificates;

(f) Shall fill out weekly spray reports completely and accurately maintain, submit, and report use and sales data as required by the Secretary, including but not limited to, weekly spray reports, invoices, sales records, training records, and annual usage;

(g) Shall conform to the application-use restrictions established in 6 V.S.A. Chapter 87, the Regulations for Control of Pesticides, and permits issued thereunder;

(h) Shall cooperate with Department Agency requests for information related to pesticide application, to observe pesticide applications, spraying operations, to inspect equipment, to inspect pesticide related records, to inspect business premises, and to conduct pesticide-related sampling;

(i) Shall apply use all a pesticide consistently with its labeling. Use of a pesticide in the following manner shall be considered application consistent with the labeling:

(1) Applying a pesticide at any dosage, concentration, or frequency less than specified on the labeling;

(2) Applying a pesticide against any target pest not specified on the labeling if the application is to the crop, animal, or site specified on the labeling except when the labeling specifically
states that the pesticide may be used only on pests specified on the labeling;

(3) Employing a reasonable method of application that is not prohibited by the labeling;

(3) employing any method of application not prohibited by labeling;

(4) mixing a pesticide with fertilizer when such mixture is not prohibited by labeling or state regulations;

(5) using a pesticide for agricultural or silvicultural purposes at a dilution factor less than label dosages as authorized by the EPA in regulations or in advisory opinions;

(j) Shall provide the following information (on a bill, invoice, or other written or electronic documentation) to all customers or persons for which pesticide applications are exchanged for remuneration, at the time of application, unless otherwise specified, except for applications under Section IV 4.6: (8):

(1) the common or trade name for each pesticide applied;
(2) the EPA registration number for each pesticide applied;
(3) the amount of each pesticide applied;
(4) the amount of total dilution used, if applicable;
(5) the pest(s) treated for; and
(6) the name and signature of the applicator;
(7) the certified applicator certificate number;
(8) all information as required by the Worker Protection Standard; and
(9) post-application label safety precautions, if specified.

(k) Are advised that Vermont Occupational Safety and Health Program requirements may be applicable to their activities.

l— Shall use a pesticides so as not to exceed the maximum contaminant level or primary groundwater quality enforcement standards pursuant to identified in Appendix One Chapter 12.702 of the “Ground Water Protection Rule and Strategy” in accordance with 10 V.S.A. Chapter 48.

(m) Shall manage the use of a pesticides to reduce the concentrations of a pesticide in groundwater to the preventive action limits pursuant to established by Appendix One Chapter 12.702 of the “Ground Water Protection Rule and Strategy” when monitoring indicates the presence of pesticide concentrations in groundwater that exceed the preventive action limits.

n— Shall obtain a Water Quality Permit (from the Vermont Department of Environmental Conservation, Water Quality Division), prior to using pesticides in waters of the State.

(me) Shall maintain a minimum fifty (50)-foot buffer when applying a pesticides to soil or vegetation which provide control within the soil profile around any existing private well unless written permission allowing a lesser distance has been granted by the well owner or the label prescribes a greater buffer; and

(n) maintain a 200-foot buffer when applying a pesticides to soil or vegetation around a public well, or public water intake unless written permission
allowing a lesser distance has been granted by the water supplier or the label prescribes a greater buffer.

5.03 General Requirements for Pesticide Applicators, Licensed Companies, and Pesticide Dealers

(a) A federally restricted use pesticide shall only be applied by a certified applicator.

(b) Applicators, licensed companies, and dealers shall maintain legible labels on all pesticide containers at all times.

(c) Applicators, licensed companies, and dealers shall not reuse pesticide containers for use in any manner other than what is specified on the container’s original labeling.

(d) Service containers shall be made of similarly durable material to the original container, be free of leaks and have a label affixed to the container or have clearly written information which shall, at a minimum, contain the following information on the label:

   (1) The name, address and telephone number of the applicator or commercial company, if applicable.
   (2) Product name.
   (3) EPA registration number.
   (4) Name and percentage of active ingredient in container.
   (5) Indication whether the material is dilute or concentrate.

(6) Signal word of original pesticide

   Service containers shall bear abbreviated labeling, affixed to the container, which includes:

   (b) Signal word of original concentrate;
   (c) Common name and percentage of active ingredients;
   (d) Name, address and telephone number of pesticide application firm; and
   (e) Notation as to whether the material is dilute or concentrate.

(7) The statement: “Follow the directions for use on the pesticide label when applying this product.”
1. Apply pesticides that are highly toxic to bees when there is less chance for exposure to managed or native pollinators: early morning or late evening.

2. Applications of pesticides that are highly toxic to bees shall provide buffers to native pollinators. Buffers should be accomplished by either: A fifty (50) foot buffer from pollinator foraging sites, such as natural and semi-natural areas or intentional pollinator plantings OR a twenty (20) foot width non-pollinator-attractive vegetative barrier higher than the spray release height with an established 60% plant density.

3. Reduce drift by applying pesticides when winds are less than 9 mph and there is a low risk of inversion.

4. Avoid application of fungicides to plants attractive to pollinators when plants are in bloom.

5. Avoid the use of soil fumigants.

543.04 (3). Protection of Bees -

(a) No person shall apply a pesticide to flowering crops, including but not limited to, alfalfa, apples, blueberries, clover, pumpkins, raspberries, squash, or trefoil without prior notification of an apiculturist who has an established apiary on the premises.

(b) A person or individual hiring a commercial applicator for an application under section 5.04(a) shall be responsible for notifying, or cause to be notified, an apiculturist prior to the application. Apiculturists who are notified of spraying operations shall remove their bees from the area or cover the hives to prevent exposure.

(c) A person applying a pesticide that is highly toxic to bees shall:

1. apply the pesticide during periods and conditions of least exposure, such as early morning, late evening, and when winds are less than nine mph;

2. include a 50-foot buffer from pollinator foraging sites, such as natural and semi-natural areas or intentional pollinator plantings OR a 20-foot wide non-pollinator-attractive vegetative barrier higher than the spray release height with an established 60% plant density; and

3. avoid application of a fungicide to pollinator-attractive plants when in bloom.

Section 6. Permitting Requirements

6.01 The following pesticides are exempt from the requirement of Section IV, subsection 3:

a. Blossom thinning sprays consisting of sodium salt or 4,6-Dinitro-o-cresol (DNC) or Dinitro orthocyclohexylphenol.

b. Fungicides.

(4)— Rights-of-Way Clearing and Maintenance Permit

(a) No entity shall use an herbicides for the purpose of clearing or
maintaining a right-of-way without first obtaining an approved permit from the Commissioner/Secretary for each application as provided in this section. For persons seeking to control terrestrial invasive plant species on a right-of-way for purposes other than for control or maintenance please see Section 6.08.

(b4) Right-of-way clearing and maintenance permits shall not be issued for treatment of terrestrial invasive plants when the presence and treatment of the plant is not required to maintain the right-of-way.

A request for permission to use a herbicide on a right-of-way complete and accurate permit application shall be made, on a form provided by the Secretary, before April 1 of the year of the proposed spray application.

(c3) A complete and accurate permit application shall be made, on a form provided by the Secretary before April/March 1 of the year of the proposed application. Right-of-way clearing and maintenance permits shall not be issued for treatment of terrestrial invasive plants when the presence and treatment of the plant is not required to maintain the right-of-way.

(2) Application shall be made on a form provided by the Commissioner. In the case of utilities, as defined in Section I., the application shall be signed by an officer of the utility and who shall agree to conditions to be set forth by the Commissioner in the permit. Final action by the Commissioner will be taken only after the submitted application form has been forwarded to the Vermont Pesticide Advisory Council (VPAC) members for review and recommendation in accordance with 6 V.S.A. Section 1102(d)(1).

(d3) The application form shall be accompanied by two sets of geodetic maps, a map of the area of proposed application indicating the right-of-way boundaries, surface waters, private and public water supplies, threatened or endangered species, and any water systems or private wells, and a copy of the notice of intent to use an herbicide which shall be published with the right-of-way. With the assistance of the Department of Health, the Department of Agriculture, Food and Markets, shall mark the public water supplies along the right-of-way and return one set of maps to the permit applicant. The other set shall be retained by the Department on permanent file. Subsequent requests for permits to treat the same right-of-way shall require re-submission of the permit applicant’s set of maps for update.

(eb) After applying for a permit to use herbicides on a right-of-way, the permit applicant shall publish a notice of the intent to use herbicides which satisfies the following criteria. A copy of the notice shall be supplied to the Department prior to publication. The notice of intent to use an herbicide shall:

(1) be published not less than 25 days nor more than 60 days before the commencement of spraying application;

(2) be published for one (1) day a week for two (2) consecutive weeks in each of two (2) newspapers prescribed in Appendix B, for every county to be affected by the right-of-way spraying application. If the notice is printed in a daily newspaper, then the notice
shall be published on Thursdays. If the notices are printed in a weekly newspaper, then the notices shall be published on whatever day the paper is published;

(33) be at least two (2) columns wide by three (3) inches high; and

(44) set forth the name and address of the permit applicant; a reasonable identification of the affected right-of-way; the names of the towns where the spraying application is to be done; the approximate date of the herbicide application; that a permit has been requested from the Commissioner Secretary; the method by which the herbicide is to be applied; the common name of the product or active ingredient chemicals to be used; the name, position, address, and telephone number of a person from the permit applicant to contact for further information; the address and phone number of the Department of Agriculture Agency, Food and Markets, identifying it as the appropriate place to contact with comments and/or complaints; a warning notice to residents along the right-of-way that drinking water supplies should be buffered and other environmentally sensitive areas near the right-of-way should be protected from spray application and that it is the resident's responsibility to notify the permit applicant of the existence of a private water supply near the right-of-way.

(fe) In addition to the notice of intent to use an herbicide newspaper advertisements, further notification by one of the following methods containing the information set forth in subdivision 6.014(e)(4) shall be provided by:

(14) three spot messages per day on each of two radio stations in the area of application on two consecutive days during the two-week period prior to the commencement of applying; or:

(22) written communication to residents adjacent to the right-of-way during the calendar year of application, at least two weeks prior to such application, by U.S. Mail or electronic mail; or:

(33) a hand-delivered, printed statement to residents of property adjacent to the right-of-way during the calendar year of spray application, at least ten days prior to such application.

(d) The permit applicant shall notify the Agency of the option used and the dates implemented. The text of this notification shall be supplied in the application.

(1) Upon notification by the landowner or water supply user, the permit applicant shall mark private water supplies on their maps.

(2) Prior to application, the applicant shall flag all public and private water supplies marked on their maps as well as other sensitive areas as designated by the Secretary in the permit.

(3) The applicant shall furnish the certified applicator with a copy of the right-of-way map showing flagged areas and a copy of the approved permit.
The applicator shall not spray near the flagged areas.

Applicants conducting vegetative management along rights-of-way shall submit a long-term vegetative management plan which should include:

1. A general statement of policy and goals;
2. Identification of a biologically sound schedule to achieve long-term objectives including a specified time interval between original control and subsequent scheduled control;
3. Description and identification of the species to be eliminated or controlled versus the species to be left in various types of vegetative settings;
4. List and description of techniques and conditions under which given mechanical, chemical and other methods would normally be considered appropriate;
5. Procedure for identifying, evaluating, reporting and responding to right-of-way maintenance problems;
6. Establishment of clearance standards sought, based on kilowatt of transmission line and the part of the right-of-way to be controlled; i.e., central strip, side strip, high visibility, other;
7. Establishment of standards and practices for:
   (a) Wetlands;
   (b) Wildlife;
   (c) Erosion control;
   (d) Aesthetic considerations;
8. Establishment of right-of-way inspection and monitoring standards including frequency of inspection, manner of inspections and what is to be taken note of; suggested list -- heights of road crossing screens or ideal clearance level, danger trees, evidence of tree-conductor contact, species identification, conditions of sensitive areas, notation of condition of specially or experimentally treated areas;
9. Retention of records to coincide with maintenance cycle of company including right-of-way inspection dates, maintenance schedules, maintenance activities;
10. Provisions for periodically reviewing, evaluating and revising long-range plans and the time interval for such revisions;
11. A plan to assure contractor accountability in implementing the plan such as drawing-up a comprehensive contract for contractors or developing a contractor training program, to familiarize and provide detailed instructions to field personnel in the concepts of the vegetative management plan so that field personnel can demonstrate an understanding of the practices and standards contained in the document. This may include: identification of plant species and their role in the overall management scheme, what is expected practice in sensitive areas, correct techniques to use in a given situation, knowledge of standards sought in a given situation.

Permit - Applicants conducting vegetative management along rights-of-way shall submit a long-term integrated vegetative management plan which shall include to the Agency the Secretary at least every five years. This plan shall include:

11. A general statement of policy and goals;
(22) identification of the species to be maintained; the scheduled frequency and method of maintenance; and an evaluation of non-chemical options;

(2) identification of a biologically sound schedule to achieve long-term objectives including a specified time interval between original control and subsequent scheduled control;

(3) description and identification of the species to be eliminated or controlled versus the species to be left in various types of vegetative settings;

(4) list and description of techniques and conditions under which given mechanical, chemical, and other methods would normally be considered appropriate;

(5) procedure for identifying, evaluating, reporting, and responding to right-of-way maintenance problems;

(33) establishment identification of other applicable utility and federal clearance guidelines and standards to be maintained on the basis of kilowatt of transmission line and the part of the right-of-way to be controlled/maintained;

(4) establishment of right-of-way inspection and monitoring standards including frequency and method of inspection; and

(54) establishment of standards and practices for:

(Aa) wetlands;
(Bii) pollinator habitat;
(Cib) wildlife;
(Dvii) erosion control; and
(iEd) aesthetic considerations.

(48) establishment of right-of-way inspection and monitoring standards including frequency and method of inspection, manner of inspections and what is to be taken note of;

(he) A long-term vegetative management plan shall be provided to the Agency at least every five years.

In addition to newspaper advertisements, further notification by one of the following methods containing the information set forth in 4.b. (4) shall be provided by:

(1) three (3) spot messages per day on each of two (2) radio stations in the area of spraying on two (2) consecutive days during the two-week period prior to the commencement of spraying.

(2) U.S. mail to residents adjacent to the right-of-way during the calendar year of spray application, at least two weeks prior to such application.

(3) a personally delivered printed statement to residents of property adjacent to the right-of-way during the calendar year of spray application, at least ten (10) days prior to such application.
e. The permit applicant shall notify the Department of the option used and the dates implemented. The text of this notice shall be supplied to the Department prior to implementation.

1. Upon notification by the landowner or water supply user, the permit applicant shall mark private water supplies on their maps.

2. Prior to spraying, the permit applicant shall flag all public and private water supplies marked on their maps as well as other sensitive areas as designated by the Commissioner in the permit.

3. The permit applicant shall furnish the certified applicator with a copy of the right-of-way maps showing flagged areas and a copy of the approved permit.

4. The applicator shall not spray near the flagged areas.

5. All right-of-way clearing or maintenance by the use of herbicides shall be conducted by certified applicators or persons working under the direct supervision of certified applicators.

6. All uses of herbicides on rights-of-way shall be conducted by the certified applicator in a manner that minimizes the extent and duration of foliar browning.

7. Right-of-Way clearing and maintenance and right-of-way spraying operations shall be conducted in a manner and under weather conditions which prevent deposits of pesticides to areas outside the rights-of-way.

8. The clearing of brush, trees and other vegetation from rights-of-way shall be conducted in accordance with other applicable provisions of state and federal laws and regulations.

9. All operations conducted prior, during or subsequent to the aerial application of pesticides to rights-of-way, including, but not limited to, gaining access, landing of aircraft, refilling operations and the like, shall not be conducted on private lands near the right-of-way without the owner's prior written permission. Written permission shall be maintained by the permit applicant for one (1) year following completion of the operations and shall be available to the Commissioner upon request.

10. Aerial applications shall be published by the Agency for a 30-day comment period from the public prior to any issuance of a permit.

11. A permit applicant may request a minor permit amendment at any time due to unforeseen issues. The amendment request must be made in writing to the Secretary and will be included in the original permit application file. Significant changes will be required to go through an initial request process to ensure public notification.
(aaa) No person shall make an aerial application without first obtaining an approved permit from the Secretary as provided in this section.

(bbb) A permit application shall be made, on a form provided by the Secretary, before April 1 of the year of the proposed application. A complete and accurate permit application shall be made, on a form provided by the Secretary, before the proposed application.

(cee) An applicant applying for an aerial company license or certificate of permit to engage in aerial application of pesticides shall meet the requirements of the Federal Aviation Administration and the Vermont Agency of Transportation in the permit application, Aeronautics Section, to operate the aircraft and equipment described in the application.

(bd) An aerial applications shall be conducted by a certified applicator in the appropriate categories and/or subcategories only.

6.03e All aerial pesticide applications require an approved permit prior to application.

(1) Aerial applicators shall obtain a permit for each contract to apply pesticides for purposes other than the treatment of agricultural commodities. Permits may not be issued for more than one spray season.

(2) Aerial applicators shall obtain a permit annually for the treatment of agricultural commodities.

(d) Materials listed on Attachment A, subsection 2, "Control Details for Permit Application", as recommended by the Vermont Extension Service or other state agencies will be used for permit review.

4.6(6) Experimental Use Permit

(a) Any person who desires to use an unregistered, or pesticide or who desires to use a registered, pesticide for an unregistered use without shall first obtaining an approved experimental use permit from the Commissioner.

(bb) A complete and accurate permit application shall be made on a form provided by the Secretary before the proposed application.

(ce) The Secretary may issue permits for three kinds of experimental uses:

(1) A state-issued permit as authorized under Section 45(f) of the FIFRA (as amended) to accumulate information or data necessary to register a pesticide use for special local needs.

(22) A state-issued permit to conduct laboratory, greenhouse, or limited replicated field trials to test or validate to confirm such tests or other tests in which the purpose is to determine the value of the substance for pesticidal activity purposes or to determine its toxicity, or other related chemical properties to the extent allowed under FIFRA, permitted under EPA regulations.
(33) A state-issued authorization to conduct an experimental use in Vermont the State for all or some of the uses provided on the label under the experimental use permit issued by the US EPA pursuant to Sections 45(a)-(e) of FIFRA as amended.

(b) A state experimental use permit may, subject to the terms and conditions of the state’s certification from the Administrator of EPA, be issued when the Commissioner Secretary determines that the conditions under which the use of the experimental pesticide will be conducted are satisfactory are sufficiently protective of human health and the environment.

dee No experimental use permit The permit shall be for a specified period commensurate with the experimental program submitted, but in any case shall not exceed one year.

efd Permits may be renewed or extended upon request if circumstances warrant. The permittee shall supervise the test program experimental use and evaluate provide written the results to the Agency of testing at each site of application Upon completion of the experimental use or at the expiration date of the experimental use permit, the permittee shall provide a written summary to the Secretary which shall include:

1. the chemical or pesticide product used;
2. the location of the application;
3. the rate of application;
4. the dates of application; and
5. any adverse effects of the application.

efg The permittee shall report immediately to the Commissioner Secretary, upon identification, any adverse effects from the use of or exposure to the pesticide.

efc A report shall be submitted to the Commissioner Secretary at the conclusion of the experimental pesticide treatment or at the expiration date of the experimental use permit. The report shall include the data gathered during the testing program, the dates of application, any adverse effects to the environment and recommended directions for use which might be submitted for future registration.

eghd The application of a pesticide under a state experimental use permit shall be made by a certified applicator as required by labeling and any additional restrictions imposed by the Commissioner Secretary in the permit.

ehih When a pesticide is applied to a food or feed crop under an experimental use permit where a tolerance has not been established for that particular crop and use pattern, then:

1. the crop must shall be destroyed after harvest; or
2. the crop may shall not be consumed by humans. If the crop is consumed by test animals, the animals or animal products may shall not be used for human or animal consumption.

6.044.8(7) Bird and Other Vertebrate animal Pest Control Permit, exclusive of Cricetidae and Muridae families the phylum chordata (families Cricetidae and Muridae),
Cricetidae: (moles and voles)
Muridae: (rats and mice)

(aa) No person shall use a pesticide on a golf course to control birds or other animals without first obtaining an approved permit from the Secretary.

(b) A complete and accurate permit application shall be made, on a form provided by the Secretary, for bird or animal control - exclusive of the phylum chordata (families Cricetidae and Muridae).

(cb) A pesticide application may only be made after the Secretary has deemed the bird and animal pests are those that may be declared a pest by the Commissioner. Secretary may declare a bird or animal to be a pest in a specific situation where there is a likelihood of damage to health, the economy or where harm to other wildlife may occur or in the event of injury or severe annoyance.

(dci) Types of use that may be authorized by this permit:

1. Area-wide application of pesticides for the protection of agricultural commodities, wildlife, and for human health protection.

2. Limited-area applications of pesticides where the use of those pesticides could have a detrimental effect on non-target animals or may affect food or food products life adjacent to the structure, lot or yard which is specifically treated or may affect food or food products.

b. Any licensed company or certified applicator applying pesticides for the lethal control of pest birds or other pest animals shall apply to the Commissioner, on an approved form, for a permit to perform such control operation.

(c1) The application for a permit shall state the problem and the pest to be controlled, the pesticide to be used, rate to be applied, the area to be treated, disposal of the controlled pest and unused pesticide and the treatment time period.

2. For municipal or community-wide operations, a written request or statement granting permission for such operation signed by an official of the municipality shall be submitted with the request.

(dci) All permit application requests for an area-wide application of pesticides for bird or animal control treatment on open land shall be reviewed by the Vermont Fish and Wildlife Department and the Vermont Department of Health prior to any permit issuance.

(e1) Notification of all permitted limited-area requests for pesticide applications of pesticides shall be submitted to the Vermont Fish and Wildlife Department and the Vermont Department of Health, the aforesaid departments if approved by the Commissioner/Secretary.

(f1) Control operations may also be subject to guidelines or directives which are established by the Vermont Commissioner of the Fish and Wildlife Department, Vermont Commissioner of Health, and the U.S. Fish and Wildlife Service and the Vermont Commissioner of Labor and Industry.

(gf) A permit is not required for the following:

1. The use of animal or bird repellents; or,
(22) Pesticide applications for members of the Cricetidae and Muridae families.

6.054.9 Golf Course Permit

(1) Permit Issuance

(aA) No person shall use a pesticide on a golf course without first obtaining a permit from the Secretary.

(bB) The Secretary shall issue, amend, or deny a permit after consideration of risk to human health and the environment, the integrated pest management and nutrient plans and the past compliance history of the golf course.

(cB) For a new or expanded golf course the Secretary may require a permit applicant for a new or expanded golf course permit proof that the course was built as represented in the submitted site plan or submit proof that the course was built as represented.

(-4d2a) Initial application——

(1) A complete and accurate permit application shall be made, on a form provided by the Secretary, for the maintenance of golf course turf.

(22) An application for a golf course permit shall contain all information requested in the application, which shall may include the following information:

(AA) The name and contact information of the golf course;

(BB) The mailing address and E911 golf course address;

(CC) The telephone number of the golf course;

(D) The email address of the golf course;

(5) The golf course superintendent’s name and the golf course officer’s name;

(6) The golf course officer name;

(7) The date of application;

(8) A general description of the golf course as it exists or is designed;

(DD) A mapped site plan;

(EE559) A an integrated pest management plan; and

(FF660) A long-term integrated nutrient management plan.

(23) The application form shall be accompanied by a mapped site plan provided to the Secretary showing shall include:

(AA1) the tees, greens, and fairways;

(BB2) all surface waters;

(CC3) all private water supplies on or within 200 feet of an abutting property line;

(DD4) all public water supplies on or within 200 feet of an abutting property line;

(EE5) property boundary lines;

(FF6) all buildings and a description of their uses;

(GG7) a legend, scale, and north designation;
(H18) surface acreage and average depth of ponded surface waters and identification of primary source of water supply;
(H19) a soils map and key as mapped by the U. S. Natural Resources Conservation Service;
(JJ10) the square footage of each green and tee and an identification of each green or tee located within 100 feet of surface water;
(KK11) an approximate acreage of fairways and roughs; and 
(LL12) the location of any proposed buffer to protect surface water, groundwater, and environmentally sensitive areas.

(1) the tees, greens, and fairways;
(2) all surface waters;
(3) all private water supplies on or within 200 feet of an abutting property line;
(4) all public water supplies on or within 200 feet of an abutting property line;
(5) property boundary lines;
(6) all class I or II wetlands;
(7) buildings and a description of their uses;
(87) a legend, scale, and north designation;
(98) surface acreage and average depth of ponded surface waters and identification of primary source of water supply;
(109) a soils map and key as mapped by the U. S. Natural Resources Conservation Service;
(119) the square footage of each green and tee and an identification of each green or tee located within 100 feet of surface water; and 
(121) an approximate acreage of fairways and roughs; and 
(12) the location of any proposed buffer established to protect surface water, groundwater, and environmentally sensitive areas.

(43) The long-term integrated pest management plan provided to the Secretary provided to the Secretary shall include:
(AA) a general statement of policy and goals;
(BB) an identification of the species to be maintained,; the scheduled frequency and method of maintenance,; and an evaluation of non-chemical options;
(CC) a description of biological and cultural pest management strategies and practices that will be used including and will identify pest or damage thresholds being used for treatment decision making;
(DD) a description of the location of pesticide storage and handling areas including a spill response plan;
(EE) a description of irrigation practices used;
(FF) a description of any unique features or practices that may minimize pest pressure; and

(GG) a description of, and the location, including the location of, any proposed buffer and “no treatment” areas established to protect surface water, groundwater, and environmentally sensitive areas.

(54) Permit applicants shall provide: The long-term integrated nutrient management plan provided to the Secretary which shall include:

(AA) a brief description of the goals of the nutrient management plan;

(BB) an identification of any areas where a nutrient application will be made including greens, tees, fairways and roughs; and

(CC) a description of the process in which soil test results are interpreted based on accepted University or industry Agency recommendations and consistent with the nitrate leaching index.

