PRO	OPO	SED	RULE #	#	

Proposed Filing - Coversheet

Instructions:

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the "Rule on Rulemaking" (CVR 04-000-001) adopted by the Office of the Secretary of State, this filing will be considered complete upon filing and acceptance of these forms and enclosures with the Office of the Secretary of State, and the Legislative Committee on Administrative Rules.

All forms shall be submitted to the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of Proposed Filing Coversheet will be used to generate a notice of rulemaking in the portal of "Proposed Rule Postings" online, and the newspapers of record. Publication of notices will be charged back to the promulgating agency.

PLEASE REMOVE ANY COVERSHEET OR FORM NOT REQUIRED WITH THE CURRENT FILING BEFORE DELIVERY!

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Vermont Regulations for Control of Pesticides

/s/ Anson Tebbetts	on_3/22/2022					
(signature)	(date)					
Printed Name and Title:						
Anson B. Tebbetts,						
Secretary of the Agency of Agriculture,	Food and Markets					
	RECEIVED BY:					
☐ Coversheet						
☐ Adopting Page						
☐ Economic Impact Analysis						
☐ Environmental Impact Analysis ☐ Strategy for Maximizing Public Input						
 ☐ Strategy for Maximizing Public Input ☐ Scientific Information Statement (if applicable) 						
☐ Incorporated by Reference Statement (if applicable)						
☐ Clean text of the rule (Amended text without annotation)						
☐ Annotated text (Clearly marking changes from previous rule)						
☐ ICAR Filing Confirmed						

1. TITLE OF RULE FILING:

Vermont Regulations for Control of Pesticides

2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

3. PRIMARY CONTACT PERSON:

(A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

Name: Cary Giguere

Agency: VAAFM

Mailing Address: 116 State Street, Montpelier Vermont,

05620

Telephone: (802) 793-1706 Fax:

E-Mail: cary.giguere@vermont.gov Web URL (WHERE THE RULE WILL BE POSTED): https://agriculture.vermont.gov/

4. SECONDARY CONTACT PERSON:

(A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

Name: David Huber

Agency: VAAFM

Mailing Address: 116 State Street, Montpelier Vermont,

05620

Telephone: (802) 461-7160 Fax:

E-Mail: david.huber@vermont.gov

5. RECORDS EXEMPTION INCLUDED WITHIN RULE:

(DOES THE RULE CONTAIN ANY PROVISION DESIGNATING INFORMATION AS CONFIDENTIAL; LIMITING ITS PUBLIC RELEASE; OR OTHERWISE, EXEMPTING IT FROM INSPECTION AND COPYING?) No

IF YES, CITE THE STATUTORY AUTHORITY FOR THE EXEMPTION:

PLEASE SUMMARIZE THE REASON FOR THE EXEMPTION:

6. LEGAL AUTHORITY / ENABLING LEGISLATION:

(THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).

Title 6 Chapter 087 Control of Pesticides § 1104

7. EXPLANATION OF HOW THE RULE IS WITHIN THE AUTHORITY OF THE AGENCY:

Title 6 Chapter 087 Control of Pesticides Section 1104:
"The Secretary in furtherance of the purposes of this chapter may. . . Adopt standards, procedures, and requirements relating to the display, sale, use, application, treatment, storage, or disposal of economic poisons or their waste products and limit the conditions under which the same may be sold, used, treated, stored, or disposed of."

8. CONCISE SUMMARY (150 words or Less):

The rule is being amended in order to maintain compliance with federal regulatory standards concerning applicator certification and training, recordkeeping, container containment, and maintain State jurisdiction of the program. The rule is also being amended to update currently outdated provisions to more effectively and efficiently regulate modern trends in pesticide use. For example, the amended rule adds two new permit programs one of which places new restrictions on the application of mosquito adulticides and another which provides a mechanism to control for terrestrial invasive plant species on another's property. Further, the rule is being amended to clarify unclear language for the regulated community; incorporate new pollinator protections; create more transparency for the benefit of third parties to a pesticide application through new notification requirements; and create a more robust storage regulation to further minimize adverse effects to public health and the environment.