(65) Permit applicants shall provide the following information for all pesticides being requested for use at the golf course, which shall include:

(AA) the pesticide product name and EPA Registration Number;

(BB) a list of active ingredient(s);

(CC) the proposed rate of application, site of application, number of applications per year, acres to be treated, and target pest for each application being considered;

(DB) the anticipated total annual amount of each active ingredient; and;

(EC) a demonstration that use of the pesticide will not exceed ground or surface water standards using simple dilution analyses calculations or other methods approved by the Secretary. Reference standards shall be the Vermont Water Quality Standards for surface water and Vermont Drinking Water Standards for groundwater.

(7G) All initial permit applications shall be published by the Agency the Secretary for a 30-day comment period prior to any issuance of a permit.

(e) Permittee testing and buffer requirements.

(1) A golf course permit holder shall sample and test areas receiving fertilizer applications at a minimum, once every three years; be collected according to University recommendations or other methods approved by the Secretary; and analyzed for:
(A) available phosphorus using Modified Morgan Extraction method or other methods approved by the Secretary;
(B) potassium;
(C) pH;
(D) reactive aluminum; and
(E) soil organic matter.

(2) The Secretary may require sampling and analysis of relevant groundwater or surface water such as those described in subdivisions (d)(3)(B)-(D) of this section.

(3) Any golf course permit or permit amendment shall be conditioned to include buffer strips for the purposes of protecting surface waters, groundwater, or other environmentally sensitive areas which shall, at a minimum, be established as follows:
(A) be 100 feet from all private drinking water supplies and public transient drinking water supplies;
(B) be 200 feet from all public, non-transient drinking water supplies;
(C) be 25 feet from all flowing surface waters;
(D) be 10 feet from impounded surface waters wholly on the golf course property; and
(E) be 25 feet from impounded surface waters not wholly on the golf course property.

(4) The Secretary may modify these buffers upon written request. Buffer modifications shall be considered on a case-by-case basis.

Three Required Permit Conditions Permittee Testing and Buffer Requirements
(A1) Soil Sampling Testing
A golf course (A) permit holders shall sample and test areas receiving fertilizer applications at a minimum, once every three years:
(B) The soil sample shall be collected according to University recommendations or standard industry practice; and
(C) Soil samples shall be analyzed for:
(ii) Available phosphorus using Modified Morgan Extraction method or other methods approved by the Secretary
(iii) Potassium
(iv) pH
(v) Reactive aluminum
(vi) Soil organic matter
(B2) Water testing. The Agency may require sampling and analysis of relevant groundwater or surface water such contained within the site plan as those described in section 4.4(e)(1)(C)(ii-iii).
(C3) Buffers.
(A) Any golf course permit or permit amendment shall be conditioned to include buffer strips for the purposes of protecting surface waters, groundwater, or
other environmentally sensitive areas which shall, at a minimum, be established as follows:

(ii) be 100 feet from all private drinking water supplies and public transient drinking water supplies;

(iii) be 200 feet from all public, non-transient drinking water supplies;

(iv) be 25 feet from all flowing surface waters and Class II wetlands; and

(v) be 25 feet from impounded surface waters not wholly on the golf course property.

(D) The Secretary may modify these buffers upon written request. Buffer modifications shall be considered on a case-by-case basis.

(E4) Plan Maintenance.

(A) The permittee shall review and update the site, integrated pest management, and nutrient management plans for the golf course, at a minimum every 5 years, or upon any significant physical change to the course at all times and be made available to the Agency upon request. REVISED EVERY 5 YEARS?

(33c) Permittee Record Keeping and Posting Requirements

(A1) Routine pesticide application records shall be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(B2) Routine pesticide application records application records shall be maintained on a daily basis and shall contain:

(iA) The date and time of application.

(ii) The site of application (tee, green, fairway, rough etc.).

(iiiC) The pesticide used and EPA Registration Number.

(ivD) The amount of pesticide product used.

(vE) The active ingredient(s) in product applied.

(viE) The amount of active ingredient(s) applied in pounds.

(viiG) The pest or pests treated for.

(viiiH) The weather conditions at the time of application.

(C3) Routine records for nutrient application shall be kept be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(D4) Routine records for nutrient application shall contain:

(iA) The date of application.

(iiB) The site of application (tee, green, fairway, rough etc.).

(iiiC) The grade or nutrient analysis of the fertilizer applied.

(ivD) The area of application in acres or square feet.

(vE) The amount of product used.
(viF) The university or industry Agency-approved recommendation relied upon for nitrogen application
(viiG) The university or industry Agency-approved recommendation relied upon for phosphorous application
(viiiH) The amount of nitrogen and phosphorous applied per thousand square feet,(5)

— The permittee shall maintain the integrated pest management plan and nutrient management plan at the golf course which shall be made available to the Secretary or their designee upon request.

(E56) Any pesticide application made on golf course turfgrass or landscape plants shall require the posting of a written notice on the clubhouse bulletin board or the first tee.

(Ai) The written notice shall contain the information as specified under Section 5.1(c)(1-6)IV 8a. (3) (a-f) and include the specific location and number of each fairway, green, tee and driving area, etc., where pesticide is applied.

(iiB) The notice shall be posted prior to application and remain on the bulletin board or the first tee for at least 24 hours after application.

(iiiC) Upon request, a pesticide label and Safety Data Sheet for the specific product(s) used shall be made available to any golfer using the facility or course employee.

(F6) Maintenance of records and report of pesticide use as provided in Section 4.4(e) shall exempt a golf course or certified applicators employed by a golf course from the reporting requirements of Sections 6.2, 6.4, and 6.6.

(G) Plan Maintenance. The permittee shall have an up-to-date site, integrated pest management, and nutrient management plans at the course at all times and be made available to the Agency upon request. REVISED EVERY 5 YEARS (4d)

4di) Permit Amendments:

What do we allow under amendment? Buffers, pesticides, physical changes to course—when does it trigger new permit?

All initial permit applications shall be applications shall be published by the Agency for a 30-day comment period prior to any issuance of a permit publicized by the Agency and allow for a 30-day comment period from the public prior to any issuance of a permit.

(9) A permit applicant may request a minor permit amendment at any time due to unforeseen issues. The amendment request must be made in writing to the Secretary and will be included in the original permit application file. Significant changes will be required to go through an initial request process to ensure public notification.

(f) Permittee record keeping and posting requirements.

(1) Routine pesticide application records shall be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(2) Routine pesticide application records shall contain:

(A) The date and time of application.

(B) The site of application (tee, green, fairway, rough etc.).
(C) The pesticide applied and EPA Registration Number.
(D) The amount of pesticide product used.
(E) The active ingredient(s) in product applied.
(F) The amount of active ingredient(s) applied in pounds.
(G) The pest or pests treated for.
(H) The weather conditions at the time of application.

(3) Routine records for nutrient application shall be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(4) Routine records for nutrient application and shall contain:
   (A) The date of application.
   (B) The site of application (tee, green, fairway, rough etc.).
   (C) The grade or nutrient analysis of the fertilizer applied.
   (D) The area of application in acres or square feet.
   (E) The amount of product used.
   (F) The university or Agency-approved recommendation relied upon for nitrogen application
   (G) The university or Agency-approved recommendation relied upon for phosphorous application
   (H) The amount of nitrogen and phosphorus applied per thousand square feet.

(5) Any pesticide application made on golf course turf-grass or landscape plants shall require the posting of a written notice on the clubhouse bulletin board or the first tee.
   (A) The written notice shall contain the information specified under section 7.01(d)(1)-(6) and include the specific location and number of each fairway, green, tee and driving area, etc., where pesticide is applied.
   (B) The notice shall be posted prior to application and remain on the bulletin board or the first tee for at least 24 hours after application.
   (C) Upon request, a pesticide label and Safety Data Sheet for the specific product(s) used shall be made available to any golfer using the facility or course employee.

(6) Maintenance of records and reports of pesticide application as provided in subsection 6.05(f) shall exempt a golf course or certified applicator employed by a golf course from the reporting requirements of sections 6.02, 6.04, and 6.06.

(7) The permittee shall have an up-to-date integrated site, integrated pest management, and integrated nutrient management plans at the course at all times and be made available to the Secretary upon request.
(g54ei)  (1) GoEach permit shall be renewed annually at the end of the calendar year aprior to any and prior to any new application in the subsequent year.

(Aa)—A complete and accurate permit renewal for the maintenance of golf course turf shall be made on a form provided by the Secretary. A complete and accurate permit renewal shall be made, on a form provided by the Secretary, for the maintenance of golf course turf annually at the end of the calendar year and prior to any application in the subsequent year.

(Ab)—An application for a golf course permit renewal shall contain all information requested in the application, which may include:

A complete and accurate permit renewal application shall be made, on a form provided by the Secretary, for the maintenance of golf course turf.

Renewal applications shall include the following information:

(111) A report of the previous year’s pesticide usage.

(222) A report of the previous year’s fertilizer usage containing:

(33333) The total amount nitrogen and phosphorus used in the preceding calendar year

(44444) The total amount of nitrogen and phosphorous applied at each application site including tees, greens, fairways and roughs.

(55555) The average rate of nitrogen and phosphorus used per acre (or per 1000 sq. ft.) for each site of application. Permittees requesting additional pesticides to a permit shall include the information required in Section 9. A. 1. i).

(56)(1), amend and nutrient -

(2)

(3)(4) initial and any subsequent application materials, including nutrient integrated pest management plans, sites. (D5) T.

Permittee Testing and Buffer Requirements

(A)—Soil Testing. A golf course permit holder shall sample and test areas receiving fertilizer applications at a minimum, once every three years. The samples shall be collected according to University recommendations or other methods approved by the Secretary; and analyzed for:

(i) Available phosphorus using Modified Morgan Extraction method or other methods approved by the Secretary

(ii) Potassium

(iii) pH

(iv) Reactive aluminum

(v) Soil organic matter
(B) Water testing. The Agency may require sampling and analysis of relevant groundwater or surface water such as those described in section 4.4(e)(1)(C)(ii–iii).

(C) Buffers. Any golf course permit or permit amendment shall be conditioned to include buffer strips for the purposes of protecting surface waters, groundwater, or other environmentally sensitive areas which shall, at a minimum, be established as follows:

   (i) be 100 feet from all private drinking water supplies and public transient drinking water supplies;
   (ii) be 200 feet from all public, non-transient drinking water supplies;
   (iii) be 25 feet from all flowing surface waters;
   (iv) be 10 feet from impounded surface waters wholly on the golf course property; and
   (v) be 25 feet from impounded surface waters not wholly on the golf course property.

(D) The Secretary may modify these buffers upon written request. Buffer modifications shall be considered on a case-by-case basis.

(5) Permittee Record keeping and posting requirements.

(A) Routine pesticide application records shall be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(B) Routine pesticide application records shall contain:

   (i) The date and time of application.
   (ii) The site of application (tee, green, fairway, rough etc.).
   (iii) The pesticide used and EPA Registration Number.
   (iv) The amount of pesticide product used.
   (v) The active ingredient(s) in product applied.
   (vi) The amount of active ingredient(s) applied in pounds.
   (vii) The pest or pests treated for.
   (viii) The weather conditions at the time of application.

(C) Routine records for nutrient application shall be maintained on a daily basis for a period of five years and shall be made available to the Secretary or their designee upon request.

(D) Routine records for nutrient application and shall contain:
(i) The date of application.
(ii) The site of application (tee, green, fairway, rough etc.).
(iii) The grade or nutrient analysis of the fertilizer applied.
(iv) The area of application in acres or square feet.
(v) The amount of product used.
(vi) The university or Agency-approved recommendation relied upon for nitrogen application.
(vii) The university or Agency-approved recommendation relied upon for phosphorous application.
(viii) The amount of nitrogen and phosphorous applied per thousand square feet.

(E) Any pesticide application made on golf course turf, grass, or landscape plants shall require the posting of a written notice on the clubhouse bulletin board or the first tee.

(i) The written notice shall contain the information specified under Section 5.1(c)(1-6) and include the specific location and number of each fairway, green, tee and driving area, etc., where pesticide is applied.

(ii) The notice shall be posted prior to application and remain on the bulletin board or the first tee for at least 24 hours after application.

(iii) Upon request, a pesticide label and Safety Data Sheet for the specific product(s) used shall be made available to any golfer using the facility or course employee.

(F) Maintenance of records and report of pesticide use as provided in Section 4.4(e) shall exempt a golf course or certified applicators employed by a golf course from the reporting requirements of Sections 6.2, 6.4, and 6.6.

(G) Plan Maintenance. The permittee shall have an up-to-date site, integrated site, integrated pest management, and nutrient management plans at the course at all times and be made available to the Agency upon request. REVISED EVERY 5 YEARS.

6.064.10 Mosquito Larvicide Permits
(aa) No person, except homeowners making applications of *Bacillus thuringiensis israelensis* products specifically labeled for that site on their wholly-owned property, Any person, except a homeowner private applicator or certified commercial and noncommercial applicator making an application of *Bacillus thuringiensis israelensis* products specifically labeled for that site on their wholly-owned property, who makes an application of these products shall make a mosquito larvicide application without first obtaining a permit from the Secretary as provided in this section. This shall not apply to homeowners making applications. All mosquito larvicide applications of *Bacillus thuringiensis israelensis* products specifically labeled for that site on their wholly-owned property shall be made, on a form provided by the Secretary, before the proposed application.

(bb) A complete and accurate permit application shall be made, on a form provided by the Secretary, before the proposed application.

(cc) The application form shall be accompanied by a map of the area of proposed potential application area indicating the town boundaries, surface waters, private and public water supplies, threatened or endangered species habitat, any water systems or private wells, and a copy of the notice of intent to use a larvicide which shall be published.

(dd4) The notice of intent to use a mosquito larvicide shall:

1. (1A) be published not less than 25 days nor more than 60 days before the commencement of application;

2. (2B) be published for one day a week for two consecutive weeks in a newspaper, for every county to be affected by the larvicide application. If the notice is printed in a daily newspaper, then the notice shall be published on Thursdays. If the notice is printed in a weekly newspaper, then the notice shall be published on whatever day the paper is published;

3. be at least two columns wide by three inches high;

4. (3C) set forth the method(s) by which the larvicide is to be applied; the common name of the product or active ingredient to be used; the name, position, address, and telephone number of the applicant; and the address and phone number of the Agency identifying it as the appropriate place to contact with comments and/or complaints; set forth the name and address of the Permittee as well as the name, position, address, and telephone number of the person representing the Permittee who can be contacted for further information; reason able description of the area to be treated, including the names of towns in which treatments will occur; the approximate date(s) of the treatments; and

5. (D4D) set forth the method(s) by which application will occur, the name of the products being applied, and a contact name, address, and telephone number for a member of VAAFM who can be
contacted for further information; provision for an opportunity for individuals to refuse treatment of their property or request a buffer of 200 feet around their private water supply:

(D) prior to publication or distribution, a copy of the notice shall be provided to VAAFM.

(E5EE)

(cD) Following publication of the notice of intent after publication, the permittee shall provide any tear sheets and distribution lists used shall be provided to the Agency the Secretary as proof of public notice. VAAFM

(fe5) In addition to the notice of intent to use a mosquito larvicide, newspaper advertisements, further notification by one of the following methods containing the information set forth in subdivision xxx6.06(d)(4) CITE shall be provided by:

(11B) written communication to residents adjacent to the larvicide application treatment area during the calendar year of application, at least two weeks prior to such application, by U.S. Mail or electronic mail; or-

(22C) a hand-delivered, printed statement to residents in the or abutting the larvicide treatment area of property adjacent to larvicide application at least fourteen (14) days prior to such application.

(gfe) The Permittee permit applicant shall publish or distribute a Notice of Intent (NOI) to use the products listed in only use products VAAFM allowed for and in accordance with the conditions specified in the Vermont Mosquito Control Permitting Procedures, which the Secretary shall be made publicize publish public by the Agencies, which will be posted annually.

(h8) The Secretary shall publish all permit applications shall be published by the Agency for a for a 30-day comment period prior to any issuance of a permit.

(i98) A mosquito larvicide permit may be issued for a maximum of 5 years before renewal.

(j49) A private, applicator or certified commercial, and/or noncommercial applicator making an application of Bacillus thuringensis israelensis bits-and-dunks larvicide products on wholly-owned private property is exempt from this section.

6.07
4.14 (a) Mosquito Adulticide Permits

(aa4) No person shall apply a mosquito adulticide for nuisance mosquitoes using ground-based truck-mounted sprayers without first obtaining an approved permit from the Secretary as provided in this subsection.

Exemptions for...
(bb2) A complete and accurate permit application shall be made, on a form provided by the Secretary, before February 1 of the year of the proposed application.

(ce3) The application form shall be accompanied by a map of the area of proposed application indicating boundaries, surface waters, private and public water supplies, threatened or endangered species habitat, any public water systems or private wells, and a copy of the notice of intent to use a mosquito adulticide which shall be published.

(dd4) The notice of intent to use a mosquito adulticide shall:

(1) be published not less than 25 days nor more than 60 days before the commencement of application;

(2) be published for one day a week for two consecutive weeks in each of two newspapers, for every county town to be affected by the right-of-way adulticide application. If the notice is printed in a daily newspaper, then the notice shall be published on Thursdays. If the notice is printed in a weekly newspaper, then the notice shall be published on whatever day the paper is published;

(3) be at least two columns wide by three inches high; and

(4) set forth the name and address of the permit applicant; a reasonable identification of the affected treatment areas; the names of the towns where the application is to be done; the approximate starting date of the application; that a permit has been requested from the Secretary; the method by which the adulticide is to be applied; the common name of the product or active ingredient to be used; the name, position, address, and telephone number of a person from the applicant to contact for further information; the address and phone number of the Agency identifying it as the appropriate place to contact with comments and/or complaints;

(D) set forth the method(s) by which the adulticide is to be applied; the common name of the product or active ingredient to be used; the name, position, address, and telephone number of a person from the applicant to contact for further information; the address and phone number of the Agency identifying it as the appropriate place to contact with comments and/or complaints; reasonable description of the area to be treated, including the names of towns in which treatments will occur; the approximate date(s) of the treatments; and

(5) set forth the provision for an opportunity for individuals to refuse request a no-treatment area on or abutting of their property or request a buffer around their private water supply property.

(e) Following publication of the notice of intent, the permittee shall provide any tear sheets and distribution lists used to the Secretary as proof of public notice.

(f) In addition to the notice of intent to use a mosquito adulticide newspaper advertisements, further notification by one of the following methods
containing the information set forth in subdivisions 6.07(d)4.(4), (5)b.(4) shall be provided by:

(A1A) three spot messages per day on each of two radio stations in the area of application on two consecutive days during the two-week period prior to the commencement of applying.

(1AB2B) written communication to residents in or directly adjacent to the treatment area during the calendar year of application, at least two weeks prior to such application, by U.S. Mail or electronic mail;

(2BC3C) a hand-delivered, printed statement to residents of property in or directly adjacent to the treatment area during the calendar year, at least ten days prior to such application; or:

(3C) other means of public notification deemed acceptable by the Secretary.

(gf6) Permit applicants shall submit a long-term integrated pest management plan to the Agency the Secretary at least every two-five years which. This plan shall include:

(1A) a general statement of policy and goals;

(22B) identification of the species to be controlled; the thresholds at which adult control will be conducted; a commitment to larvicide options; control options prior to the use of an adulticide; and an evaluation of non-chemical options;

(3C) an assessment or inventory of mosquito breeding habitat and proposed mechanisms to reduce this habitat in the proposed treatment area.

(D) establishment of standards and practices for:

(i) wetlands;

(ii) pollinator habitat;

(iii) endangered species protection habitat;

(ii) water supply protection;

(iiiii) wildlife protection, including pollinators;

(iv) buffer establishment and maintained.

(4) a public notification action plan identifying steps the permittee will take to notify the public of how the permittee plans on reducing mosquito habitat; and

(5) establishment of standards and practices for:

(A) endangered species protection;

(B) water protection;

(C) wildlife protection, including pollinators; and

(D) buffer establishment and maintenance.

(vEiv) erosion control; and
(h7) Mosquito adulticide permits issued by the Secretary shall establish buffer distances. Buffer distances shall be determined according to the type of application, properties of any chemicals to be used, and the characteristics of the area to be treated.

(i9) The Secretary shall publish all permit applications shall be published by the Agency for a 30-day comment period prior to any issuance of a permit.

6.08

4.12 Terrestrial Invasive Plant Control Permits

(a4) No person shall use a pesticide to control terrestrial invasive plants on property which they do not have a legal right to control without first obtaining a permit from the Secretary as provided in this section.

(b2) A complete and accurate permit application shall be made, on a form provided by the Secretary, before April 1 of the year of the proposed application.

(3) An applicant for an aerial permit shall demonstrate compliance with the requirements of the Federal Aviation Administration and the Vermont Agency of Transportation in the permit application.

(4c3) A terrestrial invasive plant control aerial application shall be conducted by a certified applicator in the appropriate categories and/or sub-categories.

(d4) A terrestrial invasive plant control application shall be conducted in accordance with procedures recommendations developed provided by the Vermont Secretary Agency’s Invasive Plant Advisory Committee and in the permit applications which shall include a plan demonstrating how the permit applicant shall demonstrate the chemical control plan will eradicate and either be able to eradicate or otherwise further control the any further spread of the invasive species with a reduction in any or the need for continued chemical applications.

(e5) Landowner permission for chemical control shall be required.

(f6) The Secretary shall publish all permit applications shall be published by the Agency for a 130-day comment period prior to any issuance of a permit.
75.01  No Turf-grass and landscape Ornamental Pesticide Application – General Requirements

(a) No outdoor application by a certified commercial or non-commercial applicators of pesticide applicators to turf-grass or landscape ornamental plants shall be made without the following provisions having been met:

(a1) Prior to the pesticide application, the applicator or their employer shall provide the customer with written information containing the common name and EPA registration number of the pesticide, proposed rate, and availability of copy of product label and Safety Data Sheets.

(b) Prior to any outdoor pesticide application to turf-grass or ornamental plants the applicator or their employer shall provide the customer with the pesticide’s common name and EPA registration number, the proposed application rate, product label, and safety data sheet.

(c2) Before beginning an application, the applicator shall post at least one sign(s), prescribed below, at each conspicuous point of access to the treated area(s). The applicator shall leave such the sign(s) posted with instructions to remove the sign 24 hours after following the application. This shall mean that if a property has more than one entrance or point of access then the corresponding number of signs shall be posted. The specifications of the sign shall:

1A) be at least four by five inches, of sturdy, weather resistant material;
2B) be made with contrasting colors using the indicated point size;
3C) contain no additional words or symbols on the front panel; however, the back panel may include any additional information such as emergency number or company name;
4D) contain the date and time of application; and
5ED) be posted at least 12 inches above the ground; and
(E) contain the date and time of application on the back of the sign.

CAUTION

Pesticide Application

KEEP OFF UNTIL DRY
CUSTOMER: Please remove after 24 Hours.

[See graphic or tabular material in printed version]

(d3) Immediately upon completion of each application, the applicator or their employer shall leave with the customer, resident, or occupant, and if unavailable in a notable location at the site or at the residence, or with the property manager a statement containing the following information that contains:

(1A) the name, address, and telephone number of the non-commercial applicator or company or non-commercial facility providing service;
(2B) the pesticide applicator's name and certification number;
(3C) the common or trade name, EPA registration number, amount used and pests treated for each pesticide applied;
(4D) any required post-application label safety precautions, if applicable;
(5E) the application date, time, and location; and
(6F) instructions that the signs should remain posted for at least after 24 hours.

(e4) The applicator or their employer shall provide a copy of the pesticide label and Safety Data Sheet upon request by either the customer or adjoining landowner. Upon request, by either customer or adjoining landowner, a copy of the pesticide label and Safety Data Sheet shall be provided by the applicator or their employer.

(f5) The applicator or their employer shall provide the customer with prior notification of the timing of each pesticide application upon request. Upon request, the applicator or their employer shall provide the customer with prior notification of the timing of each pesticide application.

(g) This section does not apply to golf courses.

5.7.02 Turf-grass and landscape Ornamental pesticide Application – Non-Private Residential Dwelling Unit

In addition to the requirements of section 7.01, no outdoor application by a commercial or non-commercial applicator to turf-grass or ornamental plants shall be made on property of condominiums or apartment buildings without first meeting the following provisions:

(a) Prior to any outdoor commercial or non-commercial pesticide application to turf-grass or landscape ornamental plants made on property of condominiums or apartment buildings, a residential dwelling unit the applicator or their employer shall provide a template form to the customer or person contracting for the service or property manager of the residential non-private of the property that contains:
(1) the name, address, and telephone number of the non-commercial applicator or company providing service; and
(2) text and headings which include:
   (A) the contact information of the property manager or owner; and
   (B) the anticipated application date, time, common name of product or active ingredients; and general location.

(b) At least 24 hours, but no more than seven days before any outdoor commercial or noncommercial pesticide application to turf-grass or landscape ornamental plants made on property of a condominium or apartment building, the customer shall complete and post, or cause to be completed and posted, the written notice provided in subsection 7.02(a) in a central area accessible to all occupants. The written notice may be made to occupants electronically such as by text message or email notifications.

(c) At least 24 hours, but no more than 7 days before any outdoor non-commercial outdoor application of Class A or Class B products, to turf-grass or ornamental plants made on property of a condominium or apartment building on residential dwelling unit property, the applicator or their employer shall complete and post, or cause to be completed and posted, the written notice containing the information provided in subdivisions 5.2(1a) and (2) of section 7.02(a) in a central area accessible to all occupants. The written notice information provided in section 5.2(a) may be made to occupants electronically such as by text message or email notifications.

(b) Outdoor commercial or noncommercial pesticide application to turf-grass or landscape plants made on fenced, private non-residential properties shall require the posting of a written notice(s) in visitor reception area(s) and main employee entrance(s) by the grounds superintendent or their equivalent. All other private non-residential properties without fencing shall comply with Section 5.2a.

(1) The written notice shall contain information as specified under Section 4.2(j)(1-9) and the specific location where each pesticide is applied.

(2) The notice shall be posted prior to application and remain in place for at least 24 hours after application.

(3) Upon request, a label, Material Safety Data Sheet or EPA Pesticide Fact Sheet for the specific pesticide(s) used shall be made available to any visitor or facility employee for review.

(dd) This section regulation does not apply to owner-occupied multi-unit dwellings cover the injection of pesticides directly into plant- or owner occupied dwellings, material and does not apply to rights-of-way or utility applications. Maintained recreational areas likely to be occupied by humans including picnic areas, marked roadside rest areas, marked hiking trails, park and recreation facilities, athletic fields, and other areas for organized sports or recreation available for access by the public whether free or for a fee. This definition does not include trails located on privately owned lands which are used by permission of the landowner.
(e) This regulation does not apply to private pesticide applicators or certified private pesticide applicators.

5.3 Turf-grass and landscape pesticide application — Non-Residential

(a) Prior to any outdoor commercial or noncommercial pesticide application to turf-grass or landscape plants made on non-residential properties the applicator or their employer shall provide a template form to the owner or property manager of the residential non-private property that contains:

(1) the name, address, and telephone number of the non-commercial applicator or company providing service; and

(2) text headings which include:

(A) the contact information of the property manager or owner; and

(B) the anticipated application date, time; and general location.

(b) Outdoor commercial or noncommercial pesticide application to turf-grass or landscape plants made on fenced, private non-residential properties shall require the posting of a written notice(s) in visitor reception area(s) and main employee entrance(s) by the grounds superintendent or their equivalent. All other private non-residential properties without fencing shall comply with Section 5.2.

(1) The written notice shall contain information as specified under Section 4.2(i)(1-9) and the specific location where each pesticide is applied.

(2) The notice shall be posted prior to application and remain in place for at least 24 hours after application.

(b3) Upon request, a label, Material Safety Data Sheet or EPA Pesticide Fact Sheet for the specific pesticide(s) used shall be made available to any visitor or facility employee for review.

(ed) This regulation does not cover the injection of pesticides directly into plant material and does not apply to rights-of-way or utility applications.

(de) This regulation does not apply to private pesticide applicators or certified private pesticide applicators.

5.752-5.0343 Indoor pesticide Application — Public Residential — Residential Dwelling Unit

In addition to the requirements of section 7.01, no application shall be made inside a residential dwelling unit not wholly owned by the occupant, owner, or landlord of the residential dwelling unit without first meeting the following provisions:

(a) Prior to any indoor commercial or noncommercial pesticide application to the inside of an occupied residential building the applicator or their employer shall provide a template form to the owner or property manager of the private residential property that contains notification:

(1) the name, address, and telephone number of the non-commercial applicator or company providing service; and

(2) text headings which include:
(A)  the contact information of the property manager or owner; and
(B)  the anticipated application date, time; and general location.

(ba)  At least 24 hours, but and no more than seven days before in advance of any private, commercial or non-commercial pesticide application made to the inside of an occupied residential building dwelling unit not owned by the occupant, the owner, or landlord of the occupied residential property dwelling unit shall complete and post provide or cause to be provided the written notice provided in 5.4(a) to in a central area accessible to all residents occupant of the residential dwelling unit, or residents of an apartment unit, condominium unit or other rented residential unit to be treated, where the resident occupant of that unit did not request the impending pesticide application. Alternatively, the information provided in section 5.2(a) may be made to residents electronically such as by text message or email notifications.

(b)  The written notice may be mailed, sent electronically, or provided directly to the resident occupant and shall include:
  (1)  the name of the certified applicator or company making the application;
  (2)  the anticipated date and time of application;
  (3)  product name and EPA registration number;
  (3)  the pests treated for; and
  (4)  the contact information of the property manager owner or landlord for more information.

(c)  Upon request by an occupant-resident, the property owner or landlord shall provide any additional information requested relating to the application of pesticides.

(d)  The following pesticide uses are exempt from the requirements of section 5.7.034(a):
  (1)  Application of a ready to use general use pesticides by hand or with non-powered equipment to control or repel stinging or biting insects when there is an urgent need to mitigate or eliminate a pest that threatens the health or safety of any person;
  (2)  Application of an general use antimicrobial products by hand or with non-powered equipment to interior or exterior surfaces and furnishings during the course of routine cleaning procedures;
  (3)  Application of any paints, stains or wood preservatives that is not a State-restricted use product classified as general use pesticides;
  (4)  Application of a pesticides by a resident occupant to his or her own residential unit;
  (5)  Commercial application of a pesticides where the occupant resident has contracted for application to his or her own personal residential unit; and
(6) Indoor applications of a pesticides injected into closed systems for control of nuisance microbial organisms.

(e) This section does not apply to owner-occupied dwellings.

all conspicuous points of access that cannot be controlled or other controlled access and

(d) This regulation does not apply to private pesticide applicators or certified private pesticide applicators.

5.4 Persons exempt from this section permits other than golf courses. The following persons are exempt from the requirements of Section 5:

(a) Golf courses;
(b) Owner occupied dwellings;

(b)________________________

(8) Notification and Posting of turf-grass and landscape pesticide application:

a. No outdoor application by certified commercial or non-commercial applicators of pesticides to turf-grass or landscape plants shall be made on residential, single or multi-family or public non-residential properties, such as athletic fields without the following provisions having been met.

(1) At the time the service is being requested, the customer shall be provided with written information regarding the identification of the pesticides (common or trade name, EPA Registration number) and the rates being proposed for use. In addition, the customer shall be informed, in writing, of the availability of labels and Material Safety Data Sheets for these pesticides and any existing EPA Fact Sheets for the active ingredients contained within.

(2) At the beginning of each application, the applicator shall post a sign(s) prescribed below, at conspicuous points of access to the treated area(s). The applicator shall leave such sign(s) posted with instructions to remove 24 hours after application. This shall mean that if a property has more than one entrance or point of access then the corresponding number of signs shall be posted. The specifications of the sign shall be as follows:

(a) Shall be at least 4 x 5 inches, of sturdy, weather resistant material

(b) Shall be with contrasting colors using the indicated point type size

(c) Shall contain no additional words or symbols on the front panel; however, the back panel may include any additional information such as emergency number or company name

(d) Shall be posted at least 12" above the ground

(e) Shall contain the date and time of application on the back of the sign

[See graphic or tabular material in printed version]

(3) Immediately upon completion of each application, the applicator or their employer shall leave at the residence or with the property manager a written statement containing the following information:

(a) Name, address and telephone number of the company or non-commercial facility providing service

(b) Pesticide applicator's name and certification number
(c) Common or trade name, EPA Reg. #, amount used and pest(s) treated for each pesticide applied
(d) Post application label safety precautions, if applicable
(e) Application date, time and location
(f) Instructions that signs should remain posted for at least 24 hours
(4) Upon request, by either customer or adjoining landowner, a copy of the pesticide label and Material Safety Data Sheet or available EPA Fact Sheet shall be provided by the applicator or their employer.
(5) Upon request, the applicator or their employer shall provide the customer with prior notification of the timing of each pesticide application.
NOTE: Golf courses shall be regulated by Section IV 8b. of this regulation. Outdoor commercial or noncommercial pesticide application to turf-grass or landscape plants made on private non-residential properties shall comply with either Section IV 8a. or Section IV 8c. of the regulations.

b. Pesticide applications made by certified commercial or noncommercial applicators on golf course turf-grass or landscape plants shall require the posting of a written notice on the clubhouse bulletin board or the first tee by the course superintendent or their designee.

(1) The written notice shall contain information as specified under Section IV 8a. (3) (a-f) and include the specific location and number of each fairway, green, tee and driving area, etc., where pesticide is applied. The Commissioner reserves the right to approve the use of alternate wording to fulfill the written notice requirement on a case-by-case basis. Alternate wording must be submitted to the Commissioner, in writing and approved prior to its use.

(2) The notice shall be posted prior to application and remain on the bulletin board or the first tee for at least 24 hours after application.

(3) Upon request, a label, Material Safety Data Sheet or EPA Pesticide Fact Sheet for the specific pesticide(s) used shall be made available to any golfer using the facility or course employee for their review.

(b)c. Outdoor commercial or noncommercial pesticide application to turf-grass or landscape plants made on fenced, private non-residential properties shall require the posting of a written notice(s) in visitor reception area(s) and main employee entrance(s) by the grounds superintendent or their equivalent. All other private non-residential properties without fencing shall comply with Section 5 IV 8.a.

(1) The written notice shall contain information as specified under Section 4 IV 8a. (j3) (1a-f9) and the specific location where each pesticide is applied.

(2) The notice shall be posted prior to application and remain in place for at least 24 hours after application.

(3) Upon request, a label, Material Safety Data Sheet or EPA Pesticide Fact Sheet for the specific pesticide(s) used shall be made available to any visitor or facility employee for review.

(d) This regulation does not cover the injection of pesticides directly into plant material and does not apply to rights-of-way or utility applications.

(e) This regulation does not apply to private pesticide applicators or certified private pesticide applicators.

9. Golf Course Permits:

a. No person shall use a pesticide(s) on a golf course without first obtaining a permit from the Commissioner as provided in Section IV 9. except as described in Section IV 9.b. The permit process shall begin as follows:
(1) Existing golf courses shall submit to the Commissioner their name, address, location and information identifying surface water, private water sources of abutting landowners, public water sources, private or public source protection areas and environmentally sensitive areas present on the golf course. The amount and type of pesticide used on the golf course over the last three (3) years is also required. A form will be provided by the Commissioner for the submission of this information.

2) The Commissioner shall determine a schedule staggered over the next five (5) years when each golf course existing on the effective date hereof shall file an application for a permit and shall notify each course in writing, certified mail, return receipt requested. The scheduling of golf courses will be prioritized on the basis of risk and will require those golf courses with the highest risk potential to submit first.

b. An existing golf course may continue to use pesticides until either it fails to file an application for a permit on the date scheduled by the Commissioner or a permit is denied.

c. An application for a permit shall be on a form provided by the Commissioner and conform to the provisions of Section IV.9.h. and be signed by an officer of the golf course and the golf course superintendent completing the form, who shall agree to the conditions to be set forth by the Commissioner in the permit. Applications for a renewal permit shall be filed with the Commissioner three (3) months prior to the expiration of the existing permit. An application for renewal shall detail any proposed changes to the existing pesticide management plan of the golf course.

d. The Commissioner will forward the application to the Vermont Pesticide Advisory Council (VPAC) for review and recommendation under 6 V.S.A. Section 1102(d) (1). VPAC's review shall be based on the established requirements of statutes, regulations and guidelines.

e. The Commissioner shall issue or deny the permit after consideration of VPAC's recommendation, risk to human health and the environment, the pesticide management plan as it relates to the use of pesticides and the past history of the golf course. The Commissioner may restrict or deny the use of a pesticide in accordance with 6 V.S.A. Section 1104(3) and other applicable provisions of the law. All parties aggrieved by a decision of the Commissioner under this section may request a hearing within fifteen (15) days of the receipt of notice of the decision.

f. Permits issued by the Commissioner:

(1) Shall be conditioned on the operation of the golf course according to an approved pesticide management plan.

(2) Shall, when necessary and appropriate, establish additional buffer strips to protect surface waters and environmentally sensitive areas. The need for buffer strips shall be determined according to the type of application, properties of chemicals to be used and characteristics of the areas to be treated.
May require sampling and analysis of ground and surface water as a condition to the use of a pesticide. Those pesticides on the Prescreened Pesticide List would not require sampling or analysis unless the Commissioner determines that this type of information is critical to the evaluation of the risk to human health or the environment. Due to its cost, sampling and analysis will be required only when the Commissioner determines it is reasonably necessary to assess compliance with statutory or regulatory standards for protection of the environment or human health and will limit the variables. All parties aggrieved by a decision of the Commissioner under this section may request a hearing within fifteen (15) days of the receipt of notice of the decision.

To a proposed golf course shall be conditioned on the course being built as is represented in the application and requires the applicant to submit proof within sixty (60) days after completion.

 Shall be issued for a period of five (5) years and therefore expire at the end of the five (5) year period. The permit shall identify the pesticides permitted either by specific reference to each pesticide or reference to the Prescreened Pesticide List. The use of other pesticides may be added by modification of the five (5) year permit. Modifications shall be requested on forms provided by the Commissioner and shall be processed, issued or denied in the same manner as provided for permits, except that the term shall coincide with the term of the permit being modified.

The Commissioner shall approve and maintain the Prescreened Pesticide List along with specifications for its use on golf courses upon review and recommendation from VPAC. Pesticide(s) may be added or deleted at any time. Any person may submit to the Commissioner a request to add or delete a pesticide under this section. The request shall include a current EPA Pesticide Fact Sheet or equivalent and any other data desired to be considered. The Commissioner shall either approve or deny the request and notify the applicant in a timely manner.

Applications for a permit to use pesticides on a golf course shall contain the following information:

(1) General Information
   (a) Name of the golf course
   (b) Location
   (c) Mailing address
   (d) Golf Course Superintendent who is responsible for completing the application
   (e) Name and position of an officer of the golf course
   (f) Date of application

(2) Permit Status
   (a) Initial, renewal or modification
   (b) Course classification; existing, existing with proposed expansion or proposed

(3) Pesticide Information. Identification of the pesticide(s) to be used as follows:
(a) Pesticides found on current Prescreened Pesticide List. Indicate specific pesticides by common and trade name and EPA Registration Number.

(b) Pesticide(s) other than those found on the Prescreened Pesticide List shall be identified by both common and trade name, EPA Registration Number and by attaching a current EPA Pesticide Fact Sheet or equivalent. The KOC, solubility, half-life (soil) and any additional information as specified in Section IV.9h.(6) shall be provided for each pesticide.

(4) Golf Course Description. A description of the golf course as it exists or is designed as follows:

(a) A site plan (which may be an orthophoto map, scale 1:5000''), marked with the following:
   i. tees, greens and fairways, by hole number and supporting operations;
   ii. areas irrigated and source of water for irrigation;
   iii. all surface waters identified by name, if known;
   iv. all known ground waters;
   v. private water sources of abutting properties;
   vi. public water sources and source protection areas;
   vii. identification and location of any environmentally sensitive areas;
   viii. property boundaries;
   ix. each building and its use; and
   x. legend, scale, north designation;

(b) A topographical map, which may be a U.S.G.S. topographical map with the boundaries of the golf course identified thereon and a general written topographical description including minimum and maximum slopes and any distinct topographical features.

(c) The square feet of each green and tee, and identification of any green or tee which is within 100 feet of any surface waters.

(d) Approximate acreage of each fairway specifying closely mowed areas and rough areas individually.

(e) The square miles of the drainage area for flowing waters at the point of exit from the golf course property.

(f) The surface acreage and average depth of any ponded surface waters and the location of its primary source of supply.

(g) A soils map and key as mapped by the United States Soil Conservation Service or other reliable source, including identification of soils of high erodibility.

(5) Pesticide Management Plan. A detailed account of how pests such as insects, weeds, diseases and rodents are managed on the golf course as follows:

(a) A general statement of the policy and listing of the goals of the pesticide management plan, including the golf course's strategy for minimizing pesticide use;

(b) A description of pest problems associated with turfgrass and ornamentals during the past five (5) years, including locations and the extent of infestation. For proposed golf courses a description of anticipated pest problems and the rationale for each;
(c) A description and rationale of the pest management strategies that are or will be employed, including biological, chemical and cultural controls;

(d) A description of pest monitoring practices that are or will be utilized;

(e) A description and location of pesticide storage, handling and mixing areas; a Spill Response Plan and proposed measures to prevent accidental releases;

(f) A description of irrigation practices, including the type of system used, rates and intervals of irrigation;

(g) For proposed golf courses, a description of any unique feature of its design which will minimize pest problems;

(h) A description of any buffer zone established or to be established to protect surface waters, private and public water supplies, and environmentally sensitive areas.

(6) Other Pesticides, Additional Information. When the use of a pesticide(s) is (are) requested which is (are) not found on the current Prescreened Pesticide List or when otherwise required by the Commissioner to evaluate risk, the applicant will provide additional information which will justify the use of the pesticide within an acceptable level of risk. The following information or any other pertinent information may be submitted in support of this justification:

(a) Expected pesticide concentrations:

i. nearest private and all public water sources of concern using a Simple Dilution Analysis, calculated using a proportion of either well yield and/or precipitation and irrigation;

ii. in flowing surface water at the point of exit from the golf course boundary.

iii. in standing surface water only when deemed necessary after consultation with the Department of Environmental Conservation, Water Quality Division.

(b) In graphic or matrix form, a comparison between the expected pesticide concentrations and Vermont Water Quality Guidelines, Chapter 12 Groundwater Protection Rule Standards and Department of Health Drinking Water Standards.

(c) The hydrogeologic setting, including hydrogeologic flow patterns, receiving waters, recharge and discharge areas, range of depth to groundwater, aquifer type, if present and hydraulic conductivity.

(d) Identification of any environmentally sensitive areas and a general discussion of whether the use of pesticides will destroy or significantly imperil the same.

i. Golf courses shall keep and maintain operating records and report pesticides on forms provided by the Commissioner for that purpose as follows:

(1) Operational records of pest problems encountered, control methods employed and their effectiveness, the type and amount of pesticide(s) used, its purpose, date and area of the golf course where applied, a record of rainfall, and a summary of irrigation utilization. These records must be maintained for a period of five (5) years and shall be made available to the Commissioner upon request.

(2) A pesticide use record for each calendar year shall be submitted to the Commissioner prior to January 1 of the following year. A form will be provided by the Commissioner for this purpose.
(3) Maintenance of the records and report of pesticide use as provided above shall exempt the golf course or certified applicators employed by it from the record and reporting requirements of Section V. 2, 4 and 6.

SECTION 8.01— Maintenance of Records by Certified Applicators, Licensed Companies, Licensed Pesticide Dealers, and MAINTENANCE OF RECORDS BY CERTIFIED APPLICATORS, LICENSED COMPANIES, LICENSED PESTICIDE DEALERS AND Pesticide Producing Establishments

PESTICIDE PRODUCING ESTABLISHMENTS

8.01— Requirements for Certified Private Applicators

(a) A certified private applicator shall maintain routine operational records for any restricted use Class A pesticide applied, the pesticide product name, Environmental Protection Agency (EPA) Registration Number, amount used, date of application, location of application (farm name and town) and the pest(s) treated for during each year. This information is to be held for a period of two years and shall be furnished to the Commissioner upon request.

(b) Routine operational records shall be maintained on a daily basis and shall contain:

1. The pest treated for—The name and address of the person for whom the pesticide was applied.
2. The location of the pesticide application.
3. The size of the area treated.
4. The crop, commodity, stored product, or site to which the pesticide was applied.
5. The time and date of the pesticide application.
6. The brand or product name of the pesticide applied.
7. The EPA registration number of the pesticide applied.
   The EPA registration number of the pesticide applied.
8. The total amount of the pesticide applied per location per application.
9. The name and certification number of the certified applicator that made or supervised the application, and, if applicable, the name of any noncertified applicator(s) that made the application under the direct supervision of the certified applicator.

(c) These records must be maintained for a period of three years and shall be made available to the Secretary upon request.

8.02— Requirements for Certified Commercial and Noncommercial Applicators
(a) Certified commercial and certified noncommercial applicators shall keep and maintain pesticide operational records in a manner prescribed by the Commissioner Secretary on forms provided for that purpose.

(b) Routine operational records shall be maintained on a daily basis and shall contain:

1. The name and address of the person for whom the pesticide was applied.
2. Pest treated for.
3. The location of the pesticide application.
4. The size of the area treated.
5. The crop, commodity, stored product, or site to which the pesticide was applied.
6. The time and date of the pesticide application.
7. The brand or product name of the pesticide applied.
8. The EPA registration number of the pesticide applied.
9. The total amount of the pesticide applied per location per application.
10. The name and certification number of the certified applicator that made or supervised the application, and, if applicable, the name of any noncertified applicator(s) that made the application under the direct supervision of the certified applicator.

(c) Be kept which state the pesticide product name, EPA Registration Number, amount used, date of application, location of application (farm name and town) and the pest(s) treated for during each year. These records must be maintained for a period of two three years and shall be made available to the Commissioner Secretary upon request.

(d) Certified commercial and non-commercial applicators shall maintain/submit an annual pesticide application report to the Secretary. A pesticide use report shall be submitted to the Commissioner Secretary annually.

2. The report shall state the EPA Registration Number, the product name, the manufacturer, the amount used, the general purpose for which it was used, and the county in which it was used.

3. Annual pesticide use reports shall be submitted together with an application for the renewal of certification to the Commissioner Secretary prior to January 1 of each year. Commercial and noncommercial pesticide applicator certificates shall not be renewed without the submission of an annual pesticide use application report. Annual pesticide use application reports shall be submitted regardless of whether a pesticide was applied during a given year or not.

8.03 Requirements for Permittees
Persons applying a pesticide under the authority of a permit issued by the Department Agency shall comply with all record keeping and reporting requirements imposed by the Commissioner-Secretary as conditions of the permit, in addition to complying with all other requirements of this rule.

8.044— Requirements for Licensed Companies

(a) Licensed companies shall be responsible for maintaining routine operational records and submitting the annual pesticide application report to the Secretary. Certified noncommercial applicators, who do not work for licensed companies, will continue to be responsible for the maintenance and submission of these records.

(b) The licensed company shall collect operational records required by this section from its certified applicators, and hold them for a period of two three years, and. These records shall be available to the Commissioner-Secretary upon request.

(c) The annual pesticide application report shall be submitted together with the company license renewal application to the Commissioner-Secretary prior to January 1 of each year.

875.05— Requirements for Licensed Class A dealers

(a) Class A dealers shall keep and maintain records of the sale of any pesticide and shall make them available for inspection to the Commissioner-Secretary. Records shall be maintained on forms provided by the Commissioner.

(b) Licensed Class A dealers shall record and maintain at each individual dealership outlet, for the period of at least two three years, records of each transaction where a restricted use pesticide Class A pesticide is distributed to or sold to any person, excluding transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail sellers, acting only in those capacities.

(c) A noncertified applicator may purchase Class A pesticides on behalf of a certified applicator if:

1. Provide a legible written permission from the certified applicator to buy the pesticides, and
2. Pesticides sold are unopened and able to be transported safely.

(c) Records of each such Class A pesticide transaction shall include all of the following information:

1. The name and address of the residence or principal place of business of each the certified applicator to whom the restricted use Class A pesticide was distributed or sold, or if applicable, the name and address of the residence or principal place of business of each noncertified person to whom the restricted use Class A pesticide was distributed or sold for application by a certified applicator.
(2) The certification number presented to the seller/dealer evidencing the valid certification of the certified applicator authorized to purchase the Class A pesticide.

(3) The expiration date of the certified applicator’s certification.

(4) The category or categories(ies) in which the applicator is certified relevant to the pesticide(s) sold.

(5) The product name and EPA registration number of the Class A pesticide(s) distributed or sold in the transaction including any applicable emergency exemption or State special local need registration number.

(6) The quantity of the Class A pesticide(s) distributed or sold in the transaction.

(7) The date of the transaction.

(c) A report of special permit and any restricted use Class A pesticides sold on a calendar year basis shall be submitted together with the application for license renewal to the Commissioner Secretary by all Class "A" pesticide dealers prior to January 31 of the following year. Reports may be required by the Commissioner Secretary at any other time, provided the request is made in writing.

(d) Pesticide dealer Annual sales reports shall include the product name, the EPA registration number, the size and number of containers, total amount of Class A pesticide sold/distributed, and the county of intended use. For the purpose of reporting the county of intended use, pesticide dealers may use the applicator's county of residence.

(e) Annual sales reports must be submitted regardless of whether a or not restricted use Class A pesticides were sold.

6.8.06 Requirements for Pesticide Producing Establishments

A pesticide producing establishment shall
(a) maintain records required by FIFRA, and,
(b) make those records available to the Secretary upon request.

8.076 Additional Record Keeping Requirements

(a) Annual records may be required for the treatments of pests as deemed necessary by the Commissioner Secretary.

(b) In the event that a certified applicator, licensed company, or licensed pesticide dealer should choose not to renew a certificate or license, the annual use and/or annual sales reports are still required for the last year in which a valid certificate and/or license was held.

8. Refer to Section XII, Community Right to Know, for a complete description of additional requirements that may be applicable to pesticide companies, applicators, dealers and producers.

SECTION VI - COMPANY LICENSE.
Subchapter 3 – Certification Standards for Commercial Applicators and Noncommercial Applicators Using Other Than Class C Pesticides; Certification of Private Applicators; Classification of Pesticides and Limitations on Sale

1. Any enterprise applying pesticides to the land or home of another for remuneration must be licensed by the Department. Exceptions to the company-license requirement shall be:

a. Doctors of Medicine and Doctors of Veterinary Medicine applying pesticides as drugs or medication during the course of practice.

b. Applicators certified under Category 10, making recommendations and applying pesticides in demonstration or research programs.

c. Private applicators who apply pesticides to a neighbor’s property in exchange for services.

d. Certified and noncertified noncommercial applicators.

2. The company license shall be renewed yearly. The license shall extend from January 1 through December 31.

3. A fee of forty dollars ( $ 40.00) shall be charged for a company license.

4. The Commissioner may deny an application for a company license when the applying company is owned, controlled, or operated by persons or their employees who have been determined to have violated Vermont’s pesticide laws, or any rule or regulation adopted under its authority, or any order of the Commissioner under 6 V.S.A. Chapter 87 within two years preceding the date of application.

5. Applicants who are denied a company license may request a hearing to review the decision within fifteen days of receipt of the denial.

6. Licensed companies and those requiring licensing shall be responsible for ensuring they only employ pesticide applicators that are properly certified under these regulations, prescribed by the Commissioner in Section VIII and that applicators employed by them remain certified for the duration of their employment with the company, except that those employees working under the direct supervision of a certified applicator need not be certified.

Licensed companies shall supply the Department with a list of all certified commercial applicators they employ. They shall send written notice to the Department within thirty (30) days whenever a certified commercial applicator is hired or leaves their employment.