9. EXPLANATION OF WHY THE RULE IS NECESSARY:

This rule is necessary to maintain primary regulatory authority of pesticide use in the State; clarify language for the regulated community; and update currently outdated provisions in order to meet modern trends in pesticide use and reduce exposure. For example, the amended rule incorporates new pollinator protections; creates more transparency for the benefit of third parties to a pesticide application through new notification requirements; creates a more robust storage regulation to further minimize adverse effects

to public health and the environment, and creates two new permit programs one of which places new restrictions on the application of mosquito adulticides and another which provides a mechanism for persons to control for terrestrial invasive plant species on property they do not own.

10. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY AS DEFINED IN 3 V.S.A. § 801(b)(13)(A):

In the past 10-15 years there have been several amendments to the implementing regulations under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) which require States with implementation programs to either meet or exceed the standards set by the EPA. The amended rule both meets and exceeds the standards set by EPA. Therefore, the amended rule has a factual basis for the decision made by VAAFM, the decision made by VAAFM is rationally connected to the factual basis asserted for the decision, and the decision made by VAAFM would make sense to a reasonable person.

11. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

The Public, Pesticide Applicators & Businesses,
Pesticide Dealers/Distributors, Pesticide
Manufacturers, Agricultural Workers, VAAFM, Nurseries,
Foresters, Homeowners, Property Management Companies,
Golf Courses & Golf Course Superintendents, Farmers,
Vermont Agency of Transportation, Vermont Agency of
Natural Resources Local Governments, Permitted Persons
and Entities, Lawn Care Industry, Mosquito Control
Districts, Utilities, Rail Line Operators, and UVM
Extension.

12. BRIEF SUMMARY OF ECONOMIC IMPACT (150 words or Less):

Viewing the impacts as a whole, both negative and positive, and the fact that many of the costs have already been incurred in order to conform with federal requirements, the amended rule is expected to have only a minor impact. The requisite upgrades to technology/software systems may be the largest negative economic impact, to both the State and regulated industry, but are unpredictable based on variations of current software used in the industry. Positive economic impacts are also hard to predict but, reductions in human and animal health care costs can be

expected as a result of more stringent limitations and, ultimately, reduced exposure to pesticides.

13. A HEARING HAS BEEN SCHEDULED.

IF A HEARING WILL NOT BE SCHEDULED, PLEASE EXPLAIN WHY.

14. HEARING INFORMATION

(The first hearing shall be no sooner than $30\ \mathrm{days}$ following the posting of notices online).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING, PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION NEEDED FOR THE NOTICE OF RULEMAKING.

Date: June 15, 2022 Time: 9AM - 1PM

Street Address: Virtual hearing link: https://teams.microsoft.com/l/meetup-join/19% 3ameeting_Mzc3MmRhNmMtNzllZi00NzJkLWE3YjYtOTk5NDIzYjc4M2Rl% 40thread.v2/0?context=%7b%22Tid%22%3a%2220b4933b-baad-433c-9c02-70edcc7559c6% 22%2c%22Oid%22%3a%22dc2df2de-8526-4ff2-8649-794ef378f2f0%22%7d

Zip Code: Not applicable

Date:

Time: AM

Street Address:

Zip Code:

- 15. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING): 06/23/2022
- 16. KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

Pesticide

Pesticide control

Pesticide applicator

Revised November 1, 2021

Administrative Procedures Proposed Filing - Coversheet

Pesticide dealer

Pesticide Certification

Economic poison

Adopting Page

Instructions:

This form must accompany each filing made during the rulemaking process:

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible, the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

1. TITLE OF RULE FILING:

Vermont Regulations for Control of Pesticides

2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

- 3. TYPE OF FILING (*Please choose the type of filing from the dropdown menu based on the definitions provided below*):
 - **AMENDMENT** Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment if the rule is replaced with other text.
 - **NEW RULE** A rule that did not previously exist even under a different name.
 - **REPEAL** The removal of a rule in its entirety, without replacing it with other text.

This filing is AN AMENDMENT OF AN EXISTING RULE

4. LAST ADOPTED (PLEASE PROVIDE THE SOS LOG#, TITLE AND EFFECTIVE DATE OF THE LAST ADOPTION FOR THE EXISTING RULE):

SOS Rule Log # 91-44 Vermont Regulations for Control of Pesticides, August 2, 1991.

Economic Impact Analysis

Instructions:

In completing the economic impact analysis, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule; estimates the costs and benefits for each category of people enterprises and government entities affected by the rule; compares alternatives to adopting the rule; and explains their analysis concluding that rulemaking is the most appropriate method of achieving the regulatory purpose. If no impacts are anticipated, please specify "No impact anticipated" in the field.

Rules affecting or regulating schools or school districts must include cost implications to local school districts and taxpayers in the impact statement, a clear statement of associated costs, and consideration of alternatives to the rule to reduce or ameliorate costs to local school districts while still achieving the objectives of the rule (see 3 V.S.A. § 832b for details).

Rules affecting small businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof), must include ways that a business can reduce the cost or burden of compliance or an explanation of why the agency determines that such evaluation isn't appropriate, and an evaluation of creative, innovative or flexible methods of compliance that would not significantly impair the effectiveness of the rule or increase the risk to the health, safety, or welfare of the public or those affected by the rule.

1. TITLE OF RULE FILING:

Vermont Regulations for Control of Pesticides

2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

3. CATEGORY OF AFFECTED PARTIES:

LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

The Public, Pesticide Applicators & Businesses,
Pesticide Dealers/Distributors, Pesticide
Manufacturers, Agricultural Producers & Workers, VAAFM,
Nurseries, Foresters, Beekeepers, Homeowners, Property
Management Companies, Golf Courses & Golf Course
Superintendents, Vermont Agency of Transportation,

Vermont Agency of Natural Resources, Permitted Persons and Entities, Mosquito Control Districts.

VAAFM assessed the impact of each class using the following scale: Positive, Minor, Moderate, and Major.

The Public: The amended rule will have a positive impact on this class. The amended rule places increased restrictions on the use of pesticides through new permitting programs, creates new record-keeping and notification requirements, strengthens certification and training requirements, and creates a more robust storage program, all of which benefit the public.

Pesticide Applicators, Pesticide applicator businesses, and dealers: The amended rule will have a minor impact on this class. The amended rule may necessitate the following: software updates; facility improvements; new limitations on permit allowances; and increased notification requirements. Alternatively, new business opportunities will be created through new applicator categories and allowances for electronic invoicing and notification will result in a less cumbersome reporting process. Many of these impacts, such as facility improvements, have already been borne by the regulated community in order to comply with federal regulations. Ultimately, weighing the positives against the negatives, the impact on this class is minor.

Pesticide Manufacturers: The amended rule will have a positive impact on this class due to more regulatory certainty regarding product classification.

Agricultural Producers: The amended rule will have a minor impact on this class. The amended rule will increase the minimum age of certification to 18 and remove provisions for applications of federally restricted use pesticides under direct supervision. As a result, there may be a reduction in eligible persons to make applications but, at the same time, the new requirements will result in less exposure. Further, additional invoicing requirements to include safety instructions will result in less exposure to young persons. Ultimately, the impact on this class is minor.

VAAFM: The amended rule will have a minor impact on VAAFM. The amended rule will require updates to software; filing forms; training and examination materials; administrative documents; employee training; and create additional areas of regulation.

Alternatively, the amended rule will clarify regulatory language for enforcement purposes, streamline processes and procedures, and may more easily allow for reciprocal certifications with nearby states. Therefore, the impact is minor.