SECTION VII – REQUIREMENTS FOR CERTIFIED COMMERCIAL AND CERTIFIED NONCOMMERCIAL APPLICATORS.
1. All noncommercial applicators who use other than Class "C" pesticides and all commercial applicators who use pesticides shall be certified in accordance with the applicator standards established in these regulations, or work under the direct supervision of a certified commercial or certified noncommercial applicator. (See definition of "direct supervision", Section I.)

Exceptions: Persons conducting research in laboratories, or Doctors of Medicine or Doctors of Veterinary Medicine applying pesticides as drugs or medication during the course of their normal practice are exempt from the certification requirement.

2. The candidate for certification shall satisfactorily meet standards prescribed by the Commissioner in Section VIII.

3. Candidates for certification shall take a written examination covering general standards and specific standards required for each category an individual expects to operate under. A candidate must be certified in each specific category that he or she intends to work in.

   a. A candidate shall have a maximum of three opportunities to achieve a passing score on the certification examination during a twelve (12) month period. This twelve (12) month period shall begin on the date the candidate takes the first examination. After an initial failing score a candidate must wait at least seven (7) days to retake the examination. If a candidate fails twice, there shall be at least a twenty-eight (28) day waiting period before retaking the exam for the third time.

4. Certificates issued in any category may be further restricted by the Commissioner as a condition of issuance, when the Commissioner determines that the restrictions are necessary to protect human life or the environment. For example, a certain category certificate may be restricted to allow only the use of specific pesticides in that type of work.

5. Fees: A fee of twenty dollars ($20.00) shall be assessed for each category or sub-category certification issued. The maximum total fee charged for categories per candidate shall be seventy-five dollars ($75.00). Payment of fees for persons who are employees of federal, state or municipal government and who apply pesticides as part of that employment shall be waived.

6. The certification year will extend from January 1 through December 31.

   a. Certification of noncommercial and commercial applicators may be renewed annually for up to five Years after which recertification shall be required. The Commissioner may furthermore require recertification whenever necessary and determine the procedure to be utilized involving either additional training or reexamination.

   b. Certified noncommercial or commercial applicators shall send written notice to the Department within thirty (30) days of changing employers. The name of the new employer shall be supplied in the notice.
7. Denial of certificate: The Commissioner may deny issuance of a certificate to any person failing to adequately demonstrate competency on any examination or who otherwise fails to participate in training required in lieu of written examination or who is currently under a suspension or revocation of certificate by the Commissioner.

SECTION VIII-9 — Certification Standards for Commercial Applicators and Noncommercial Applicators Using Other Than Class C Pesticides

9.01 General Certification Requirements

(a) Noncommercial applicators who use a pesticide other than Class C and all commercial applicators, except those who work under the direct supervision of a certified applicator, shall be certified according to categories which reflect the types of pesticide use for which they have been examined and found competent.

(b) Applicants shall take and pass a written examination covering core pesticide use standards and examination(s) related to specific standards required for each category in which a person uses a pesticide.

9.02 Description of Certification Categories

(a) Category 1 Agricultural Pest Control.

(1) Category 1A Agricultural Plant. This category applies to applicators who use or supervise the use of a pesticide in the production of agricultural commodities, including but not limited to grains, vegetables, small fruits, tree fruits, peanuts, tree nuts, tobacco, cotton, feed and forage crops including grasslands, and non-crop agricultural lands.

(2) Category 1B Animal. This category applies to applicators who use or supervise the use of a pesticide on animals or to places on or in which animals are confined including a Doctor of Veterinary Medicine engaged in the business of applying a pesticide for hire, and who publicly holding themselves out as pesticide applicators. This category does not include the use of a pesticide in apiculture.

(3) Category 1C Apiculture. This category applies to applicators who use or supervise the use of a pesticide in apiculture, including, but not limited to miticides.

(b) Category 2 Forest Pest Control.

(1) Category 2A Forest. This category applies to applicators who use or supervise the use of a pesticide in forests, forest nurseries and forest seed production.

(2) Category 2B Terrestrial Invasive. This category applies to applicators who use or supervise the use of a pesticide in a wide variety of settings, including but not limited to forests, sensitive ecosystems, residential, fallow crop land, predominantly targeted at the control of designated terrestrial invasive plant species.

(c) Category 3 Ornamental and Turf Pest Control.

(1) Category 3A Ornamental & Shade Trees. This category applies to applicators who use or supervise the use of a pesticide to control
pests in the maintenance and production of ornamental and landscape plants including flowers, shrubs and trees.

(2) Category 3B Turf. This category applies to applicators who use or supervise the use of a pesticide to control pests in the maintenance and production of turf, including golf courses.

(d) Category 4 Seed Treatment. This category applies to applicators using or supervising the use of a pesticide on seeds in seed treatment facilities.

(e) Category 5 Aquatic Pest Control. This category applies to applicators using or supervising the use of a pesticide as applied to, or adjacent to, standing or running waters and includes but is not limited to, waters of the state, drinking water reservoirs, industrial lagoons and sewage or wastewater treatment plant lagoons.

(f) Category 6 Rights-of-way Pest Control. This category applies to applicators using or supervising the use of a pesticide in the maintenance of roadsides, powerlines, pipelines, railway rights-of-way or similar areas.

(g) Category 7 Industrial, Institutional, Structural, and Health Related Pest Control.

(1) Category 7A General Pest Control. This category applies to applicators using or supervising the use of a pesticide in, on or around food handling establishments, human dwellings, institutions, such as schools or hospitals, industrial establishments, including warehouses and grain elevators and any other structure and adjacent area, public or private, for the protection of stored, processed or manufactured products.

(2) Category 7B Vector Pest Control (non-public health). This category applies to applicators using or supervising the use of a pesticide for the control of mosquitoes, ticks and other biting arthropods. This category does not apply to government applicators engaged in public health programs.

(3) Category 7C Food Processing Pest Control. This category applies to applicators using or supervising the use of a pesticide to control pests in, on, or around food processing plants which may include, but are not limited to, bakeries, dairy product processing, canning and frozen food packing, confection manufacturing, and meat product processing plants.

(4) Category 7D Wood and Fiber Product Pest Control. This category applies to applicators using or supervising the use of a pesticide for control of pests which degrade or prematurely destroy the service, life and usefulness of wood and fiber products.

(5) Category 7E Cooling Towers and Biocides (non-potable water). This category applies to applicators using or supervising the use of a pesticide to control pests in non-potable cooling waters and in water or slurries used in industrial processing, in, on or around human dwellings, commercial establishments, institutions, including but not limited to, schools and hospitals, industrial
establishments and any other structures and adjacent areas whether public or private.

(6) Category 7F Disinfection and Antimicrobial Pest Control. This category applies to applicators using or supervising the use of a pesticide to treat mold or microbial growth in residential and commercial settings including commercial disinfection services.

(h) Category 8: Public Health Pest Control. This category applies to applicators using or supervising the use of a pesticide by governmental employees in public health programs for the management and control of pests for medical and public health importance.

(i) Category 9: Regulatory Pest Control. This category applies to applicators using or supervising the use of a pesticide by state, federal, and other governmental subdivisions for control of regulated pests.

(j) Category 10: Demonstration and Research Pest Control. This category applies to applicators using or supervising the use of a pesticide by individuals who demonstrate pest control to the public, supervise demonstrations or conduct field research with a pesticide. Included in this category are those individuals who demonstrate, sell, or recommend a pesticide to applicators, dealers or the public.

(k) Category 11: Aerial Pest Control. For the application of a pesticide from any aircraft for the control of pests. This is a concurrent category and must be used in conjunction with valid certification in another category as described in sections 9.02(a)-(j), in 1-9 above.

(l) Category 12: Soil fumigation. This category applies to applicators who use or supervise the use of a pesticide to fumigate soil. This is a concurrent category and must be used in conjunction with valid certification in another category as described in sections 9.02(a)-(j), in another category in 1-9 above.

(m) Category 13: Non-soil fumigation. This category applies to applicators who use or supervise the use of a pesticide to fumigate anything other than soil. This is a concurrent category and must be used in conjunction with valid certification in another category as described in sections 9.02(a)-(j).

9.03 Core standards for All Categories and Concurrent Categories

(a) Any commercial or noncommercial applicant who use a pesticide other than Class C and any commercial applicator, except those who work under the direct supervision of a certified applicator, seeking certification shall demonstrate practical knowledge of the principles and practices of pest control and the proper and effective use thereof by passing a written examination of core pesticide use standards.

(b) Written examinations for all commercial and non-commercial applicator certification certifications will address the following areas of core competency:

(1) Label and labeling comprehension. Ability to read and understand pesticide labels, labeling, and their functions, including all the following:

(A) Understanding the general format and terminology of pesticide labels and labeling.
(B) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.

(C) Understanding that it is a violation to use any pesticide in a manner inconsistent with its labeling.

(D) Understanding that applicators must comply with all use restrictions and directions for use contained in pesticide labels and labeling, including being certified in the certification category appropriate to the type and site of the application.

(E) Understanding the meaning of product classification as either federally-restricted, state-restricted, controlled-sale, or homeowner as related to Vermont Class A, B, and C classifications, and that a product may be unclassified.

(F) Understanding and complying with product-specific notification requirements.

(G) Recognizing and understanding the difference between mandatory and advisory labeling language.

(2) Safety. Measures to avoid or minimize adverse health effects, including the following:

(A) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of a pesticide.

(B) Understanding that a pesticide’s risk is a function of exposure and the pesticide’s toxicity.

(C) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.

(D) Common types and causes of pesticide accidents.

(E) Precautions to prevent injury to applicators and other individuals in or near treated areas.

(F) Need for, and proper use of, protective clothing and personal protective equipment.

(G) Symptoms of pesticide poisoning.

(H) First aid and other procedures to be followed in case of a pesticide accident.

(I) Proper identification, storage, transport, handling, mixing procedures, and disposal methods for a pesticide and used pesticide containers, including precautions to be taken to prevent children from having access to a pesticide and pesticide containers.

(3) Environment. The potential environmental consequences of the use and misuse of a pesticide, including the influence of the following:

(A) Weather and other indoor and outdoor climatic conditions.

(B) Types of terrain, soil, or other substrate.
(C) Presence of fish, wildlife, and other non-target organisms.
(D) Drainage patterns.

(4) Pests. The proper identification and effective control of pests, including the following:
   (A) The importance of correctly identifying target pests and selecting the proper pesticide product(s) for effective pest control.
   (B) Verifying that the label does not prohibit the use of the product to control the target pest(s).
   (C) Pest development and biology as it may be relevant to problem identification and control.

(5) Pesticides. Characteristics of pesticides, including the following:
   (A) Types of pesticides.
   (B) Types of formulations.
   (C) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations.
   (D) Hazards and residues associated with use.
   (E) Factors that influence effectiveness or lead to problems such as pesticide resistance.
   (F) Dilution procedures.

(6) Equipment. Application equipment, including the following:
   (A) Types of equipment and advantages and limitations of each type.
   (B) Use, maintenance, and calibration procedures.

(7) Application methods. Selecting appropriate application methods, including the following:
   (A) Methods used to apply various forms and formulations of pesticides.
   (B) Knowledge of which application method to use in a given situation and that use of a fumigant or aerial application requires additional certification.
   (C) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
   (D) Prevention of drift and pesticide loss into the environment.

(8) Laws and regulations. Knowledge of applicable State and Federal laws and regulations.

(9) Direct Supervision. Comprehension of what “direct supervision” entails including an ability to recognize which Class A pesticides allow for direct supervision.

(10) Professionalism. Understanding the importance of the following:
    (A) Maintaining chemical security for pesticides.
    (B) How to communicate information about pesticide exposures and risks with customers and the public.
(C) Appropriate product stewardship for certified applicators.

(c) All applicators seeking certification shall demonstrate practical knowledge of the principles and practices of pest control and safe use of a pesticide. Examination shall be based on examples of problems and situations appropriate to the particular category or categories of the applicator’s certification and the following areas of competence in Sections 9.05 – 9.17.

9.04 Specific Standards of Competency for Each Category of Commercial and Noncommercial Applicators
In addition to satisfying the requirements of section 9.03, to be certified as commercial and noncommercial applicators, a person must demonstrate through written examinations practical knowledge of the principles and practices of pest control and proper and effective use of pesticides for each category for which they intend to use pesticides as listed in sections 9.05 – 9.17.

9.05 Agricultural Pest Control:
(a) Category 1A Agricultural Plant. Applicators must demonstrate a practical knowledge of the following:
   (1) Crops, grasslands, and non-crop agricultural lands, and the specific pests of those areas on which they may be using a pesticide.
   (2) Pre-harvest intervals.
   (3) Restricted entry intervals.
   (4) Phytotoxicity.
   (5) Potential for environmental contamination such as soil and water problems, non-target injury and other problems resulting from the use of a pesticide in agricultural areas.
   (6) The potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures.
(b) Category 1B Animal. Applicators applying a pesticide directly to animals or to places on or in which animals are confined shall demonstrate a practical knowledge of the following:
   (1) The animals to be treated and their associated pests.
   (2) Specific pesticide toxicity and residue potential.
   (3) The relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.
(c) Category 1C Apiculture. Applicators applying a pesticide in or on beehives shall demonstrate a practical knowledge of the following:
   (1) Honeybee life cycle, and their associated pests;
   (2) Specific pesticide toxicity, residue potential, and tolerances for honey, wax, or other hive components that will enter into the food supply.
   (3) The relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.
Best management practices of pests and diseases associated with honeybees.

Methods to quantify mite loads in hives.

9.06  Category 2: Forest Pest Control
(a)  Category 2A General. Applicators shall demonstrate a practical knowledge of the following:

1. Types of forests, forest nurseries, and seed production within the jurisdiction of the certifying authority and the pests involved.
2. The cyclic occurrence of certain pests and specific population dynamics as a basis for programming pesticide applications.
3. The relevant organisms causing harm and their vulnerability to the pesticides to be applied.
4. How to determine when pesticide use is proper.
5. Selection of application method and proper use of application equipment to minimize non-target exposures.
6. Appropriate responses to meteorological factors and adjacent land use.
7. The potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures.

(b)  Category 2B Terrestrial Invasive. Applicators shall demonstrate a practical knowledge of the following:

1. Types of terrestrial invasive plants, their life cycles and management techniques.
2. Specific population dynamics as a basis for programming pesticide applications.
3. Application techniques in a variety of nonagricultural sites, including sensitive environmental areas.
4. Knowledge of non-target impacts of a pesticide in aquatic, residential and forest stands.
5. Proper techniques of application and pesticide selection.
6. Control methods which will minimize the possibility of secondary problems such as unintended effects on wildlife.
7. How to determine when pesticide use is proper.
8. Selection of application method and proper use of application equipment to minimize non-target exposures.
9. Appropriate responses to meteorological factors and adjacent land use.
10. Proper use of specialized equipment especially as it may relate to meteorological factors and adjacent land use.

9.07  Category 3: Ornamental and Turf Pest Control
(a)  Category 3A Ornamental and Shade Tree. Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental plants including:

1. The potential for phytotoxicity.
Application methods that will minimize or prevent hazards to humans, pets, and other domestic animals due to the frequent proximity of human habitations to application activities.

Knowledge of state-required posting.

Category 3B Turf. Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of turf including:
1. The potential for phytotoxicity.
2. Application methods that will minimize or prevent hazards to humans, pets, and other domestic animals.

9.08 Category 4: Seed Treatment
Applicators shall demonstrate a practical knowledge including:
(a) The types of seeds to be treated in a seed treatment facility.
(b) The effects of carriers and surface-active agents on pesticide binding and germination.
(c) The hazards associated with handling, sorting and mixing, and misuse of treated seeds.
(d) The importance of proper application techniques to avoid harm to non-target organisms.
(e) The proper disposal of unused treated seeds.

9.09 Category 5: Aquatic Pest Control
Applicators shall demonstrate a practical knowledge of the following:
(a) The secondary effects which can be caused by improper application rates, incorrect formulations and faulty application of pesticides used in this category.
(b) Various water aquatic use situations and the potential of downstream effects.
(c) Potential pesticide effects on plants, fish, birds, beneficial insects and other organisms which may be present in aquatic environments.
(d) The principles of limited-area application.

9.10 Category 6: Right-of-way Pest Control
Applicators shall demonstrate a practical knowledge of the following:
(a) The types of environments (terrestrial and aquatic) traversed by rights-of-way.
(b) Recognition of target pests.
(c) Techniques to minimize non-target exposure, runoff, drift, and excessive foliage destruction.
(d) The potential for phytotoxicity due to a wide variety of plants and pests to be controlled, and for persistence beyond the intended period of pest control.

9.11 Category 7: Industrial, Institutional, Structural and Health Related Pest Control
(a) Category 7A General. Applicators shall demonstrate a practical knowledge of the following:
1. A wide variety of pests, including their life cycles, biology, and behavior.
2. Appropriate types of formulations to control a target pest.
3. Methods of application that
(A) avoid contamination of habitat and exposure of people and pets;
(B) avoid contamination of food;
(C) minimize damage to and contamination of areas treated;
(D) minimize acute and chronic exposure of people and pets; and
(E) minimize environmental impacts of outdoor applications.

(b) Category 7B Vector Pest (non-public health). Applicators shall demonstrate a practical knowledge of the following:

1. Vector pests, including recognizing the pests and signs of their presence, their habitats, their life cycles, biology, and behavior where it is relevant to problem identification and control.
2. The importance of such nonchemical control methods as sanitation, waste disposal, and drainage.
3. Application methods which minimize acute and chronic exposure of people and pets.
4. Methods to minimize environmental impacts of outdoor applications.

(c) Category 7C Food Processing. Applicators shall demonstrate a practical knowledge of the following:

1. A wide variety of pests, including their life cycles;
2. Types of formulations appropriate for the control of a target pest; and
3. Application methods which
   (Ai) avoid contamination of food, food processing equipment, and packaging materials;
   (Bi) avoid damage and contamination of the processing area and exposure of people;
   (Ci) minimize acute and chronic exposure of people and pets; and
   (Di) minimize environmental impacts of outdoor applications.

(d) Category 7D Wood and Fiber Product. Applicators shall demonstrate a practical knowledge of the following:

1. A wide variety of pests, including their life cycle; types of formulations for their control; and
2. Application methods that:
   (A) avoid contamination of food or feed;
   (B) avoid damage and contamination of habitat and exposure to people, pets, and domestic animals;
   (C) avoid contamination, minimize damage to and contamination of areas treated;
   (D) minimize acute and chronic exposure of people and pets; and

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(E) minimize environmental impacts of outdoor applications.

(e) Category 7E Cooling Towers and Biocides (non-potable water). Applicators shall demonstrate a practical knowledge of the following:
   (1) Wide array of pests (algae, bacteria, fungi and shellfish) that infest a cooling water system or water used in industrial processing and the methods and reasons for their control;
   (2) A practical knowledge of the pesticide formulations and hazards associated with the use of a pesticide in non-potable cooling waters or water used in industrial processing, in, on or around human dwellings, commercial establishments, institutions, industrial establishments, pulp mills and any other structures and adjacent areas, public or private;
   (3) The different types of cooling water systems or water used in industrial processing and the various methods of testing for and identifying pest infestations.

(f) Category 7F Disinfection and Antimicrobial. Applicators shall demonstrate a practical knowledge of the following:
   (1) Microbial pests, including their life cycles, types of formulations appropriate for their control; and
   (2) Methods of application that:
       (A) avoid contamination of habitat and exposure of people and pets;
       (B) minimize damage to and contamination of areas treated;
       (C) minimize acute and chronic exposure of people and pets; and
       (D) minimize environmental impacts of outdoor applications.

9.12 Category 8: Public Health Pest Control
Applicators shall demonstrate practical knowledge of the following:
   (a) Vector-disease transmission as it relates to and influences application programs;
   (b) Types of pests that are important vectors of disease, including recognizing the pests and signs of their presence, their habitats, their life cycles, biology, and behavior; and
   (c) Application methods to minimize damage to and contamination of areas treated, acute and chronic exposure of people and pets, and non-target exposures.
   (d) The importance and employment of such nonchemical control methods as sanitation, waste disposal and drainage.

9.13 Category 9: Regulatory Pest Control
Applicators shall demonstrate practical knowledge of the following:
   (a) Regulated pests.
   (2) Applicable laws relating to quarantine and other regulation of pests.
The potential impact on the environment of a pesticide used in suppression and eradication programs.

Factors influencing introduction, spread and population dynamics or relevant pests.

The knowledge referenced in Section 9.13(a) shall extend beyond that required in other areas of the country where emergency measures are invoked to control regulated pests and where individual judgments must be made in new situations.

9.14 Category 10: Demonstration and Research Pest Control

(a) Applicators shall demonstrate practical knowledge of the following:

(1) Potential problems, pests, and population levels reasonably expected to occur in a demonstration situation;
(2) The effects of a pesticide on target and non-target organisms; and
(3) Pesticide-organism interactions and the importance of integrating pesticide use with other control methods.

(b) Applicators shall be expected to demonstrate competency in each pest control category applicable to their activity. The specific standards required for categories 1 through 9 applicable to their activity.

9.15 Category 11: Aerial Pest Control

Applicators shall demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of a pesticide, including the following:

(a) Label and labeling comprehension. Ability to read and understand pesticide labels, labeling, and restrictions specific to aerial application of a pesticide including:

(1) Spray volumes.
(2) Buffers and no-spray zones.
(3) Weather conditions specific to wind and inversions.

(b) Application equipment. Understand how to choose and maintain aerial application equipment, including the following:

(1) The importance of inspecting application equipment to ensure it is in proper operating condition prior to beginning an application.
(2) Selecting proper nozzles to ensure appropriate pesticide dispersal and to minimize drift.
(3) Knowledge of the components of an aerial pesticide application system, including pesticide hoppers, tanks, pumps, and types of nozzles.
(4) Interpreting a nozzle flow rate chart.
(5) Determining the number of nozzles for intended pesticide output using nozzle flow rate chart, aircraft speed, and swath width.
(6) How to ensure nozzles are placed to compensate for uneven dispersal due to uneven airflow from wingtip vortices, helicopter rotor turbulence, and aircraft propeller turbulence.
(7) Where to place nozzles to produce the appropriate droplet size.
(8) How to maintain the application system in good repair, including pressure gauge accuracy, filter cleaning according to schedule, and checking nozzles for excessive wear.

(9) How to calculate required and actual flow rates.

(10) How to verify flow rate using fixed timing, open timing, known distance, or a flowmeter.

(11) When to adjust and calibrate application equipment.

(c) Application considerations. The applicator shall demonstrate knowledge of factors to consider before and during application, including the following:

1. Weather conditions that could impact application by affecting aircraft engine power, take-off distance, and climb rate, or by promoting spray droplet evaporation.

2. How to determine wind velocity, direction, and air density at the application site.

3. The potential impact of thermals and temperature inversions on aerial pesticide application.

(d) Minimizing drift. The applicator shall demonstrate knowledge of methods to minimize off-target pesticide movement, including the following:

1. How to determine drift potential of a product using a smoke generator.

2. How to evaluate vertical and horizontal smoke plumes to assess wind direction, speed, and concentration.

3. Selecting techniques that minimize pesticide movement out of the area to be treated.

4. Documenting special equipment configurations or flight patterns used to reduce off-target pesticide drift.

(e) Performing an aerial application. The applicator shall demonstrate competency in performing an aerial pesticide application, including the following:

1. Selecting a flight altitude that minimizes streaking and off-target pesticide drift.

2. Choosing a flight pattern that ensures applicator and bystander safety and proper application.

3. The importance of engaging and disengaging spray precisely when entering and exiting a predetermined swath pattern.

4. Tools available to mark swaths, such as global positioning systems and flags.

5. Recordkeeping requirements for aerial pesticide applications including application conditions if applicable.

9.16 Category 12: Soil fumigation

Applicators shall demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigation applications, including the following:

(a) Label and labeling comprehension. Ability to read and understand pesticide labels and labeling for products used to perform soil fumigation, including all the following:
(1) Labeling requirements specific to soil fumigants.
(2) Requirements for certified applicators of fumigants, fumigant handlers and permitted fumigant handler activities, and the safety information that certified applicators must provide to noncertified applicators using fumigants under their direct supervision.
(3) Entry-restricted periods for tarped and untarped field application scenarios.
(4) Recordkeeping requirements.
(5) Labeling provisions unique to fumigant products containing certain active ingredients.

(b) Safety. Measures to minimize adverse health effects, including all the following:
(1) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, field workers, and bystanders can become exposed to fumigants.
(2) Common problems and mistakes that can result in direct exposure to fumigants.
(3) Signs and symptoms of human exposure to fumigants.
(4) Air concentrations of a fumigant that require that applicators wear respirators or exit the work area entirely.
(5) Steps to take if a fumigant applicator experiences sensory irritation.
(6) Understanding air monitoring, when it is required, and where and when to take samples.
(7) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
(8) First aid measures to take in the event of exposure to a soil fumigant.
(9) Label and labeling requirements for transportation, storage, spill clean-up, and emergency response for soil fumigants, including safe disposal of containers and contaminated soil, and management of empty containers.

(c) Soil fumigant chemical characteristics. Characteristics of soil fumigants, including the following:
(1) Chemical characteristics of soil fumigants.
(2) Specific human exposure concerns for soil fumigants.
(3) How soil fumigants change from a liquid or solid to a gas.
(4) How soil fumigants disperse in the application zone.
(5) Compatibility concerns for tanks, hoses, tubing, and other equipment.

(d) Application. Selecting appropriate application methods and timing, including the following:
(1) Application methods, including but not limited to water-run and non-water-run applications, and equipment commonly used for each soil fumigant.
(2) Site characteristics that influence fumigant exposure.
(3) Understanding temperature inversions and their impact on soil fumigant application.

(4) Weather conditions that could impact timing of soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications during specific weather conditions.

(5) Conducting pre-application inspection of application equipment.

(6) Understanding the purpose and methods of soil sealing, including the factors that determine which soil sealing method to use.

(7) Understanding the use of tarps, including the range of tarps available, how to seal tarps, and labeling requirements for tarp removal, perforation, and repair.

(8) Calculating the amount of product required for a specific treatment area.

(9) Understanding the basic techniques for calibrating soil fumigant application equipment.

(e) Soil and pest factors. Soil and pest factors that influence fumigant activity, including the following:

(1) Influence of soil factors on fumigant volatility and movement within the soil profile.

(2) Factors that influence gaseous movement through the soil profile and into the air.

(3) Soil characteristics, including how soil characteristics affect the success of a soil fumigant application, assessing soil moisture, and correcting for soil characteristics that could hinder a successful soil fumigant application.

(4) Identifying pests causing the damage and verifying they can be controlled with soil fumigation.

(5) Understanding the relationship between pest density and application rate.

(6) The importance of proper application depth and timing.

(f) Personal protective equipment. Understanding what personal protective equipment is necessary and how to use it properly, including the following:

(1) Following labeling directions for required personal protective equipment.

(2) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.

(3) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.

(4) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(g) Fumigant management plans and post-application summaries. Information about fumigant management plans, including the following:
When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.

The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.

The person responsible for verifying that a fumigant management plan is accurate.

The elements, purpose, and content of a post-application summary, who must prepare it, and when it must be completed.

Buffer zones and posting requirements. Understanding buffer zones and posting requirements, including the following:

1. Buffer zones and the buffer zone period.
2. Identifying who is allowed in a buffer zone during the buffer zone period and who is prohibited from being in a buffer zone during the buffer zone period.
3. Using the buffer zone table from the labeling to determine the size of the buffer zone.
4. Factors that determine the buffer zone credits for application scenarios and calculating buffer zones using credits.
5. Distinguishing buffer zone posting and treated area posting, including the pre-application and post-application posting timeframes for each.
6. Proper choice and placement of warning signs.

Category 13. Non-soil fumigation

Applicants must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of a pesticide to sites other than soil, including the following:

(a) Label & labeling comprehension. Ability to read and understand pesticide labels and labeling for products used to perform non-soil fumigation, including labeling requirements specific to non-soil fumigants.
(b) Safety. Measures to minimize adverse health effects, including the following:
1. Understanding how certified applicators, uncertified applicators using fumigants under direct supervision of certified applicators, and bystanders can become exposed to fumigants.
2. Common problems and mistakes that can result in direct exposure to fumigants.
4. Air concentrations of a fumigant that require applicators to wear respirators or to exit the work area entirely.
5. Steps to take if a fumigant applicator experiences sensory irritation.
6. Understanding air monitoring, when it is required, and where and when to take samples.
7. Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
First aid measures to take in the event of exposure to a fumigant.

Labeling requirements for transportation, storage, spill clean-up, and emergency response for non-soil fumigants, including safe disposal of containers and contaminated materials, and management of empty containers.

(c) Non-soil fumigant chemical characteristics. Characteristics of non-soil fumigants, including the following:

1. Chemical characteristics of non-soil fumigants.
2. Specific human exposure concerns for non-soil fumigants.
3. How fumigants change from a liquid or solid to a gas.
4. How fumigants disperse in the application zone.
5. Compatibility concerns for tanks, hoses, tubing, and other equipment.

(d) Application. Selecting appropriate application methods and timing, including the following:

1. Application methods and equipment commonly used for non-soil fumigation.
2. Site characteristics that influence fumigant exposure.
3. Conditions that could impact timing of non-soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications under specific conditions.
4. Conducting pre-application inspection of application equipment and the site to be fumigated.
5. Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.
6. Calculating the amount of product required for a specific treatment area.
7. Understanding the basic techniques for calibrating non-soil fumigant application equipment.
8. Understanding when and how to conduct air monitoring and when it is required.

(e) Pest factors. Pest factors that influence fumigant activity, including the following:

1. Influence of pest factors on fumigant volatility.
2. Factors that influence gaseous movement through the area being fumigated and into the air.
3. Identifying pests causing the damage and verifying they can be controlled with fumigation.
4. Understanding the relationship between pest density and application rate.
5. The importance of proper application rate and timing.

(f) Personal protective equipment. Understanding what personal protective equipment is necessary and how to use it properly, including the following:
(1) Following labeling directions for required personal protective equipment.
(2) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
(3) Understanding the types of respirators required when using specific non-soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
(4) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(g) Fumigant management plans and post-application summaries. Information about fumigant management plans and when they are required, including the following:

(1) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.
(2) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
(3) The person responsible for verifying that a fumigant management plan is accurate.
(4) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(h) Posting requirements. Understanding posting requirements, including all the following:

(1) Understanding who is allowed in an area being fumigated or after fumigation and who is prohibited from being in such areas.
(2) Distinguishing fumigant labeling-required posting and treated area posting, including the pre-application and post-application posting timeframes for each.
(3) Proper choice and placement of warning signs.

CERTIFICATION STANDARDS FOR COMMERCIAL APPLICATORS AND NONCOMMERCIAL APPLICATORS USING OTHER THAN CLASS "C" PESTICIDES

6.1. Noncommercial applicators who use pesticides other than Class "C" and all commercial applicators, except those who work under the direct supervision of a certified applicator, shall be certified according to categories which reflect the types of pesticide use for which they have been examined and found competent.

(b) Noncommercial and commercial applicators who use federally restricted pesticides shall be certified.
Applicants for certification in the categories and sub-categories described in this section shall demonstrate their competence to meet standards described under general standards, category specific standards and standards for supervision of noncertified applicators in this section. Applicants shall take and pass a written examination covering general core pesticide use standards and examination(s) related to specific standards required for each category a person or individual expects to operate under uses pesticides.

6.2. Description of categories and sub-categories:

a. Category 1: Agricultural Pest Control

(A) _Plant_—For use in production of food, forage and fiber agricultural crops. (a) Category 1A Agricultural _Agricultural Plant_.—This category applies to commercial applicators who use or supervise the use of pesticides in production of agricultural commodities, including but not limited to grains, vegetables, small fruits, tree fruits, peanuts, tree nuts, tobacco, cotton, feed and forage crops including grasslands, and non-crop agricultural lands.

(b) Agricultural _Animal_.—This category applies to commercial applicators who use or supervise the use of pesticides on animals or to places on or in which animals are confined. This category does not include the use of pesticides in apiculture. Doctors of Veterinary Medicine engaged in the business of applying pesticides for hire, publicly holding themselves out as pesticide applicators are included in this category. Doctors of Veterinary Medicine who apply pesticides as drugs or medications during the course of their normal practice are exempt from certification requirement.

(c) Apiculture—This category applies to commercial applicators who use or supervise the use of pesticides in apiculture, including, but not limited to miticides.

(B) _Animal_—For use on animals and to places on or in which animals are confined. Doctors of Veterinary Medicine engaged in the business of applying pesticides for hire, publicly holding themselves out as pesticide applicators are included in this category. Doctors of Veterinary Medicine who apply pesticides as drugs or medications during the course of their normal practice are exempt from certification requirement. See Section VII.

b. Category 2: Forest Pest Control

(a) Forest General Pest Control—This category applies to applicators who use or supervise the use of pesticides in forests, forest nurseries and forest seed production. For use in forests, forest nurseries and forest seed producing areas.

(b) Terrestrial Invasive—This category applies to applicators who use or supervise the use of pesticides in a wide variety of settings, including but not limited to forests, sensitive ecosystems, residential, fallow crop land, predominantly targeted at the control of designated terrestrial invasive plant species.
e. Category 3: Ornamental and Turf Pest Control.
   (A) Ornamentals and Shade Trees
   Ornamental & Shade trees—This category applies to applicators who use or supervise the use of pesticides to control pests in the maintenance and production of ornamental and landscape plants including flowers, shrubs and trees. For use to control pests in the maintenance and production of Christmas trees, ornamental trees, shade trees, shrubs and flowers.
   (B) Turf—This category applies to applicators who use or supervise the use of pesticides to control pests in the maintenance and production of turf, including golf courses. For use to control pests in the maintenance and production of turf.

f. Category 4: Seed Treatment
   This category applies to applicators using or supervising the use of pesticides on seeds in seed treatment facilities. For use on seeds.

g. Category 5: Aquatic Pest Control
   This category applies to applicators using or supervising the use of pesticides. For use as applied to, or adjacent to, standing or running waters and includes but is not limited to, waters of the state, drinking water reservoirs, industrial lagoons and sewage or wastewater treatment plant lagoons.

h. Category 6: Rights-of-Way Pest Control
   This category applies to applicators using or supervising the use of pesticides. For use in the maintenance of public roadsides, electric power lines, pipelines, railway rights-of-way or similar areas.

i. Category 7: Industrial, Institutional, Structural, and Health-Related Pest Control
   (A) Industrial, Institutional, and Structural Pest Control—General Pest Control—This category applies to applicators using or supervising the use of pesticides. For pesticide use in, on or around food handling establishments, human dwellings, institutions, such as schools or hospitals, industrial establishments, including warehouses and grain elevators and any other structure and adjacent area, public or private, for the protection of stored, processed or manufactured products.
   (B) Health Related Vector Pest Control (non-public health)—This category applies to applicators using or supervising the use of pesticides. For out-of-door pesticide use for the in control of mosquitoes, ticks and other biting arthropods. This category does not apply to government applicators engaged in public health programs.
   (C) Food Processing Pest Control Pest Control—This category applies to applicators using or supervising the use of pesticides. For use of the pesticides to control pests in, on or around food processing plants which may include, but are not limited to, bakeries, dairy product...
processing, canning and frozen food packing, confection manufacturing and meat product processing plants.

(D) Wood and Fiber Product Pest Control - This category applies to applicators using or supervising the use of pesticides for control of pests which degrade or prematurely destroy the service, life and usefulness of wood and fiber products.

(E) Cooling Towers and Biocides Antimicrobial (non-potable water) Pest Control - This category applies to applicators using or supervising the use of pesticides for the control of pests in non-potable cooling waters and in water or slurries used in industrial processing in, on or around human dwellings, commercial establishments, institutions, including but not limited to schools and hospitals, industrial establishments and any other structures and adjacent areas whether public or private.

(F) Disinfection and Antimicrobial Pest Control - This category applies to applicators using or supervising the use of pesticides to treat mold or microbial growth in residential and commercial settings, this includes commercial disinfection services.

h. Category 8: Public Health Pest Control - This category applies to applicators using or supervising the use of pesticides for use by governmental employees in public health programs for the management and control of pests for medical and public health importance.

i. Category 9: Regulatory Pest Control - This category applies to applicators using or supervising the use of pesticides for use by state, federal, and other governmental subdivisions for control of regulated pests.

j. Category 10: Demonstration and Research Pest Control - This category applies to applicators using or supervising the use of pesticides by individuals who demonstrate pest control to the public, supervise demonstrations or conduct field research with old, new or experimental use pesticides. Included in this category are those individuals who demonstrate, sell or recommend pesticides to applicators, dealers or the public.

k. Category 11: Aircraft Aerial Pest Control - For the application of pesticides from any aircraft for the control of pests in any of the preceding categories. This is a concurrent category and must be used in conjunction with valid certification in another category in 1-9 above.

(l) Category 12: Soil fumigation. This category applies to commercial applicators who use or supervise the use of a restricted use pesticide to fumigate soil. This is a concurrent category and must be used in conjunction with valid certification in another category in 1-9 above.

(m) Category 13: Non-soil fumigation. This category applies to commercial applicators who use or supervise the use of a restricted use pesticide to fumigate anything other than soil. This is a concurrent category and must be used in conjunction with valid certification in another category in 1-9 above.
6.3 General Core standards for all categories and sub-concurrent categories of noncommercial applicators who use pesticides other than Class C and all commercial applicators, except those who work under the direct supervision of a certified applicator, commercial applicators.

Persons seeking certification as commercial applicators must demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of

by passing a written examination. Written examinations for all commercial applicator certifications must address the following areas of core competency:

(1) Label and labeling comprehension.
   (a) The general format and terminology of pesticide labels and labeling;
   (b) The understanding of instructions, warnings, terms, symbols and other information commonly appearing on pesticide labels;
   (c) Classification of the product, general or restricted; and
   (d) Necessity for use consistent with the label.
(1) Label and labeling comprehension.

Familiarity with pesticide labels and labeling and their functions, including all of the following:

   (i) The general format and terminology of pesticide labels and labeling.
   (ii) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.
   (iii) Understanding that it is a violation to use any pesticide in a manner inconsistent with its labeling.
   (iv) Understanding that applicators must comply with all use restrictions and directions for use contained in pesticide labels and labeling, including being certified in the certification category appropriate to the type and site of the application.
   (v) Understanding the meaning of product classification as either federally restricted, state restricted, controlled-sale, or homeowner as related to Vermont Class A, B, and C classifications, general or restricted use and that a product may be unclassified.
   (vi) Understanding and complying with product-specific notification requirements.
   (vii) Recognizing and understanding the difference between mandatory and advisory labeling language.
(2) Safety. Factors including:
(a) Pesticide toxicity and hazard to man and common exposure routes;
(b) Common types and causes of pesticide accidents;
(c) Precautions necessary to guard against injury to applicators and other individuals in or near treated areas;
(d) Need for and use of protective clothing and equipment;
(e) Symptoms of pesticide poisoning;
(f) First aid and other procedures to be followed in case of a pesticide accident; and
(g) 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.

(2) Safety. Measures to avoid or minimize adverse health effects, including the following:
(i) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of pesticides.
(ii) Understanding that a pesticide’s risk is a function of exposure and the pesticide’s toxicity.
(iii) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.
(iv) Common types and causes of pesticide accidents.
(v) Precautions to prevent injury to applicators and other individuals in or near treated areas.
(vi) Need for, and proper use of, protective clothing and personal protective equipment.
(vii) Symptoms of pesticide poisoning.
(viii) First aid and other procedures to be followed in case of a pesticide accident.
(ix) 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.

(3) Environment. The potential environmental consequences of the use and misuse of pesticides as may be influenced by such factors as:
(a) Weather and other climatic conditions;
(b) Types of terrain, soil or other substrate;
(c) Presence of fish, wildlife and other non-target organisms; and
(d) Ground and surface water drainage patterns.

(3) Environment. The potential environmental consequences of the use and misuse of pesticides, including the influence of the following:
(i) Weather and other indoor and outdoor climatic conditions.
(ii) Types of terrain, soil, or other substrate.
(iii) Presence of fish, wildlife, and other non-target organisms.
(iv) Drainage patterns.

(4) Pests. Factors such as:
(a) Common features of pest organisms and characteristics of damage needed for pest recognition;
(b) Recognition of relevant pests; and
(c) Pest development and biology as it may be relevant to problem identification and control.

(4) Pests. The proper identification and effective control of pests, including the following:
(i) The importance of correctly identifying target pests and selecting the proper pesticide product(s) for effective pest control;
(ii) Verifying that the labeling does not prohibit the use of the product to control the target pest(s);
(iii) Pest development and biology as it may be relevant to problem identification and control.

(5) Pesticides. Factors such as:
(a) Types of pesticides;
(b) Types of formulations;
(c) Compatibility, synergism, persistence and animal and plant toxicity of the formulations;
(d) Hazards associated with use;
(e) Factors which influence effectiveness or lead to such problems as resistance to pesticides;
(f) Dilution procedures; and
(g) Residues associated with use.

(5) Pesticides. Characteristics of pesticides, including the following:
(i) Types of pesticides;
(ii) Types of formulations;
(iii) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations;
(iv) Hazards and residues associated with use;
(v) Factors that influence effectiveness or lead to problems such as pesticide resistance;
(vi) Dilution procedures.

(6) Equipment. Factors including:
(a) Types of equipment and advantages and limitations of each type; and
(b) Uses, maintenance and calibration.
(6) Equipment. Application equipment, including the following:
   (i) Types of equipment and advantages and limitations of each type;
   (ii) Use, maintenance, and calibration procedures;

(7) Application techniques. Factors including:
   (a) Methods of procedure 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;
   (b) Relationship of discharge and placement of pesticides to proper use, unnecessary use and misuse;
   (c) Prevention of drift and pesticide loss into the environment;
   and
   (d) Principles of chemigation including appropriate equipment.

(7) Application methods. Selecting appropriate application methods, including the following:
   (i) Methods used to apply various forms and formulations of pesticides.
   (ii) Knowledge of which application method to use in a given situation and that use of a fumigant or aerial application requires additional certification.
   (iii) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
   (iv) Prevention of drift and pesticide loss into the environment.

(8) Laws and regulations.
   Knowledge of applicable State and Federal laws and regulations.

(9) Direct Supervision.
   (A) Ability to recognize of Class A pesticides that allow for direct supervision.
   (B) Comprehension of definition of direct supervision.

(10) Professionalism. Understanding the importance of the following:
   (i) Maintaining chemical security for pesticides.
   (ii) How to communicate information about pesticide exposures and risks with customers and the public.
   (iii) Appropriate product stewardship for certified applicators.

   a. All commercial applicators seeking certification shall demonstrate practical knowledge of the principles and practices of pest control and safe use of
pesticides. Testing Examination shall be based on examples of problems and situations appropriate to the particular category or sub-category of the applicator's certification and the following areas of competence in Section 7.4.0:

1. Label and labeling comprehension.
   (a) The general format and terminology of pesticide labels and labeling;
   (b) The understanding of instructions, warnings, terms, symbols and other information commonly appearing on pesticide labels;
   (c) Classification of the product, general or restricted; and
   (d) Necessity for use consistent with the label.
2. Safety. Factors including:
   (a) Pesticide toxicity and hazard to man and common exposure routes;
   (b) Common types and causes of pesticide accidents;
   (c) Precautions necessary to guard against injury to applicators and other individuals in or near treated areas;
   (d) Need for and use of protective clothing and equipment;
   (e) Symptoms of pesticide poisoning;
   (f) First aid and other procedures to be followed in case of a pesticide accident; and
   (g) 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.
3. Environment. The potential environmental consequences of the use and misuse of pesticides as may be influenced by such factors as:
   (a) Weather and other climatic conditions;
   (b) Types of terrain, soil or other substrate;
   (c) Presence of fish, wildlife and other non-target organisms; and
   (d) Ground and surface water drainage patterns.
4. Pests. Factors such as:
   (a) Common features of pest organisms and characteristics of damage needed for pest recognition;
   (b) Recognition of relevant pests; and
   (c) Pest development and biology as it may be relevant to problem identification and control.
5. Pesticides. Factors such as:
   (a) Types of pesticides;
   (b) Types of formulations;
   (c) Compatibility, synergism, persistence and animal and plant toxicity of the formulations;
   (d) Hazards associated with use;
   (e) Factors which influence effectiveness or lead to such problems as resistance to pesticides;
   (f) Dilution procedures; and
   (g) Residues associated with use.
6. Equipment. Factors including:
   (a) Types of equipment and advantages and limitations of each type; and
   (b) Uses, maintenance and calibration.
7. Application techniques. Factors including:
   (a) Methods of procedure 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;
(b) Relationship of discharge and placement of pesticides to proper use, unnecessary use and misuse;
(c) Prevention of drift and pesticide loss into the environment; and
(d) Principles of chemigation including appropriate equipment.

(8) Laws and regulations. Applicable state and federal laws and regulations.

4. Specific standards of competency for each category and sub-category of commercial and noncommercial applicators. In addition to satisfying the requirements of Section 7.3 of to be certified as commercial and noncommercial applicators, persons must demonstrate through written examinations practical knowledge of the principles and practices of pest control and proper and effective use of pesticides for each category for which they intend to use pesticides. The minimum competency standards are because of the frequent proximity of human habitations to application activities, applicators in all categories must demonstrate practical knowledge of application methods which will minimize or prevent hazards to humans, pets and other domestic animals.

Certified applicators in each category will be particularly qualified with respect to the practical knowledge standards elaborated listed below:

a. Category 1: Agricultural Pest Control.

1AA. Category 1A Agricultural Plant. Applicators must demonstrate practical knowledge of crops, grasslands, and non-crop agricultural lands and the specific pests of those areas on which they may be using pesticides. The importance of such competency is amplified by the extensive areas involved, the quantities of pesticides needed, and the ultimate use of many commodities as food and feed. The required knowledge includes pre-harvest intervals, restricted entry intervals, phytotoxicity, potential for environmental contamination such as soil and water problems, no-target injury and other problems resulting from the use of restricted-use pesticides in agricultural areas. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures. Applicators must demonstrate practical knowledge of crops grown and the specific pests of those crops on which they may be using pesticides. The importance of such 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; preharvest intervals, reentry intervals, phytotoxicity and potential for environmental contamination, nontarget injury and community problems resulting from the use of restricted use pesticides in agricultural areas.

1B2B. Animal. Applicators applying pesticides directly to animals must demonstrate practical knowledge of such 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 applicators must know the relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.

(1CC) Apiculture. Applicators applying pesticides in or on beehives shall demonstrate practical knowledge of honey bee life cycle, and their associated pests. A practical knowledge is also required concerning specific pesticide toxicity and residue potential, since honey, wax, or other hive components will enter into the food supply or be sold. Further, the applicators must know the relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment. Best management practices of pests and diseases must be known. Applicators shall be able to identify methods to and quantify mite loads in hives.

b. Category 2: Forest Pest Control.

(A2A) General: Applicators must demonstrate practical knowledge of types of forests, forest nurseries, and seed production within the jurisdiction of the certifying authority and the pests involved. The required knowledge includes the cyclic occurrence of certain pests and specific population dynamics as a basis for programming pesticide applications, the relevant organisms causing harm and their vulnerability to the pesticides to be applied, how to determine when pesticide use is proper, selection of application method and proper use of application equipment to minimize non-target exposures, and appropriate responses to meteorological factors and adjacent land use. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures. Applicators shall demonstrate practical knowledge of types of forests, forest nurseries and seed production 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.
(BB) Terrestrial Invasive: Applicators shall demonstrate practical knowledge of types of terrestrial invasive plants, their life cycles and management techniques. They should possess practical knowledge specific to population dynamics as a basis for programming pesticide applications. Applicators shall demonstrate thorough knowledge of proper technique and pesticide selection. Application techniques in a variety of nonagricultural sites is required, including many in sensitive environmental areas; knowledge of non-target impacts of pesticides in aquatic, residential and forest stands is needed. Proper techniques of application will vary by site, and applicators shall demonstrate thorough knowledge of proper technique and pesticide selection. The applicator must demonstrate practical knowledge of control methods which will minimize the possibility of secondary problems such as unintended effects on wildlife, how to determine when pesticide use is proper, selection of application method and proper use of application equipment to minimize non-target exposures, and appropriate responses to meteorological factors and adjacent land use. Proper use of specialized equipment must be demonstrated, especially as it may relate to meteorological factors and adjacent land use.

e. Category 3: Ornamental and Turf Pest Control.

(3AA) Ornamental and Shade Tree. Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental plants. The required knowledge includes the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures. Because of the frequent proximity of human habitation to application activities, applicators in this category must demonstrate practical knowledge of application methods that will minimize or prevent hazards to humans, pets, and other domestic animals. Knowledge of state-required posting requirements shall also be demonstrated—pesticide problems associated with the production and maintenance of ornamental trees, shrubs and plantings including cognizance of potential phytotoxicity due to a wide variety of plant material, drift and persistence beyond the intended period of pest control.

(3BB) Turf. Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of turf. The required knowledge includes
the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures. Because of the frequent proximity of human habitations to application activities, applicators in this category must demonstrate practical knowledge of application methods that will minimize or prevent hazards to humans, pets, and other domestic animals. Knowledge of state-required posting requirements shall also be demonstrated. Applicators shall demonstrate practical knowledge of pesticide problems associated with the production, establishment and maintenance of turf including cognizance of potential phytotoxicity due to a wide variety of turf grasses and other plant types found in and around turf plantings, drift and persistence beyond the intended period of pest control.

d. Category 4: Seed Treatment. Applicators must demonstrate practical knowledge including recognizing types of seeds to be treated, the effects of carriers and surface active agents on pesticide binding and germination, the hazards associated with handling, sorting and mixing, and misuse of treated seed; the importance of proper application techniques to avoid harm to non-target organisms, and the proper disposal of unused treated seeds. Applicators shall demonstrate a 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 seed.

e. Category 5: Aquatic Pest Control. Applicators shall demonstrate a practical knowledge of the secondary effects which can be caused by improper application rates, incorrect formulations and faulty application of pesticides used in this category. They shall demonstrate practical knowledge of various water use situations and the potential of downstream effects. 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 demonstrate practical knowledge of the principles of limited area application.

f. Category 6: Right-of-way Pest Control. Applicators shall demonstrate practical knowledge of the types of environments (terrestrial and aquatic) traversed by rights-of-way, recognition of target pests, and techniques to minimize non-target exposure, runoff, drift, and excessive foliage destruction. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants and pests to be controlled, and for persistence beyond the intended period of pest control, demonstrate practical knowledge of a wide variety of environments, since rights-of-way exist over many different terrains, including waterways. They shall demonstrate practical knowledge of problems on runoff, drift, 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.

(g) Category 7: Industrial, Institutional, Structural and Health Related Pest Control

(7AA) General Pest Control. Applicators shall demonstrate a
practical knowledge of a wide variety of pests,
including their life cycles, biology, behavior, types of
formulations appropriate for their control and methods
of application that avoid contamination of habitat and
exposure of people and pets. Applicators shall
demonstrate practical knowledge of methods of
application that avoid contamination of food, minimize
damage to and contamination of areas treated, minimize
acute and chronic exposure of people and pets, and
minimize environmental impacts of outdoor
applications. Since human exposure, including that of
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 sub-category. Because general pest
control may involve outdoor applications, applicators
must also demonstrate practical knowledge of
environmental conditions, particularly related to this
activity.