Nurseries: The amended rule will have a minor impact on this class. The amended rule will increase the minimum age of certification to 18 and remove provisions for applications of federally restricted use pesticides under direct supervision. As a result, there may be a reduction in eligible persons to make applications. Further, new storage requirements may require facility upgrades. Alternatively, the new requirements will decrease exposure and, therefore, due to the increased protections for workers and minors, this impact is minor.

Foresters: The amended rule will have a minor impact on this class. The amended rule will increase the minimum age of certification to 18 and remove provisions for applications of federally restricted use pesticides under direct supervision. As a result, there may be a reduction in eligible persons to make applications. However, the amended rule also creates both a specific certification category to encompass emerging terrestrial invasive plant pests in the forestry industry and a permit that will help in controlling for these species. Therefore, the impact on this class is minor.

Beekeepers: The amended rule will have a positive impact on this class. The amended rule creates a new certification category for commercial applications to apiaries to ensure a legal and safe application of pesticides as related to members of this class. Further, the creation of new protections for pollinators, such as limitations on the use of pesticides that are highly toxic to pollinators, will

minimize adverse effects on pollinators in the state. Last, the amended rule will result in increased educational opportunities for beekeepers. Therefore, the impact is positive.

Homeowners: The amended rule will have a positive impact on this class. The amended rule will result in increased opportunities for notifications in shared spaces, more information about the chemicals provided before and at the time of application, and increased protections around private and public drinking water sources and intakes. The amended rule may, however, potentially increase the cost of pesticide application services. Weighing the costs against the benefits of the amended rule on this class, the impact is positive.

Property Management Companies/Landlords: The amended rule will have a minor impact on this class. The amended rule places new notification and posting requirements on individuals owning multi-unit dwelling properties. However, the anticipated impacts ought to be substantially alleviated provided these individuals work in unison with pesticide applicator companies to better understand and assist with the new requirements. Therefore, the impact on this class is minor.

Golf Courses & Golf Course Superintendents: The amended rule will have a minor impact on this class. The amended rule places new permit requirements for individuals applying pesticides to golf courses, such as a nutrient management plan and new testing and buffer requirements. However, many of the proposed changes have already been instituted at most golf courses making the impact minor for this class.

Vermont Agency of Transportation: The amended rule will have a positive impact on this class. The amended rule will assist this class in the eradication of invasive plants in certain areas under a new permit and certification category. Therefore, the impact is positive.

Vermont Agency of Natural Resources: The amended rule will have a positive impact on this class. The amended rule creates a new certification category to encompass

emerging terrestrial invasive plant pests in the forestry industry and may allow for new land management practices to be implemented on State land. Additionally, the amended rule creates enhanced protections for drinking water sources and pollinator habitat to better protect these environmentally sensitive areas. Further, the creation of a new mosquito adulticide permit will allow for better crossagency collaboration to protect specific habitat from insecticides from truck-mounted applications. Therefore, the impact on this class is positive.

Permitted Persons and Entities: The amended rule will have a minor impact on this class. New permitting procedures will require additional information and potentially new notifications to the public. Further, new requirements regarding the public comment period may extend the time to issue permits. Some flexibility around electronic notification may reduce paper costs for permit applicants, however, making this impact minor.

Mosquito Control Districts: The amended rule will have a moderate impact on this class. New permitting requirements for larvicide applications and new permitting requirements for adulticide applications via truck-mounted equipment will incur additional costs. Therefore, the impact on this class is moderate.

4. IMPACT ON SCHOOLS:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS CLEARLY STATING ANY ASSOCIATED COSTS:

The amended rule will have a positive impact on schools through new requirements regarding notification and posting of information concerning the use of pesticides on school property. This increased transparency will create a safer environment for students, teachers, and others recreating on school property. The costs associated with these new requirements will not be borne by the schools but rather the applicators.

5. ALTERNATIVES: Consideration of Alternatives to the Rule to Reduce or Ameliorate Costs to Local School districts while still achieving the objective of the Rule.