(B) Vector Pest (non-public health) Health Related Pest Control.
Applicators shall demonstrate practical knowledge of vector pests,
including recognizing the pests and signs of their presence, their
habitats, their life cycles, biology and behavior as it may be
relevant to problem identification and control, demonstrate
practical knowledge of vector disease transmission and nuisance
pests as these relate to and influence application programs. A wide
variety of pests from the phylum arthropoda 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.
The applicators shall have a practical knowledge of the
importance of such nonchemical control methods as sanitation,
waste disposal and drainage. Because health-related pest control
may involve outdoor applications, applicators shall demonstrate
practical knowledge of methods to minimize acute and chronic
exposure of people and pets, and minimize environmental impacts
of outdoor applications. Applicators must also demonstrate
practical knowledge of environmental conditions, particularly related to this activity.

(C) _Food Processing Pest Control._ Applicators shall demonstrate practical knowledge of a wide variety of pests, including their life cycles, types of formulations appropriate for their control and method of application that avoids contamination of food, food processing equipment and packaging materials, damage and contamination of the processing area and exposure of people. Since human exposure, including pregnant women and elderly people, may be a potential problem, Applicators shall demonstrate practical knowledge of methods to minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications. Applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including any continuous exposure in the various situations encountered in this sub-category.

Because food-processing related pest control may involve outdoor and indoor applications, applicators must also demonstrate a practical knowledge of environmental conditions, particularly related to this activity. They shall demonstrate a practical knowledge of fumigation techniques and need for containment and post-treatment ventilation.

(D) _Wood and Fiber Product Pest Control._ Applicators shall demonstrate a practical knowledge of a wide variety of pests, including their life cycle, types of formulations for control and method of application that avoids contamination of food or feed, damage and contamination of habitat and exposure to people, pets and domestic animals. Applicators shall demonstrate practical knowledge of methods of application that avoid contamination, minimize damage to and contamination of areas treated, minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications. Since exposure to humans, including children, may be a potential problem, applicators must demonstrate practical knowledge of the specific factors which may
lead to a hazardous condition including any continuous exposure conditions included in this sub-category.

(E) Cooling Towers and Biocides Antimicrobial (non-potable water) Pest Control. Applicators shall demonstrate a practical knowledge of the wide array of pests (algae, bacteria, fungi and shellfish) that infest a cooling water system or water used in industrial processing and the methods and reasons for their control. Applicators must also have a practical knowledge of the pesticide formulations and hazards associated with the use of pesticides in non-potable cooling waters or water used in industrial processing, in, on or around human dwellings, commercial establishments, institutions, industrial establishments, pulp mills and any other structures and adjacent areas, public or private. Applicators shall demonstrate a practical knowledge of the different types of cooling water systems or water used in industrial processing and the various methods of testing for and identifying pest infestations.

(F) Disinfection and Antimicrobial. Applicators shall demonstrate a practical knowledge of a microbial pests, including their life cycles, types of formulations appropriate for their control and methods of application that avoid contamination of habitat and exposure of people and pets. Applicators shall demonstrate practical knowledge of methods of application that minimize damage to and contamination of areas treated, minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications. Since human exposure, including that of babies, children, pregnant women and elderly people is frequently a potential problem, applicators shall demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category.

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Category 8: Public Health Pest Control. Applicators shall demonstrate practical knowledge of pests that are important vectors of disease, including recognizing the pests and signs of their presence, their habits, their life cycles, biology and behavior as it may be relevant to problem identification and control. The required knowledge also includes how to minimize damage to and contamination of areas treated, acute and chronic exposure of people and pets, and non-target exposures. Applicators shall demonstrate practical knowledge of vector-disease transmission as it relates to and influences application programs. A wide variety of pests is 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 the importance and employment of such nonchemical control methods as sanitation, waste disposal and drainage.

i. Category 9: Regulatory Pest Control. 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 pesticides used in suppression and eradication programs. They shall demonstrate knowledge factors influencing introduction, spread and population dynamics or relevant pests.

Their knowledge shall extend beyond that required in other areas of the country where emergency measures are invoked to control regulated pests and where individual judgments must be made in new situations.

j. Category 10: Demonstration and Research Pest Control. Applicators shall demonstrate 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. They shall demonstrate practical knowledge of the potential problems, pests, and population levels reasonably expected to occur in a demonstration situation and the effects of pesticides on target and non-target organisms. 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 shall 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 the general standards requirements. In addition, they shall meet the specific standards required for categories 1 through 9 as may be applicable to their particular activity. Persons conducting field research or method improvement work with pesticides should be expected to know the general standards. Further, they shall be expected to demonstrate competency in know the specific standards required for categories 1 through 9 applicable to their activity, or alternatively, to meet the more inclusive requirements listed under "Demonstration".

k. Category 11: Aircraft Aerial Pest Control. Applicators shall demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of pesticides, including the following:

(i) Labeling. Labeling requirements and restrictions specific to aerial application of pesticides including:
   (A) Spray volumes.
   (B) Buffers and no-spray zones.
   (C) Weather conditions specific to wind and inversions.

(ii) Application equipment. Understand how to choose and maintain aerial application equipment, including all of the following:
(A) The importance of inspecting application equipment to ensure it is in proper operating condition prior to beginning an application.

(B) Selecting proper nozzles to ensure appropriate pesticide dispersal and to minimize drift.

(C) Knowledge of the components of an aerial pesticide application system, including pesticide hoppers, tanks, pumps, and types of nozzles.

(D) Interpreting a nozzle flow rate chart.

(E) Determining the number of nozzles for intended pesticide output using nozzle flow rate chart, aircraft speed, and swath width.

(F) How to ensure nozzles are placed to compensate for uneven dispersal due to uneven airflow from wingtip vortices, helicopter rotor turbulence, and aircraft propeller turbulence.

(G) Where to place nozzles to produce the appropriate droplet size.

Applicators shall demonstrate a practical knowledge of problems which are of special significance in aerial application of pesticides. Among the subjects involved will be weather and drift, chemical dispersal equipment, tank, pump and plumbing arrangements, nozzle selection and location and ultra-low-volume systems. In addition, aerial applicators will need a practical knowledge of aircraft calibration, field flight patterns, droplet size considerations, flagging methods and loading procedures. Applicators will also be required to demonstrate comprehension of labeling information for each category or sub-category of intended operation from appropriately selected labels provided. The Commissioner will rely upon the Federal Aviation Administration and the Vermont Agency of Transportation, Aeronautics Section, to determine the aeronautical competence of spray pilots and the airworthiness of their aircraft.

(H) How to maintain the application system in good repair, including pressure gauge accuracy, filter cleaning according to schedule, and checking nozzles for excessive wear.

(I) How to calculate required and actual flow rates.

(J) How to verify flow rate using fixed timing, open timing, known distance, or a flowmeter.

(K) When to adjust and calibrate application equipment.

(iii) Application considerations.

The applicator must demonstrate knowledge of factors to consider before and during application, including all of the following:

(A) Weather conditions that could impact application by affecting aircraft engine power, take-off distance, and climb rate, or by promoting spray droplet evaporation.

(B) How to determine wind velocity, direction, and air density at the application site.

(C) The potential impact of thermals and temperature inversions on aerial pesticide application.
(iv) Minimizing drift.
The applicator must demonstrate knowledge of methods to minimize off-target pesticide movement, including all of the following:
   (A) How to determine drift potential of a product using a smoke generator.
   (B) How to evaluate vertical and horizontal smoke plumes to assess wind direction, speed, and concentration.
   (C) Selecting techniques that minimize pesticide movement out of the area to be treated.
   (D) Documenting special equipment configurations or flight patterns used to reduce off-target pesticide drift.

(v) Performing aerial application.
The applicator must demonstrate competency in performing an aerial pesticide application, including the following:
   (A) Selecting a flight altitude that minimizes streaking and off-target pesticide drift.
   (B) Choosing a flight pattern that ensures applicator and bystander safety and proper application.
   (C) The importance of engaging and disengaging spray precisely when entering and exiting a predetermined swath pattern.
   (D) Tools available to mark swaths, such as global positioning systems and flags.
   (E) Recordkeeping requirements for aerial pesticide applications including application conditions if applicable.

Category 12: Soil fumigation.
Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigation applications, including all the following:

(i) Label and labeling comprehension.
   Familiarity with the pesticide labels and labeling for products used to perform soil fumigation, including all of the following:
   (A) Labeling requirements specific to soil fumigants.
   (B) Requirements for certified applicators of fumigants, fumigant handlers and permitted fumigant handler activities, and the safety information that certified applicators must provide to noncertified applicators using fumigants under their direct supervision.
   (C) Entry restricted periods for tarped and untarped field application scenarios.
   (D) Recordkeeping requirements.
   (E) Labeling provisions unique to fumigant products containing certain active ingredients.

(ii) Safety.
   Measures to minimize adverse health effects, including all of the following:
   (A) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, field workers, and bystanders can become exposed to fumigants.
(B) Common problems and mistakes that can result in direct exposure to fumigants.
(C) Signs and symptoms of human exposure to fumigants.
(D) Air concentrations of a fumigant that require that applicators wear respirators or exit the work area entirely.
(E) Steps to take if a fumigant applicator experiences sensory irritation.
(F) Understanding air monitoring, when it is required, and where and when to take samples.
(G) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
(H) First aid measures to take in the event of exposure to a soil fumigant.
(I) Labeling requirements for transportation, storage, spill clean up, and emergency response for soil fumigants, including safe disposal of containers and contaminated soil, and management of empty containers.

(iii) Soil fumigant chemical characteristics.
Characteristics of soil fumigants, including all of the following:
   (A) Chemical characteristics of soil fumigants.
   (B) Specific human exposure concerns for soil fumigants.
   (C) How soil fumigants change from a liquid or solid to a gas.
   (D) How soil fumigants disperse in the application zone.
   (E) Compatibility concerns for tanks, hoses, tubing, and other equipment.

(iv) Application.
Selecting appropriate application methods and timing, including all of the following:
   (A) Application methods, including but not limited to water-run and non-water-run applications, and equipment commonly used for each soil fumigant.
   (B) Site characteristics that influence fumigant exposure.
   (C) Understanding temperature inversions and their impact on soil fumigant application.
   (D) Weather conditions that could impact timing of soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications during specific weather conditions.
   (E) Conducting pre-application inspection of application equipment.
   (F) Understanding the purpose and methods of soil sealing, including the factors that determine which soil sealing method to use.
   (G) Understanding the use of tarps, including the range of tarps available, how to seal tarps, and labeling requirements for tarp removal, perforation, and repair.
   (H) Calculating the amount of product required for a specific treatment area.
   (I) Understanding the basic techniques for calibrating soil fumigant application equipment.

(v) Soil and pest factors.
Soil and pest factors that influence fumigant activity, including all of the following:
(A) Influence of soil factors on fumigant volatility and movement within the soil profile.
(B) Factors that influence gaseous movement through the soil profile and into the air.
(C) Soil characteristics, including how soil characteristics affect the success of a soil fumigant application, assessing soil moisture, and correcting for soil characteristics that could hinder a successful soil fumigant application.
(D) Identifying pests causing the damage and verifying they can be controlled with soil fumigation.
(E) Understanding the relationship between pest density and application rate.
(F) The importance of proper application depth and timing.

(vi) Personal protective equipment.
Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:
(A) Following labeling directions for required personal protective equipment.
(B) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
(C) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
(D) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(vii) Fumigant management plans and post-application summaries.
Information about fumigant management plans, including all of the following:
(A) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.
(B) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
(C) The person responsible for verifying that a fumigant management plan is accurate.
(D) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(viii) Buffer zones and posting requirements.
Understanding buffer zones and posting requirements, including all of the following:
(A) Buffer zones and the buffer zone period.
(B) Identifying who is allowed in a buffer zone during the buffer zone period and who is prohibited from being in a buffer zone during the buffer zone period.
(C) Using the buffer zone table from the labeling to determine the size of the buffer zone.
(D) Factors that determine the buffer zone credits for application scenarios and calculating buffer zones using credits.

(E) Distinguishing buffer zone posting and treated area posting, including the pre-application and post-application posting timeframes for each.

(F) Proper choice and placement of warning signs. Applicators will be required to demonstrate recognition of target area characteristics as well as characteristics of nontarget areas to avoid accidental damage or contamination.

Category 13. Non-soil fumigation. Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of restricted use pesticides to sites other than soil, including all the following:

(i) Label & labeling comprehension.
   Familiarity with the pesticide labels and labeling for products used to perform non-soil fumigation, including labeling requirements specific to non-soil fumigants.

(ii) Safety.
   Measures to minimize adverse health effects, including all of the following:
   (A) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, and bystanders can become exposed to fumigants.
   (B) Common problems and mistakes that can result in direct exposure to fumigants.
   (C) Signs and symptoms of human exposure to fumigants.
   (D) Air concentrations of a fumigant that require applicators to wear respirators or to exit the work area entirely.
   (E) Steps to take if a fumigant applicator experiences sensory irritation.
   (F) Understanding air monitoring, when it is required, and where and when to take samples.
   (G) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
   (H) First aid measures to take in the event of exposure to a fumigant.
   (I) Labeling requirements for transportation, storage, spill clean up, and emergency response for non-soil fumigants, including safe disposal of containers and contaminated materials, and management of empty containers.

(iii) Non-soil fumigant chemical characteristics.
   Characteristics of non-soil fumigants, including all of the following:
   (A) Chemical characteristics of non-soil fumigants.
   (B) Specific human exposure concerns for non-soil fumigants.
   (C) How fumigants change from a liquid or solid to a gas.
   (D) How fumigants disperse in the application zone.
   (E) Compatibility concerns for tanks, hoses, tubing, and other equipment.

(iv) Application.
   Selecting appropriate application methods and timing, including all of the following:
(A) Application methods and equipment commonly used for non-soil fumigation.

(B) Site characteristics that influence fumigant exposure.

(C) Conditions that could impact timing of non-soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications under specific conditions.

(D) Conducting pre-application inspection of application equipment and the site to be fumigated.

(E) Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.

(F) Calculating the amount of product required for a specific treatment area.

(G) Understanding the basic techniques for calibrating non-soil fumigant application equipment.

(H) Understanding when and how to conduct air monitoring and when it is required.

(v) Pest factors.

Pest factors that influence fumigant activity, including all of the following:

(A) Influence of pest factors on fumigant volatility.

(B) Factors that influence gaseous movement through the area being fumigated and into the air.

(C) Identifying pests causing the damage and verifying they can be controlled with fumigation.

(D) Understanding the relationship between pest density and application rate.

(E) The importance of proper application rate and timing.

(vi) Personal protective equipment.

Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:

(A) Following labeling directions for required personal protective equipment.

(B) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.

(C) Understanding the types of respirators required when using specific non-soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.

(D) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(vii) Fumigant management plans and post application summaries.

Information about fumigant management plans and when they are required, including all of the following:
(A) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.

(B) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.

(C) The person responsible for verifying that a fumigant management plan is accurate.

(D) The elements, purpose and content of a post application summary, who must prepare it, and when it must be completed.

(viii) Posting requirements.
Understanding posting requirements, including all of the following:

(A) Understanding who is allowed in an area being fumigated or after fumigation and who is prohibited from being in such areas.

(B) Distinguishing fumigant labeling-required posting and treated area posting, including the pre-application and post application posting timeframes for each.

(C) Proper choice and placement of warning signs.

SECTION IX—Section 109.- Certification Standards for Private Applicators
CERTIFICATION OF PRIVATE APPLICATORS

10.01.—General requirements

(a) Persons applying restricted use Class A pesticides on property owned by them or on land rented by them for the production of agricultural commodities shall be certified as having the necessary competency or work under the direct supervision of a certified applicator in accordance with the. Certification shall be limited to allow the use of only those pesticides for which competency is determined.

2.--Before receiving a certificate, the private applicator shall meet requirements set forth by the Commissioner Secretary as the core standards for pesticide use for private applicator certification, which shall includes the ability to read and understand pesticide labels and labeling requirements. Competency shall be established by either by-passing a written examination or by active participation in a training program approved by the Commissioner. Persons unable to read will be examined individually by an oral examination procedure covering standards for private applicators and knowledge of labeling and use patterns for each pesticide the applicator intends to use.

(b) Standards of competency for private applicators.

3. Certification in this core as a private applicator certification category alone is not sufficient to authorize the purchase, use, or supervision of use of the pesticide products in the subcategories described in this section: aerial, soil and non-soil fumigation. In addition to meeting the requirements set forth by the Secretary as the core standards for pesticide use by a private applicator, a private applicator must also take the appropriate subcategory exam or exams to be able to use pesticide products in aerial, soil, and non-soil fumigation applications. In addition to satisfying the requirements set forth by the
Secretary as the core standards for pesticide use by a private application, a private applicator who intends to use a pesticide in aerial, soil, and non-soil fumigation applications shall obtain further certification certification by written examination in the relevant sub-category as provided in Sections 10.03 – 10.05.

10.024. Core Standards of Competency for Private Applicators.

(a) Persons seeking certification as private applicators must demonstrate a practical knowledge of the principles and practices of pest control associated with the production of agricultural commodities and effective use of Class A pesticides, including the following:

(1) Label and labeling comprehension. Familiarity with Ability to read and understand pesticide labels, and labeling, and their functions, including all of all the following:

(1A) The general format and terminology of pesticide labels and labeling.

(2B) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.

(3C) Understanding that it is a violation of Federal law to use any registered pesticide in a manner inconsistent with its labeling.

(4D) Understanding when a certified applicator must be physically present at the site of the application based on labeling requirements.

(5E) Understanding that applicators must comply with all use restrictions and directions for use contained in pesticide labels and labeling, including being certified in the appropriate subcategory to use a pesticide for fumigation or aerial application.

(6F) Understanding the meaning of product classification.

(7G) Understanding and complying with product-specific notification requirements.

(8H) Recognizing and understanding the difference between mandatory and advisory labeling language.

(b) Safety. Measures to avoid or minimize adverse health effects, including the following:

(1A) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of a pesticide.

(2B) Understanding that a pesticide’s risk is a function of exposure and the pesticide’s toxicity.

(3C) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.

(4D) Common types and causes of pesticide mishaps.

(5E) Precautions to prevent injury to applicators and other individuals in or near treated areas.

(6F) Need for, and proper use of, protective clothing and personal protective equipment.
(7Civi) Symptoms of pesticide poisoning.
(8Hviii) First aid and other procedures to be followed in case of a pesticide mishap.
(9ix) 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, pesticide and pesticide containers.

c3 Environment.
The potential environmental consequences of the use and misuse of pesticides, including the influence of the following:
(1Ai) Weather and other climatic conditions.
(2Bii) Types of terrain, soil, or other substrate.
(3Ciii) Presence of fish, wildlife, and other non-target organisms.
(4Div) Drainage patterns.

d4 Pests.
The proper identification and effective control of pests, including the following:
(1Ai) The importance of correctly identifying target pests and selecting the proper pesticide product(s).
(2Bii) Verifying that the labeling does not prohibit the use of the product to control the target pest(s).

e5 Pesticides.
Characteristics of pesticides, including the following:
(1Ai) Types of pesticides.
(2Bii) Types of formulations.
(3Ciii) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations.
(4Div) Hazards and residues associated with use.
(5Evi) Factors that influence effectiveness or lead to problems such as pesticide resistance.
(6Evii) Dilution procedures.

f6 Equipment.
Application equipment, including the following:
(1Ai) Types of equipment and advantages and limitations of each type.
(2Bii) Uses, maintenance, and calibration procedures.

g7 Application methods.
Selecting appropriate application methods, including the following:
(1Ai) Methods used to apply various forms and formulations of pesticides.
(2B) Knowledge of which application method to use in a given situation and that use of a fumigant, aerial application, or predator control device containing sodium cyanide or sodium fluoroacetate requires additional certification.
(3Cii) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
(4Div) Prevention of drift and pesticide loss into the environment.
(h) **Laws and regulations.**
Knowledge of applicable State and Federal laws and regulations, including understanding the Worker Protection Standard in 40 CFR part 170 and the circumstances where compliance is required.

(i) **Stewardship.** Understanding the importance of the following:

1. **Maintaining chemical security for restricted use pesticides.**
2. **How to communicate information about pesticide exposures and risks with agricultural workers and handlers and other persons.**

(j) **Agricultural pest control.**
Practical knowledge of pest control applications to agricultural commodities including the following:

1. **Specific pests of relevant agricultural commodities.**
2. **How to avoid contamination of ground and surface waters.**
3. **Understanding pre-harvest and restricted entry intervals and entry-restricted periods and areas.**
4. **Understanding specific pesticide toxicity and residue potential when pesticides are applied to animal or animal product agricultural commodities.**
5. **Relative hazards associated with using pesticides on animals or places in which animals are confined based on formulation, application technique, age of animal, stress, and extent of treatment.**

As a minimum requirement for certification, a private applicator must show that he possesses practical knowledge of the pest problems and pest control practices associated with his agricultural operations; proper storage, use, handling and disposal of the pesticides and containers and his related legal responsibility. This practical knowledge includes ability to:

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

b. **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 preharvest or reentry restrictions and any specific disposal procedures.**

c. **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, the quantity dispersed in a given period of operation and the principles of chemigation including appropriate equipment.**

d. **Recognize local environmental conditions that must be considered during application to avoid contamination.**

e. **Recognize poisoning symptoms and procedures to follow in case of a pesticide accident.**
In addition to satisfying the requirements in paragraph subsection 987.2(aXX) of this section, private applicators that use or supervise the use of pesticides in fumigation applications to soil, by fumigation soil or by aerial methods, must obtain certification by written examination in a appropriate relevant sub-sub-category listed below in addition to the core private applicator standard.

10.03 Sub-category: Aerial Pest Control,

In addition to satisfying the requirements in Section 10.02, private applicators that use Class A pesticides applied by fixed or rotary wing aircraft must demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of a pesticide, including the following:

(a) Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of pesticides, including the following:

(i) Labeling. Labeling requirements and restrictions specific to aerial application of pesticides, pesticide including:

1A) Spray volumes.

2B) Buffers and no-spray zones.

3C) Weather conditions specific to wind and inversions.

4D) Labeling-mandated recordkeeping requirements for aerial pesticide applications including application conditions if applicable

(bii) Application equipment. Understand how to choose and maintain aerial application equipment, including all of the following:

1A) The importance of inspecting application equipment to ensure it is in proper operating condition prior to beginning an application.

B2) Selecting proper nozzles to ensure appropriate pesticide dispersal and to minimize drift.

3C) Knowledge of the components of an aerial pesticide application system, including pesticide hoppers, tanks, pumps, and types of nozzles.

4D) Interpreting a nozzle flow rate chart.

5E) Determining the number of nozzles for intended pesticide output using nozzle flow rate chart, aircraft speed, and swath width.

6F) How to ensure nozzles are placed to compensate for uneven dispersal due to uneven airflow from wingtip vortices, helicopter rotor turbulence, and aircraft propeller turbulence.

7G) Where to place nozzles to produce the appropriate droplet size.

8H) How to maintain the application system in good repair, including pressure gauge accuracy, filter cleaning according to schedule, and checking nozzles for excessive wear.
(9I) How to calculate required and actual flow rates.
(10J) How to verify flow rate using fixed timing, open timing, known distance, or a flowmeter.
(11K) When to adjust and calibrate application equipment.

(ciii) Application considerations.
The applicator must demonstrate knowledge of factors to consider before and during application, including all of the following:
  (1A) Weather conditions that could impact application by affecting aircraft engine power, take-off distance, and climb rate, or by promoting spray droplet evaporation.
  (B2) How to determine wind velocity, direction, and air density at the application site.
  (3C) The potential impact of thermals and temperature inversions on aerial pesticide application.

(div) Minimizing drift.
The applicator must demonstrate knowledge of methods to minimize off-target pesticide movement, including all of the following:
  (1A) How to determine drift potential of a product using a smoke generator.
  (B2) How to evaluate vertical and horizontal smoke plumes to assess wind direction, speed, and concentration.
  (3C) Selecting techniques that minimize pesticide movement out of the area to be treated.
  (4D) Documenting special equipment configurations or flight patterns used to reduce off-target pesticide drift.

(ex) Performing aerial application.
The applicator must demonstrate competency in performing an aerial pesticide application, including the following:
  (1A) Selecting a flight altitude that minimizes streaking and off-target pesticide drift.
  (2B) Choosing a flight pattern that ensures applicator and bystander safety and proper application.
  (3C) The importance of engaging and disengaging spray precisely when entering and exiting a predetermined swath pattern.
  (4D) Tools available to mark swaths, such as global positioning systems and flags.
  (5E) Recordkeeping requirements for aerial pesticide applications including application conditions if applicable.

10.04 Sub-category: Soil fumigation.

In addition to satisfying the requirements in Section 10.02, private applicators that use Class A pesticides to fumigate soil must demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigation applications, including the following:
(a) Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigation applications, including all the following:

(i) Label and labeling comprehension.

Familiarity with the ability to read and understand pesticide labels and labeling for products used to perform soil fumigation, including all of all the following:

(A1) Labeling requirements specific to soil fumigants.

(B2) Requirements for certified applicators of fumigants, fumigant handlers and permitted fumigant handler activities, and the safety information that certified applicators must provide to noncertified applicators using fumigants under their direct supervision.

(C3) Entry-restricted periods for tarped and untarped field application scenarios.

(4D) Recordkeeping requirements.

(5E) Labeling provisions unique to fumigant products containing certain active ingredients.

(6) Labeling requirements for fumigant management plans, such as when a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it; the elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan; the person responsible for verifying that a fumigant management plan is accurate; and the elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(bii) Safety.

Measures to minimize adverse health effects, including all of the following:

(1A) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, field workers, and bystanders can become exposed to fumigants.

(2B) Common problems and mistakes that can result in direct exposure to fumigants.

(3C) Signs and symptoms of human exposure to fumigants.

(4D) Air concentrations of a fumigant that require that applicators wear respirators or exit the work area entirely.

(5E) Steps to take if a fumigant applicator experiences sensory irritation.

(6F) Understanding air monitoring, when it is required, and where and when to take samples.

(7G) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.

(8H) First aid measures to take in the event of exposure to a soil fumigant.

(9L) Labeling requirements for transportation, storage, spill clean-up and emergency response for soil fumigants, including
safe disposal of containers and contaminated soil, and management of empty containers.

(ciii) Soil fumigant chemical characteristics.

Characteristics of soil fumigants, including all of the following:

1A) Chemical characteristics of soil fumigants.
2B) Specific human exposure concerns for soil fumigants.
3C) How soil fumigants change from a liquid or solid to a gas.
4D) How soil fumigants disperse in the application zone.
5E) Compatibility concerns for tanks, hoses, tubing, and other equipment.

(div) Application.

Selecting appropriate application methods and timing, including all of the following:

1A) Application methods, including but not limited to water-run and non-water-run applications, and equipment commonly used for each soil fumigant.
2B) Site characteristics that influence fumigant exposure.
3C) Understanding temperature inversions and their impact on soil fumigant application.
4D) Weather conditions that could impact timing of soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications during specific weather conditions.
5E) Conducting pre-application inspection of application equipment.
6E) Understanding the purpose and methods of soil sealing, including the factors that determine which soil sealing method to use.
7G) Understanding the use of tarps, including the range of tarps available, how to seal tarps, and labeling requirements for tarp removal, perforation, and repair.
8H) Calculating the amount of product required for a specific treatment area.
9I) Understanding the basic techniques for calibrating soil fumigant application equipment.

(ex) Soil and pest factors.

Soil and pest factors that influence fumigant activity, including all of the following:

1A) Influence of soil factors on fumigant volatility and movement within the soil profile.
2B) Factors that influence gaseous movement through the soil profile and into the air.
3C) Soil characteristics, including how soil characteristics affect the success of a soil fumigant application, assessing soil moisture, and correcting for soil characteristics that could hinder a successful soil fumigant application.
4D) Identifying pests causing the damage and verifying they can be controlled with soil fumigation.
5E) Understanding the relationship between pest density and application rate.
(6E) The importance of proper application depth and timing.

(fvi) Personal protective equipment.
Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:

(1A) Following labeling directions for required personal protective equipment.

(B2) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.

(3C) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.

(4D) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(gvii) Fumigant management plans and post-application summaries.
Information about fumigant management plans, including all of the following:

(1A) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.

(2B) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.

(3C) The person responsible for verifying that a fumigant management plan is accurate.

(4D) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(fviii) Buffer zones and posting requirements.
Understanding buffer zones and posting requirements, including all of the following:

(1A) Buffer zones and the buffer zone period.

(2B) Identifying who is allowed in a buffer zone during the buffer zone period and who is prohibited from being in a buffer zone during the buffer zone period.

(3C) Using the buffer zone table from the labeling to determine the size of the buffer zone.

(4D) Factors that determine the buffer zone credits for application scenarios and calculating buffer zones using credits.

(5E) Distinguishing buffer zone posting and treated area posting, including the pre-application and post-application posting timeframes for each.

(6F) Proper choice and placement of warning signs.

10.05 Sub-category: Non-Soil Fumigation:
In addition to satisfying the requirements in Section 10.02, private applicators that use Class A pesticides to fumigate soil must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of a pesticide to sites other than soil, including the following:
Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of restricted use pesticides to sites other than soil, including all the following:

(i) Label & labeling comprehension.
Familiarity with the ability to read and understand pesticide labels and labeling for products used to perform non-soil fumigation, including labeling requirements specific to non-soil fumigants.

(bii) Safety.
Measures to minimize adverse health effects, including all of the following:

(1A) - Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, and bystanders can become exposed to fumigants.

(2B) Common problems and mistakes that can result in direct exposure to fumigants.

(3C) Signs and symptoms of human exposure to fumigants.

(4D) Air concentrations of a fumigant that require applicators to wear respirators or to exit the work area entirely.

(5E) Steps to take if a fumigant applicator experiences sensory irritation.

(6E) Understanding air monitoring, when it is required, and where and when to take samples.

(7G) - Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.

(8H) First aid measures to take in the event of exposure to a fumigant.

(9I) Labeling requirements for transportation, storage, spill clean-up, and emergency response for non-soil fumigants, including safe disposal of containers and contaminated materials, and management of empty containers.

(ciii) Non-soil fumigant chemical characteristics.
Characteristics of non-soil fumigants, including all of the following:

(1A) Chemical characteristics of non-soil fumigants.

(2B) Specific human exposure concerns for non-soil fumigants.

(3C) How fumigants change from a liquid or solid to a gas.

(4D) How fumigants disperse in the application zone.

(5E) Compatibility concerns for tanks, hoses, tubing, and other equipment.

(div) Application.
Selecting appropriate application methods and timing, including all of the following:

(1A) Application methods and equipment commonly used for non-soil fumigation.

(2B) Site characteristics that influence fumigant exposure.

(3C) Conditions that could impact timing of non-soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications under specific conditions.
Conducting pre-application inspection of application equipment and the site to be fumigated.

Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.

Calculating the amount of product required for a specific treatment area.

Understanding the basic techniques for calibrating non-soil fumigant application equipment.

Understanding when and how to conduct air monitoring and when it is required.

Pest factors.

Pest factors that influence fumigant activity, including all of the following:

1. Influence of pest factors on fumigant volatility.

2. Factors that influence gaseous movement through the area being fumigated and into the air.

3. Identifying pests causing the damage and verifying they can be controlled with fumigation.

4. Understanding the relationship between pest density and application rate.

5. The importance of proper application rate and timing.

Personal protective equipment.

Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:

1. Following labeling directions for required personal protective equipment.

2. Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.

3. Understanding the types of respirators required when using specific non-soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.

4. Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

Fumigant management plans and post-application summaries.

Information about fumigant management plans and when they are required, including all of the following:

1. When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.

2. The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.

3. The person responsible for verifying that a fumigant management plan is accurate.
(4D) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(hviii) Posting requirements. Understanding posting requirements, including all of the following:

(1A) Understanding who is allowed in an area being fumigated or after fumigation and who is prohibited from being in such areas.

(2B) Distinguishing fumigant labeling-required posting and treated area posting, including the pre-application and post-application posting timeframes for each.

(3C) Proper choice and placement of warning signs.

10.064.—____ Certification and renewal—

_____ Exceptions DVM and lab peps:

a. Private applicators will be certified according to the pesticide needs associated with the agricultural commodities they produce.

b. Any person who is qualified and has adequately met standards for determination of competency shall be certified.

c. Private applicator certificates shall be issued for a five-year period after which recertification will be required. Recertification requirements may be met by participation in additional training approved by the Commissioner Secretary or by reexamination.

(b) The following persons are exempt from the requirements of this subsection:

(1) The Department of Motor Vehicles; and

(2) Lab employees?

SECTION X—Section 10, Classification of Pesticides and Limitations on Sale—CLASSIFICATION OF PESTICIDES AND LIMITATIONS ON SALE

1. General: The U.S. Environmental Protection Agency classifies all registered pesticides available to consumers as either general use or restricted use for the purposes of federal regulation. Vermont recognizes federal and state and by permit only restricted use pesticides as Class "A". Vermont classifies all registered pesticides used, sold, distributed or manufactured within the state into three categories known as:

Class "A"—Restricted Use—federal and state and by permit only

Class "B"—Controlled Sale

Class "C"—Homeowner/Specialty

All pesticides sold in Vermont must be registered with the State under 6 V.S.A. Chapter 81, the Pesticide Registration Act.

2. Identification of Class "A"—Restricted Use, Class "B"—Controlled Sale and Class "C"—Homeowner/Specialty pesticides.
a. Class "A"—Restricted Use—federal: shall be those federally restricted use pesticides identified by the EPA designation "Restricted Use Pesticide" on the product label.

b. Class "A"—Restricted Use—state: shall be those pesticides classified general use by EPA and reclassified as restricted use by the Vermont Department of Agriculture, Food and Markets Agency after consideration of the following:

   (1) Toxicological profile, including acute, subchronic and chronic effects.
   (2) Environmental profile, including aquatic and wildlife effects.
   (3) Physical hazard profile, including the potential for fire, explosion and reactivity.
   (4) Potential for ground and surface water contamination.
   (5) Potential for misuse.
   (6) Potential for drift.
   (7) Container construction and size.
   (8) Those requiring training due to special concerns.
   (9) Method of application.
   (10) Product label statements, such as “professional use.”

Class "A" pesticides shall be listed in "Appendix A(2)", available from the Department's Plant Industry Section. The Agency shall make available pesticide product classifications in a public format.

c. Class "A"—Restricted Use—by permit only: shall be those pesticides which may be purchased and used only after securing a special permit from the Commissioner Secretary. Pesticides are classified Class "A"—Restricted Use—by permit only by the Commissioner Secretary with the advice of the Vermont Pesticide Advisory Council Secretary of ANR and the Commissioner of the Department of Health after a determination that routine use of the chemical could result in harm to human health or the environment. Any sale or use whether or not currently registered under the FIFRA as amended for the following products is forbidden unless a permit is obtained from the Commissioner Secretary:

Aldrin
Daminozide (Alar—food uses)
Endrin
Mercury
Sodium Arsenite
Sodium Fluoroacetate (Compound 1080)
Dieldrin
Heptachlor
Dibromo-chloro-propane (DBCP)
Chlordane

ed. Class "B"—Controlled sale:
shall be those pesticides determined to be less hazardous than Class "A" under the
criteria expressed in subsection 2.b but require some control over where
products are sold. Class "B" pesticides are generally for use outside of the
home and not marketed as ready-to-use.

and contain more than 33% total active ingredient, however, the Commissioner
Secretary reserves the right to classify additional pesticides as Class "B".

The Commissioner Secretary has classified the following additional pesticides as are
Class "B":
(1) All turf products care, excluding aerosols or products containing
either Bacillus thuringiensis or potassium fatty acids regardless of percent of
total active ingredient and does not meet Class "A" definition.
The Secretary reserves the right to classify additional pesticides as Class B.

de. Class "C"—Homeowner/Specialty:
Class C—shall be those pesticides which are generally used in and around the home
and are marketed as ready-to-use or have total active ingredient less than
3% and which contain not more than 3% total active ingredient; however
the Commissioner Secretary reserves the right to classify additional pesticides
including non-homeowner specialty products as Class "C".

The Commissioner Secretary has classified the following additional pesticides as Class "C":
(1) Limited percentages of active ingredients:
(a) Anti-fouling paint containing mercury—of not more than 0.5% total
active ingredient and which conform to the U.S. Department of
Agriculture or Environmental Protection Agency, Pesticides
Regulation Division, Interpretation No. 3 under FIFRA as
amended.
(b) Pet supplies—shampoos, dips, tick and flea collars and dusts except
lindane products which shall not exceed 7% total active ingredient.
(Be) DDVP impregnated strips (Vapona strips)—concentrations not over
20% in resin strips and pet collars.
(2) Unlimited percentage of active ingredients:
(a) Wood preservatives and sapstain control agents other than
creosote, inorganic arsenicals and pentachlorophenol;
(b) Antimicrobials—agents such as disinfectants, bacteriostats,
bactericides, mildewicides, mildewstats, viricides,
sanitizers, slimicides, sterilants and industrial
preservatives
(Be) Animal repellents, indoors and outdoors
(C)d Insect repellents for human use
(e) Moth flakes, crystals, cakes and nuggets
(Df) Indoor aquarium supplies products
(Eg) Swimming pool supplies products
(Fb) Pediculocides and mange cure on humans
(Hi) Pheromone baits and floral lures and lures
(Hj) Premixed paints containing preservatives and which make pesticidal claims
(k) Aerosols, excluding Class A; including fumigator bombs
(Hl) Insecticides containing bacillus thuringiensis, bacillus popilliae, bacillus lentimorbus or potassium fatty acid
(m) Colorants used to control algae growth by providing shade
(n) Animal ear tags

The Secretary reserves the right to classify additional pesticides including non-homeowner products as Class C.

3. The following pesticides are prohibited from use in Vermont:
   a. All uses of pesticides cancelled or suspended under FIFRA amended at the time these regulations are adopted are hereby prohibited in Vermont. All uses of pesticides prohibited in the future by the U.S. Environmental Protection Agency will be prohibited in Vermont by adoption of regulations pursuant to 3 V.S.A. Chapter 25.
   b. All DDT—Dichloro-diphenyl trichloroethane use is prohibited by 6 V.S.A. Section 1105, as of December 31, 1971.
   c. All pesticide products formulated from technical grade 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) which contain more than 0.10 ppm 2,3,7,8-tetra-chloro-dibenzo-p-dioxin (TCDD) shall not be sold or used in the State of Vermont.

4. Limitations on sales of pesticides:
   a. Limitations on sales of Class "A"—Restricted Use—federal and state or by permit only:
      (1) Dealers shall obtain a Class "A" dealer's license before they may sell distribute Class "A"—Restricted Use pesticides.
      (2) Class "A" pesticides shall be sold only to certified applicators and persons who produce written authorization from a certified applicator to purchase specific restricted use Class A pesticides. Written authorization shall include the certificate number of the certified applicator authorizing the purchase, as well as the name and quantity of the pesticide desired.
      (3) Class "A" pesticides shall not be displayed for self-service or stored in food areas.
      (4) Class "A"—Restricted Use—by special permit only—pesticides shall be sold only to certified applicators who produce a special permit issued by the Commissioner authorizing the purchase.
   b. Limitations on sales of Class "B" pesticides:
      (1) Dealers shall obtain a Class "A" or Class "B" dealer's license before they may sell distribute Class "B" pesticides to the general public.
(2) Class "B" pesticides may not be stored or displayed in food areas.

e. Limitations on sale of Class "C" pesticides:
   (1) Dealer's shall obtain either a Class "A", Class "B" or Class "C" (retail) dealer's license before they may sell Class "C" pesticides to the general public.
   (2) Class "C" pesticides may not be stored or displayed in food areas.

9.5 The Agency shall make available pesticide product classifications in a public format.

SECTION XI—PESTICIDE DEALER LICENSES.

1. Class "A" and Class "B" licenses.

   a. No store or other retail sales outlet shall sell restricted use or Class "B" pesticides unless a licensed dealer is a full-time employee of the store or retail sales outlet. Persons who pass the tests required for Class "A" or Class "B" dealer licenses shall be entitled to sell the following classes of products:

      (1) Class "A" license: Licensees may sell any pesticide registered in the State of Vermont, subject to the limitations imposed by these regulations. Generally, Class "A" licensees may sell restricted use, Class "B" and Class "C" pesticides.

      (2) Class "B" license: Licensees may sell any Class "B" or Class "C" pesticides registered in the State of Vermont.

   b. Prior to the issuance of a license, a pesticide dealer must apply for a license to the Commissioner and then pass a written and/or oral examination conducted by the
Commissioner to show that the applicant possesses adequate knowledge of: regulations, classification of pesticides, safe handling, hazards and disposal of pesticides which will be sold or recommended for use.

e. Holders of Class "A" and Class "B" dealer licenses are required to notify, in writing, the Department within thirty (30) days of a change of employment, including a change from one branch store location to another.

2. Class "C" licenses are issued to retail outlets, entitling the licensee to sell Class "C" pesticides from that location. No examination is required. Class "C" licenses are issued upon payment of the required fee.

3. All sales and technical field representatives of commercial companies recommending or demonstrating pesticides to "agricultural type" company stores and individuals shall be certified under Section VIII, Demonstration and Research Pest Control, and shall make annual reports of sales of pesticides classified for restricted use plus materials used for demonstrations.

4. Salesmen for wholesale companies operating in Vermont and selling to institutions, governmental subdivisions and retail sales outlets other than "agricultural type" company stores shall be licensed according to the classification of the pesticide sold. Salesmen selling only Class "C" pesticides are exempted from this provision.

5. License classification, renewals and fees

a. A pesticide dealer's license shall state the classification of pesticides the dealer is qualified to sell and will be considered as one category for fee assessment purposes.

(1) Pesticide dealers shall be classed as follows:

(a) Class "A" dealer refers to a dealer licensed to sell restricted use pesticides, Class "B" pesticides, special permit pesticides and Class "C" pesticides. Class "A" dealers shall not sell restricted use pesticides or special permit pesticides to Class "B" or Class "C" dealers.

(b) Class "B" dealer refers to a dealer licensed to sell Class "B" and Class "C" pesticides. Class "B" dealers shall not sell Class "B" pesticides to Class "C" dealers.

(c) Class "C" dealer refers to a dealer licensed to sell Class "C" pesticides only.

(2) A license fee of twenty dollars ( $ 20.00) will be assessed for the issuance of a Class "A" or Class "B" license; a fee of ten dollars ( $ 10.00) will be assessed for the issuance of a Class "C" license as provided under Section 1109 by 6 V.S.A. as amended in 1989.

b. The license year will extend from January 1 through December 31 and the license must be renewed annually by January 1 of each year.
Licenses may be renewed without examination provided the conditions under which the original license was issued have not changed. However, the Commissioner may determine that additional instruction or examination is necessary to meet new criteria relative to any pesticide use, handling or disposal.

SECTION XII—COMMUNITY RIGHT-TO-KNOW REQUIREMENTS, EMERGENCY ACTIONS AND ACCIDENT REPORTING

Ref: Adopted Rule 91-P38, Vermont Community Right to Know (CRTK) Program and EPA Superfund Amendments and Reauthorization Act, Title III (SARA) Program

During the Legislative Committee on Administrative Rules' September 19, 1991 hearing the Department of Agriculture, Food, and Markets proposed adding the following to Section Twelve—Repeal of Existing Rules:

12.2 Vermont Department of Agriculture, Food and Markets rules, Vermont Regulations for control of Pesticides, Section XII—"Community Right-to-Know Requirements". Effective August 2, 1991 are repealed on the effected date of these rules.

The Legislative Committee on Administrative Rules agreed unanimously to add the requested language. No change in economic impact is anticipated.

SectionECTION 11.XIII — Transportation, and Storage, and Disposal of Pesticides

TRANSPORTATION, STORAGE AND DISPOSAL OF PESTICIDES.

13119.01 Transportation-
(a) To prevent any discharges, Pesticide applicators and dealers shall ensure that secure pesticide containers are secured during transportation so they may not shift, become punctured, or otherwise compromised to prevent spillage any discharges.
(b) Pesticide applicators and dealers shall ensure that vehicles owned, leased, rented, or borrowed by them for the purpose of transporting a pesticide are placarded in accordance with state and federal transportation regulations.

? Spill kit for larger containers?

13119.0122— Storage Pesticide and Container Storage by: The storage of pesticides and pesticide containers by: Certified Applicators and Class A and B Dealers, Non-commercial and commercial applicators of pesticides.

Certified applicators and Class A and B Dealers, non-commercial shall comply with the following requirements:

General. (Unless otherwise specified in this section.)
(a) No pesticide container shall be re-used for any other purpose except as provided on the manufacturer’s label, MAYBE NOT THE RIGHT PLACE, not sure where to put it.
(a) Any pesticide shall be stored in accordance with requirements and precautionary storage instructions contained on the product label.

(b) Pesticide containers shall have legible labeling indicating the contents of the container.

(c) Any pesticide or pesticide containers that have not been triple rinsed shall be stored in a separate room and in such a manner as to prevent contamination to food, feed, seed, livestock remedies, drugs, plants, and other products or materials from the volatilization of pesticides, a pesticide, the leakage or breakage of pesticide-containers, or other causes.

(d) Any pesticide storage rooms shall be stored inside, and protected and secured in such a manner to prevent unauthorized access from unauthorized persons the public and wildlife and be reasonably protected from weather.

(e) The floor surface of the pesticide storage area shall be smooth, facilitating the complete recovery of any discharge spills. Floor surfaces may include, but shall not be limited to, sealed concrete and plastic.

(f) Earthen floors shall be prohibited in pesticide storage areas unless all containers are placed in a containment second containers vessel which designed to recover and contain any discharge can contain any dischargerooms.

(gf) The pesticide storage area shall be identified by legible signage clearly indicating that a pesticide is in storage, as follows:

1. Sign(s) shall include the word "Warning," "Danger," or "Pesticides" followed by wording that indicates a pesticide is in storage.

2. Lettering of the words "Warning," "Danger," or "Pesticides" shall be a minimum of one and 1/2 inches in height.

(hg) Pesticide storage areas shall be vented to the outdoors.

(hb) Pesticides shall be stored in a dry place and in accordance with temperature requirements on the label.

(iii) Pesticides shall be stored in tightly sealed containment free from leakage, corrosion, breaks, or tears. Containment vessels used for pesticide storage and handling shall be of materials and construction compatible with the pesticide stored and the conditions of storage and maintained in a manner as to minimize the possibility of a spill discharge.

(ij) Pesticides shall be stored, wherever possible, down gradient from water wells and surface water.

(kiij) In conjunction with pesticide storage, ambulance and fire department phone numbers or the 911 number shall be displayed at a central location where all persons have access.

(kijl) A pesticide storage area shall maintain sufficient lighting to allow the observation of containers and their labeling.

(klm) All empty pesticide containers that have not been triple rinsed pursuant shall be stored in the pesticide storage room area prior to disposal.

(lln) Storage of pesticides in bulk shall be in compliance with the bulk pesticide storage rules under CITE Section 12.
(mno) Cabinets, storage bins, lockers, or similar type storage facilities shall be considered a pesticide storage area provided that:

1. The storage facility compartment complies with subsections (a) – (d), (e) – (h), (j) – (m), and (p) – (q) of this section. This Section (a) – (d), (f), (h), (m), and
2. If the single or aggregate area exceeds 15 cubic feet or 25,920 cubic inches, the facility shall be vented;

(npq) Floor drains not used in conjunction with catch basins shall be prohibited in a pesticide storage area.

(oop) PA pesticide storage area floors may be equipped with a catch basin, provided that:

1. There are no pipes attached;
2. It is constructed for complete recovery of a spill discharge; and
3. It is located within the floor where liquids can be transferred to an above ground container in the event of a spill or discharge onto the floor.

(ppp) Areas used for storage of pesticides shall be maintained in a clean condition.

(qqs) At a minimum, any spills and leaks shall be cleaned up by the end of the day during which the pesticides have been spilled or leaked discharged occurred.

(rrt) Any pesticide containers having the capacity for holding greater than 55 gallons but less than 300 gallons of bulk pesticides, known as mini-bulk containers, shall be exempt from which parts of this SECTION subsections (c), (e) – (h), (j) – (ppp) of this section (s) <<CHECK CITE>> provided that:

1. The container is identified with pesticide labeling that is affixed to the mini-bulk container by the dealer or person who sold or distributed the product;
2. There is a mechanism attached to the container for the purpose of securing the dispensing apparatus; and
3. Within 90 days of receipt of the pesticide in the mini-bulk container, the container is:
   - Returned to the dealer;
   - Emptied;
   - Disposed; and
   - Emptied and triple rinsed;
3. There is a mechanism attached to the container for the purpose of securing the dispensing apparatus.

10.43 Storage Requirements Pesticide and Container Storage by Class A and B Dealers

Dealers. Dealers of Class A or B pesticides shall comply with the following requirements:

(a) Pesticides shall be stored in accordance with requirements and precautionary storage instructions contained on the product label.
(b) Pesticide containers shall have legible labeling indicating the contents of the containers.

c) Pesticides and pesticide container(s) that have not been triple rinsed shall be stored in a separate room and in such a manner as to prevent contamination to food, feed, seed, livestock remedies, drugs, plants, and other products or materials from the volatilization of pesticides, the leakage or breakage of containers, or other causes.

d) Pesticide storage rooms/areas shall be protected and locked in such a manner that they are not readily accessible to unauthorized persons or wildlife, children and the general public.

e) The floor surface of the pesticide storage room shall be smooth and impervious, facilitating the complete recovery of spills/discharges. Floor surfaces may include, but are not limited to, sealed concrete and plastic. Earthen floors shall be prohibited in a for pesticide storage area unless all containers are placed in a containment vessel designed to recover and contain any discharge. Earthen floors shall be prohibited for pesticide storage rooms.

(f) The pesticide storage room shall be identified by legible signage clearly indicating that pesticides are in storage, as follows:

1. Sign(s) shall include the word "Warning," "Danger," or "Pesticides" followed by wording that indicates pesticides are in storage; and

2. Lettering of the words "Warning," "Danger," or "Pesticides shall be a minimum of one and 1/2 inches in height;

(g) A pesticide storage room/area shall be vented to the outdoors.

(h) Pesticides shall be stored in a dry place and in accordance with the temperature requirements on the label.

(hi) Pesticides shall be stored in tightly sealed containment free from leakage, corrosion, breaks, or tears. Containers used for pesticide storage and handling shall be of materials and construction compatible with the pesticide stored and the conditions of storage and maintained in a manner as to minimize the possibility of a spill/discharge.

(ii) In conjunction with pesticide storage, ambulance and fire department phone numbers or the 911 number shall be displayed at a central location where all persons have access.

(jk) A pesticide storage room/areas shall have sufficient lighting to allow the observation of containers and their labeling.

(kl) Storage of pesticides in bulk/bulk pesticide shall be in compliance with the bulk pesticide storage rules under CITE Section 11.

(ml) Cabinets, storage bins, lockers, or similar type storage compartment shall be considered a pesticide storage area provided that the storage compartment complies with subsections 10.3(a), (c), (d), (h), and (j). Cabinets, storage bins, lockers, or similar type storage facilities shall be considered a storage room provided that:
(1) If the single or aggregate area exceeds 15 cubic feet or 25,920 cubic inches, the facility shall be vented according; and

(2) The storage facility complies with SECTION CITE (mn) — Floor drains not used in conjunction with catch basins shall be prohibited in pesticide storage rooms.;

(no) — Pesticide storage room floors may be equipped with a catch basin, provided that:
    (1) There are no pipes attached; and
    (2) It is constructed for complete recovery of a spill discharge;

(op) — Areas used for storage of pesticides shall be maintained in a clean condition.;

And

(ps) — At a minimum, spills and leaks discharges shall be cleaned up within a one hour period of becoming aware of the a spill, leak or discharge.

Pesticide left unattended for 15 consecutive days shall be considered in storage, excluding dry bulk pesticide. This shall include pesticides not available for self-service retail sales.

(b) Dry bulk pesticide shall be considered in storage except during loading and unloading and use Section 10.3.

(c) No applicator or dealer shall leave a pesticide or pesticide container in any area which is readily accessible to unauthorized persons, livestock, or wildlife.

(d) All pesticide storage areas shall be maintained to be free of any spillage from any container.

(e) Pesticide storage areas, including bulk storage areas, shall be maintained in a manner that is the least likely to induce damage to the container.

(f) Pesticide adequately separated from food, feed, and other products so that pesticides will not contaminate or be mistaken for those products.

(g) Thoroughly clean pesticide residues from storage areas before reusing those storage areas for other purposes.

(h) Pesticide containers shall be stored in a manner to reasonably protect them and the pesticide label from foreseeable damage or destruction.

(i) All pesticides in storage shall be labeled. Section 12. Bulk Pesticide Storage Standards Applicable To Pesticide Storage, Mixing and Loading Facilities.

(a1) — During the use or storage of pesticides, no commercial and private applicators or dealer shall not leave a pesticides or pesticide containers in any area which is readily accessible to unauthorized persons, livestock, or wildlife.

(b#) — Pesticide storage areas, including bulk storage areas, shall be maintained to be maintained free of any spillage from any pesticide containers.

(c) — Pesticide storage areas, including bulk storage areas, shall be maintained in a manner that is the least likely to induce damage to the container.
Containers left unattended for 15 consecutive days are considered storage containers.

Labeling of storage containers of Pesticides in Storage
(a) Applicators and dealers shall maintain legible labels on all secondary and pesticide containers.
(b) Secondary and service containers shall, at a minimum, contain the following information on the label:
   (1) The name, address and telephone number of the applicator or commercial company, if applicable.
   (2) Product name.
   (3) EPA registration number.
   (4) Name and percentage of active ingredient.
   (5) If the product in the container is diluted, it should be followed by the phrase: “The product in this container is diluted as directed on the pesticide product label.”
   (6) Signal word and precautionary statements (including First Aid statements) from the registered label unless the registrant has acute toxicity data supporting lesser precautionary statements for the diluted product and alternate directions for the diluted product are indicated on the product label; and
   (7) The statement: “Follow the directions for use on the pesticide label when applying this product.”

In addition to federal regulatory requirements concerning the labeling of a pesticide storage container, applicators and dealers shall maintain legible labels on all storage containers containing bulk pesticide at all times.

Storage of Dry Bulk Pesticide Storage in bulk quantity.
(a) Except during loading and unloading, stored Dry Bulk Pesticide
   (a) Dry bulk pesticide shall be covered by an impermeable roof or tarpaulin which will keep precipitation off the pesticides.
   (b) Dry bulk pesticide stored outdoors shall be kept in bulk storage containers.
   (c) Dry bulk storage containers shall be placed on pallets or on a raised concrete platform.

Bulk Pesticide Security
(d) Bulk Storage facilities shall be secured against entry by unauthorized persons, livestock or wildlife.
   (ae) Storage containers at facilities that are within the 100-year flood plain shall be anchored.
(b) Bulk pesticide storage facilities shall be secured against entry by unauthorized persons, livestock, or wildlife.
(c) Outdoor bulk storage containers and containment facilities shall be located within a permanent fenced area or equivalent security system approved by the Secretary that is designed to reasonably prevent access by unauthorized persons, and to provide reasonable protection against access by livestock or wildlife and prevent deterioration from weather.

(d) Appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access which may result in a discharge.

(e) Valves on bulk storage containers shall be locked or otherwise secured except when persons responsible for facility security are present at the facility.

(f) Valves on rail cars, nurse tanks and other mobile pesticide containers parked overnight at a storage facility shall be locked or secured except when persons responsible for facility security are present at the facility.

(f) Bulk pesticide

13129.0424(4) Bulk SSSstorage Cccontainers -and Aappurtenances. 
(a) Design, construction, and maintenance of bulk storage containers and appurtenances. General requirements.

(1) Bulk Sstorage containers and appurtenances shall be Storage containers and appurtenances shall be constructed, installed and maintained so as to prevent the discharge of liquid bulk pesticide.

(2) Bulk storage containers and appurtenances shall be Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture or cracking.

(3) Materials used in the construction or repair of bulk storage containers and appurtenances shall meet or exceed the manufacturer’s recommendations for all materials used in the construction or repair of a storage containers or appurtenances.

(4) Materials used in the construction or repair of bulk storage containers and appurtenances shall not be constructed of materials and may not be of a type which react chemically or electrolytically with stored bulk pesticide in a way which may weaken the storage container or appurtenance, create a risk of discharge or adulterate the pesticide.

(5) Materials used for valves, fittings and repairs on metal containers shall be compatible with the metals used in the construction of the bulk storage container, so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances, or create a risk of discharge.
(6) Bulk storage containers and appurtenances shall be designed and constructed to handle all operating stresses, taking into account static head, pressure buildup from pumps and compressors and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operation.

(b) Appurtenances

1. Every bulk storage container connection, except a safety relief connection, shall be equipped with a shut-off valve located on the storage container or at a distance from the bulk storage container dictated by standard engineering practices.

2. Valves shall be secured to protect against vandalism or accidental valve openings which may result in a discharge.

3. Pipes and fittings shall be adequately supported to prevent sagging and possible breakage due to gravity and other forces which may be encountered in the ordinary course of operations.

(c) Vents

1. Any air tight bulk storage container used for liquid bulk pesticide shall be equipped with a pressure relief vent which opens and closes within the designed pressure limits of the container, so as to relieve excess pressure, prevent evaporative losses and prevent the entry of precipitation into the container.

2. All other bulk storage containers used for liquid bulk pesticide shall be equipped with a cover or closure which will relieve excess pressure, prevent evaporative losses and prevent the entry of precipitation.

(d) Liquid level gauging devices

1. Every bulk storage container shall be equipped with a liquid level gauging device by which the level of liquid in the bulk storage container can be readily and safely determined.

2. A liquid level gauging device is not required if the level of liquid in a bulk storage container can be readily and reliably measured by other means. External sight glass gauges are prohibited.

(e) Security. Outdoor bulk storage containers and containment facilities shall be located within a permanent fenced area or equivalent security system approved by the Commissioner Secretary that is designed to reasonably prevent access by unauthorized persons and to provide reasonable protection against access by livestock or wildlife. Appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access which may result in a discharge. Valves on storage containers shall be locked or otherwise secured except when persons responsible for facility security are present at the facility. Valves on rail cars, nurse tanks and other mobile pesticide
containers parked overnight at a storage facility shall be locked or secured except when persons responsible for facility security are present at the facility.

(ef) Filling. Bulk storage containers may not be filled to more than 95 percent of rated capacity unless the storage container construction or location provides for constant temperature control.

13912.03(5) Mixing, Loading, and Rinsate Collection Areas.

(a) Paved surfaces and catch basins.

(1) Any mixing, loading and unloading, including mini-bulk filling, of pesticide or washing or rinsing of pesticide application equipment that takes place at commercial pesticide application and bulk storage facilities must take place on a pad which is paved with asphalt or concrete.

(2) The paved surface shall be curbed or constructed with sufficient slope to drain into a liquid-tight catch basin.

(3) The curbed surface and catch basin shall be of adequate size and design to contain 125 percent of the capacity of the largest mobile container used.

(b) Protection against damage by moving vehicles. Bulk storage containers and appurtenances, including pipes and transfer hoses, shall be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles engaged in the loading or unloading of pesticide.

(c) Recovery of discharges.

(1) Any discharge incidental to loading or unloading of pesticide shall be promptly recovered immediately upon detection from the paved surface and catch basin.

(2) If recovery of any of the spill for use as originally intended is not feasible, then procedures shall be employed to dispose of the discharged pesticide and any resulting clean up material as a hazardous waste in accordance with the statutes and regulations of Vermont's Hazardous Waste Management Law, 10 V.S.A. Chapter 159: Waste Management.

13912.04(6) Secondary Containment for Liquid Bulk Pesticides.

(a) General requirements.

(1) Liquid bulk storage containers shall be enclosed in a secondary containment facility which is adequate, in the event of a discharge, to prevent the movement of liquid pesticide to waters of the state, including groundwater.

(2) A secondary containment facility shall consist of a wall and liner as provided under paragraphs subsections (d) and (e) or a prefabricated facility as provided under paragraph subsection (f) of this subsection. Precipitation shall not be permitted to accumulate within a secondary containment facility. Empty pesticide containers shall not be stored or accumulated within secondary containment facilities.
(b) Capacity. The capacity of a secondary containment facility shall be at least equal to the sum of the following: (1) 110 percent of the greatest volume of liquid which could be discharged from the largest storage container within the secondary containment facility; and (2) the total volume of discharged liquid which would be displaced by the submerged portions of all other storage containers, fixtures and materials located within the secondary containment facility.

(c) Storage with other commodities. No other commodity, except liquid pesticide, pesticide rinsate or recovered pesticide discharges may be stored within a liquid pesticide secondary containment facility.

(d) Walls. The walls of a secondary containment facility shall be constructed of earth, steel, concrete or solid masonry and be designed to withstand a full hydrostatic head of any discharged liquid. Cracks and seams shall be sealed to prevent leakage. Walls constructed of earth or other permeable materials shall be lined as provided under paragraph subsection (e) of this subsection. Earthen walls shall have a horizontal-to-vertical slope of at least three to one, unless a steeper slope is consistent with good engineering practice and shall be protected from erosion. Walls may not exceed 6 feet (1.8 meters) in height above interior grade.

(e) Linings. The base of a secondary containment facility, and any earthen walls of the containment facility, shall be lined with asphalt, concrete, or an approved synthetic liner in accordance with the following requirements. Liners shall meet the following requirements:

1. Asphalt or Concrete Liners. Asphalt or concrete liners shall be designed according to good engineering practices to withstand any foreseeable loading conditions, including a full hydrostatic head of discharged liquid. Cracks and seams shall be sealed to prevent leakage.

2. Synthetic Liners.
   (A) Synthetic liners shall have a minimum thickness of 30 mils (0.8 millimeters), and be chemically compatible with the materials being stored within the facility.
   (B) The synthetic liner shall be protected by a 6-inch (15 centimeter) soil layer below the liner, and a 12-inch (30 centimeter) soil layer above the liner.
   (C) Both soil layers shall be free of large rocks, angular stones, sticks or other materials which may puncture the liner.
The use of synthetic liners for the construction of secondary containment facilities shall be approved by the Commissioner Secretary provided the manufacturer of the liner provides the Department Agency with a written confirmation of chemical compatibility and a written estimate of the life of the liner.

Synthetic liners shall be installed under the supervision of a qualified representative of the manufacturer, and all field constructed seams shall be tested, and repaired, if necessary, in accordance with the manufacturer’s recommendations.

Prefabricated facilities

1. A prefabricated facility shall be composed of a rigid prefabricated basin having both a base and walls constructed of steel or synthetic materials which are resistant to corrosion, puncture, or cracking.

2. Materials used in the facility shall be chemically compatible with the products being stored within the secondary containment facility.

3. The prefabricated facility shall be designed and installed to withstand all foreseeable loading conditions, including the tank load and a full hydrostatic head of any discharged liquid.

4. Upon request, a manufacturer shall provide a written confirmation of chemical compatibility to the Secretary.

Recovery of discharges

1. Discharges incident to the storage, loading or unloading of pesticide shall be promptly recovered from within the secondary containment facility.

2. If recovery of any of the spill for use as originally intended is not feasible, then procedures shall be employed to dispose of the discharged pesticide and any resulting clean up material as a hazardous waste in accordance with the statutes and regulations of Vermont’s Hazardous Waste Management Law, 10 V.S.A. Chapter 159: Waste Management.

Inspection and Maintenance

The operator of a pesticide storage facility shall routinely inspect and maintain storage facilities, bulk storage containers, and appurtenances in accordance with the following schedule in order to minimize the risk of a discharge.

(a) Valves and other appurtenances shall be inspected for leakage and proper operation at least weekly.

(b) The contents of each bulk storage container shall be measured and recorded at least weekly to facilitate the monthly inventory reconciliation as required by section paragraph 12.06(a)(3)(d).
Secondary containment facilities shall be inspected annually to assure compliance with subsection 12.04(6).

All equipment and supplies mandated by the Discharge and Response Plan shall be maintained in sound working order.

A written record of all inspections and maintenance shall be made on the day of the inspection or maintenance, and kept at the storage facility, or at the nearest local office from which the storage facility is administered.

Recordkeeping

The following records shall be prepared and maintained on file at every storage facility, or at the nearest local office from which the storage facility is administered.

Furthermore, records shall be maintained for at least five years, and shall be made available for inspection and copying by the Commissioner upon request.

A record of all discharges at the storage facility, including the date and time of discharge, the type of liquid bulk pesticide discharged, the volume of the discharge, the cause of the discharge, any action taken to control or recover the discharge, and the method of use or disposal of any recovered discharge. The discharge record shall be completed on the day the discharge is discovered, and shall be promptly updated to show measures taken to control, recover, use or dispose of the discharge.

A regular record of the liquid pesticide levels in each storage container. The level in each storage container shall be measured and recorded at least weekly, as provided in paragraph section 12.057(bb).

A monthly inventory reconciliation, showing the amount of liquid bulk pesticide from each storage container which is lost or unaccounted for at the end of each monthly period.

Inspection and maintenance records pertaining to storage containers, appurtenances, and secondary containment facilities, as provided under paragraphs sections 12.05(a), and 7(a) and 7(c).

A record of manufacturers' compatibility statements as provided under paragraphs sections 12.04(c)(22)(D) and 12.04(f)(4)(f).

Records shall be maintained for at least five years and shall be made available for inspection and copying by the Secretary upon request.

Preparations for Control and Recovery of Pesticide Discharges

The operator of a storage facility shall prepare a written discharge response plan for the storage facility.

The operator shall keep the plan current at all times. A copy of the plan shall be kept readily available at the storage facility or at the nearest local office from which the storage facility is administered, and shall be available for inspection and copying by the Department Agency.
The operator of the storage facility shall inform the local fire and police departments of the existence of the plan, and shall provide a current copy of the plan to the local fire department.

(b) The discharge response. The plan shall include:

(1) The identity and telephone number of the persons or agencies who are to be contacted in the event of a discharge, including persons responsible for the stored pesticide.

(2) For each bulk pesticide stored at the facility, a copy of the label affixed to the bulk storage container, the Material Safety Data Sheet (MSDS) and a complete copy of the labeling that would ordinarily accompany sale of the pesticide.

(3) A map identifying the location of bulk pesticide storage containers located at the storage facility.

(4) For each type of bulk pesticide stored at the facility, the procedures to be used in controlling and recovering, or otherwise responding to a discharge.

(5) Procedures to be followed in using or disposing of a recovered discharge.

(6) Storage facilities shall also comply with applicable requirements of Section XII – 139.2312 Community Right-to-Know and Accident Reporting.

(c) Equipment and supplies.

(1) Applicators, manufacturers, and distributors who store bulk pesticides shall have access to pumps and recovery containers which can be used to control and recover discharges, and to personal protective equipment and clothing for use by persons involved in discharge control and recovery.

(2) Pumps, recovery containers, personal protective equipment and clothing and persons capable of deploying and operating them, shall be readily available in an emergency.

(3) Pumps, recovery containers, personal protective equipment and clothing required under this subsection may include those provided by a local fire department or other persons, if the use and availability of such equipment is arranged in advance as part of a discharge response plan.

(4) Pumps, recovery containers, personal protective equipment, and other materials used in control and recovery of discharges shall be decontaminated promptly after the discharge has been recovered, and may not be used for other purposes until they have been decontaminated.

(5) Absorbent materials suitable for the control and cleanup of small liquid discharges shall be kept readily available at every storage facility.

(d) Training. Persons employed at the storage facility shall be made aware of and trained in discharge response procedures, pursuant to the discharge response plan.
Prohibition of Underground Liquid Storage Prohibited

(a) No liquid bulk pesticide or pesticide rinsate shall be stored underground. This prohibition does not apply to a watertight catch basin used for temporary collection of discharges or runoff.

Alternative Technology

(a) The Commissioner Secretary may exempt any person or company from a requirement under this regulation if compliance is not technically feasible, but only if the Commissioner Secretary finds that alternative measures provide substantially similar protection for the waters of the state.

(b) A person desiring to implement technology inconsistent with the provisions of this regulation shall make such a request in writing and shall provide the Commissioner Secretary with adequate information to show that the alternative measures requested provide substantially similar protection for the waters of the state.

Disposal of Pesticides and Pesticide Containers

a. Pesticide containers prior to disposal

(1) Unused or unwanted pesticides being stored prior to disposal, whether in sealed or previously opened containers, and all pesticide containers that have not been or cannot be rinsed shall be:

(A) Kept in a secure enclosure;
(B) Maintained to prevent:
   (1) Deterioration of containers;
   (2) Unauthorized use;
   (3) Mishandling;
   (4) Loss;
   (5) Contamination of the environment; and
   (6) Risk to the public health;

(2) Disposal of pesticide containers shall comply with instructions on the labeling and with other state and federal regulations.

b. Obsolete, excess, and mixtures of pesticides shall be returned to the manufacturer, supplier or formulator for recycling, destruction or disposal or disposed of according to the statutes and regulations established by Vermont's Hazardous Waste Management Law, 10 V.S.A. Chapter 159: Waste Management.

c. All containers made of materials other than paper shall be triple rinsed prior to disposal.
| 229 | Aquatic uses cancelled. |
| 242.5 | All above 0.05% |
| 250.1 | All above 0.005% |
| 264 | All |

(Non-aquatic wood preservative uses excepted)
All; discontinued by manufacturer

All above 3%

All

All; discontinued by manufacturer

All

All

All

All

All above 5%

By permit only
All pressurized containers of chlorine gas

All

All above 2%

All-tracking powders,
- dust-and-ready-to-use,
- 0.2% or greater

490 All

494 All granular

499 All

509 All above 13%

514 All-wood preservative uses except brush on

570 All

590 All above 2%

596 All
- 604 All
- 619 All non-food uses.
- 626 All
- 632 All
- 656 Cancelled, 1985
- 671 All above 8%
- 679 All
- 682 All
- 690 All wettable powder equal to or above 50%
- 693 Cancelled, 1971
All aquatic use requires Water Quality Permit.

All above 20% or containers larger than 1 gallon. Aquatic use requires Water Quality Permit.

All above 20% or containers larger than 1 gallon.

Cancelled, 1984

All; discontinued by manufacturer.

All above 1%; (20% resin strips & pet collars excepted)

All
<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
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<tr>
<td>806</td>
<td>Cancelled, 1987</td>
</tr>
<tr>
<td>823</td>
<td>All; (granular &amp; tablets of 2% or less excepted)</td>
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<tr>
<td>824</td>
<td>All above 15% with the following exceptions: 1) Up to 25% EC &amp; packaged</td>
</tr>
<tr>
<td>825</td>
<td>All</td>
</tr>
<tr>
<td>828</td>
<td>All</td>
</tr>
<tr>
<td>834</td>
<td>All; discontinued by manufacturer</td>
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All above 2%
897 All forestry uses
899 All above 1%
900 All
901 Cancelled, 1988
911 All above 20%
921 Banned in U.S.
923 All; discontinued by
manufacturer
933 Cancelled, 1989
941 All above 2%
942  All above 1%

958  All; aquatic use requires Water Quality Permit

975  All above 6%

976  All; discontinued by manufacturer

1001  All above 3%

1002  All; aquatic use requires Water Quality Permit

1009  Cancelled, 1985

All above 2%
| -        | All  |
| -        | All  |
| 1020     | All  |
| 1021     | All  |
| -        | All  |
| -        | All  |
| 1039     | All above 6% |
| -        | All above 6% |
| -        | All above 6% |
| -        | All  |
| 1056     | All  |
| -        | All  |
| 1061     | All  |
| 1078     | All  |
| -        | All  |
| 1079     | All  |
| -        | All  |
| -        | All  |
| 1080     | Cancelled, 1987 |
| -        | All  |
| 1081     | All  |
| -        | All  |
| -        | All  |
| -        | All  |
| 1084     | All  |
| -        | All  |
| -        | All  |
| -        | All  |
1093  All above 1%
-  
-  
-  
-  
-  
-  
-  
1098  All above 1%
-  
-  
-  
-  
-  
-  
-  
-  All above 5 gallons
-  
1115  All
1117  All

1113.5 All; aquatic use requires Water Quality Permit

1115  All above 2.5%
1117  All

1139 By permit only
All above 3% with the following exceptions: 1) emulsifiable concentrates up to 20% packaged in 1 pint or less; and 2) seed treatment products

All above 6%
By permit only; (outdoor paints excepted); indoor paint use cancelled, 1990

All

All

All

All

All liquids 65% or greater

All
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<td>All agricultural and commercial outdoor use</td>
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<tr>
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<td>All above 10%</td>
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<td>1441</td>
<td>All above 2%; (slug &amp; snail baits excepted); discontinued by manufacturer</td>
</tr>
<tr>
<td>1457</td>
<td>All</td>
</tr>
<tr>
<td>1472</td>
<td>All; discontinued by manufacturer</td>
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<tr>
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<td>All</td>
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<td>1499</td>
<td>By-permit only</td>
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<td>Description</td>
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<tr>
<td>1508</td>
<td>All discontinued by</td>
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<td></td>
<td>manufacturer</td>
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<td>All</td>
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<td>All</td>
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<td></td>
<td>All</td>
</tr>
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<td>1551</td>
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<td>All above 0.2%</td>
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<tr>
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<td>All above 2%</td>
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<td>1558</td>
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<td>All</td>
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<td>All</td>
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<td>1575.5</td>
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</table>
1639  All above 1%
-     
1640  All above 2%
-     
1641  All above 1%
1644  By permit only
-     
-     
1645  All above 2%
-     
-     
-     
1661  All above 3%
-     
-     
1669  All; discontinued by manufacturer
-     
-     
-     
1735  All above 8%
1736  All above 6%
-     
-     
1740  All above 8%
1741.5 All emulsifiable concentrates 50% or greater
-     
-     
-     
162
All

1784
All

1816
All above 10%

1823
By permit only

1833
If sold as single ingredient (fire hazard)

1845
All; brush on excepted

1851
By permit only

1865
All containers larger than 1 quart

1900
All; uses below ground & applied by hand excepted

1914
All; desiccants
1916 All

1924 All; sales and use restricted to U.S. Fish & Wildlife Service

1927 All above 5%

1948 All

1949 All

1952 All; industrial microbicides are excepted

1964 Cancelled, 1972

All granular
1986
- All
- All above 2%

1997
- All antifouling paint
- All antifouling paint

2024
- Cancelled

2081
- All; sales and use restricted to US Fish & Wildlife Service
- All
- All
- All
- All
- All
- All
- All
- All

2101
- All

2117
- All above 3%

2141
- All above 2%
- All
APPENDIX B

GRAND ISLE
- The Islander
- Burlington Free Press

WASHINGTON
- The Times Argus
- Burlington Free Press

FRANKLIN
- The Messenger
- Burlington Free Press

ADDISON
- Addison County Independent
- Rutland Herald

ORLEANS
- Newport Daily Express
- Burlington Free Press

ORANGE
- The Times Argus
- The Valley News (West Lebanon)

ESSEX
- Caledonian Record
- Burlington Free Press

RUTLAND
- Rutland Herald
- Burlington Free Press

LAMOILLE
- Burlington Free Press
- The Times Argus
- The Valley News (West Lebanon)
- Claremont Eagle

WINDSOR
- Burlington Free Press
- The Times Argus
- Brattleboro Reformer
- The Town Crier (Bellows Falls)

CALEDONIA
- Caledonian Record
- Hardwick Gazette

BENNINGTON
- Bennington Banner
- Rutland Herald

Statutory Authority:

Do we still need the following?
6 V.S.A. Chapter 87

Pesticide left unattended for 15 consecutive days shall be considered in storage, excluding dry bulk pesticide. This shall include pesticides not available for self-service retail sales.
(b) Dry bulk pesticide shall be considered in storage except during loading and unloading and use and shall be stored according to [Section 10.3].

(e) No applicator or dealer shall leave a pesticide or pesticide container in any area which is readily accessible to unauthorized persons, livestock, or wildlife.

(d) All pesticide storage areas shall be maintained in a clean condition and be free of any spillage from any container.

(e) Pesticide storage areas, including bulk storage areas, shall be maintained in a manner that is the unlikely to induce damage to the container.

(f) Pesticide shall be adequately separated from food, feed, and other products so that pesticides will not contaminate or be mistaken for those products.

(g) An applicator or dealer shall thoroughly clean pesticide residues from storage areas before reusing those storage areas for other purposes.

(h) Pesticide containers shall be stored in a manner to reasonably protect them and the pesticide label from foreseeable damage or destruction.

(i) All pesticides in storage shall be labeled.

Section 13. Disposal of Pesticides and Pesticide Containers

13.01 Management of Pesticide Containers Prior to Disposal

(a) Unused or unwanted pesticide being stored prior to disposal, whether in sealed or previously opened containers, and all pesticide containers that have not been or cannot be rinsed shall be:

(1) kept in a secure enclosure; and
(2) maintained to prevent:
   (A) deterioration of containers;
   (B) unauthorized use;
   (C) mishandling;
   (D) loss;
   (E) contamination of the environment; and
   (F) risk to the public health.

(b) Disposal of pesticide containers shall comply with labeling instructions and with other state and federal regulations.

(c) If practical, pesticide drums shall be shipped to recycling centers capable of handling pesticide containers.

(d) Empty pesticide containers shall not be stored or accumulated within a secondary containment facility.

13.02 Obsolete, Excess, and Mixtures of Pesticides

Obsolete, excess, and mixtures of pesticide shall be returned to the manufacturer, supplier or formulator for recycling, destruction or disposal or disposed of according to the statutes and regulations established by 10 V.S.A. Chapter 159: Waste Management.

13.03 Triple Rinse Requirement

All containers made of materials other than paper shall be triple rinsed prior to disposal.
History

Effective Date:

August 2, 1991 (Secretary of State Rule Log # 91-44)