Alternatives were not considered because the amended rule does not create any negative impacts on schools but rather positive impacts.

6. IMPACT ON SMALL BUSINESSES:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON SMALL BUSINESSES (EXCLUDING IMPACTS INCIDENTAL TO THE PURCHASE AND PAYMENT OF GOODS AND SERVICES BY THE STATE OR AN AGENCY THEREOF):

Pesticide Dealers: Minimal impact. The amended rule places new requirements on pesticide dealers/distributors regarding storage of pesticides. For example, the amended rule will require pesticide applicators and dealers to implement new safety measures (i.e. posting signage, ventilation, smooth floors, etc.). Additionally, the amended rule will require dealers to maintain a clean and orderly storage areas. These impacts are only minimal in nature.

7. SMALL BUSINESS COMPLIANCE: EXPLAIN WAYS A BUSINESS CAN REDUCE THE COST/BURDEN OF COMPLIANCE OR AN EXPLANATION OF WHY THE AGENCY DETERMINES THAT SUCH EVALUATION ISN'T APPROPRIATE.

The impacts on small businesses that may result as a consequence of the amended rule are so de minimis as to not require an evaluation, where possible flexibility for small businesses was incorporated into the rule.

8. COMPARISON:

COMPARE THE IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

Alternative 1 - No Amendment. This alternative is unacceptable as federal law requires the rule to be amended. This alternative will have a significant impact on all affected parties and is the least viable alternative.

Alternative 2 - Amend the rule but only to meet the threshold federal standards. This alternative would entail only the federally mandated requirements regarding certification and training of pesticide applicators. This alternative would not entail a suite

of protections directed at protecting and notifying entities from the adverse effects of pesticide use, including, but not limited to, bees, inadvertent third parties to a pesticide application, schools, and the environment as a whole. While this alternative would have a minimal impact on small businesses it does not satisfy the local needs of the State including its inhabitants and environment.

Alternative 3 - Amend the rule to meet federal standards and more. This alternative includes the federally mandated amendments and additional restrictions that the Agency deems necessary to further limit and reduce any adverse effects of pesticides to both the persons and environment of the State. These additional restrictions include, but are not limited to, a mosquito adulticide permit, enhanced protections for apiaries, more stringent requirements for the transportation and storage of pesticides, and new notification requirements for applications of pesticides. Due to the minimal nature of these impacts, alternative 3 is the best alternative.

9. SUFFICIENCY: DESCRIBE HOW THE ANALYSIS WAS CONDUCTED, IDENTIFYING RELEVANT INTERNAL AND/OR EXTERNAL SOURCES OF INFORMATION USED. The sufficiency of this economic analysis is based on Agency observations, discussions with industry, and experiences of other states, as all states are currently undergoing similar regulatory changes to meet the federal requirement as mandated by the EPA. EPA's data can be accessed online. The requisite upgrades to technology/software systems may be the largest negative economic impact, to both the State and regulated industry, but are unpredictable based on variations of current software used in the industry. Positive economic impacts are also hard to predict but, reductions in human and animal health care costs can be expected as a result of more stringent limitations. Ultimately, the public will see a reduction in exposure to pesticides.

Environmental Impact Analysis

Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis. If no impacts are anticipated, please specify "No impact anticipated" in the field.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

1. TITLE OF RULE FILING:

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2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

- 3. GREENHOUSE GAS: EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):

 The manufacture, transport, and application of pesticides contributes to greenhouse gas emissions through energy use in the production, and the release of active ingredients and 'inert' adjuvants into the atmosphere. The amended rule will reduce greenhouse gas emissions related to pesticide uses by imposing more stringent requirements on their use.
- 4. WATER: EXPLAIN HOW THE RULE IMPACTS WATER (E.G. DISCHARGE / ELIMINATION OF POLLUTION INTO VERMONT WATERS, THE FLOW OF WATER IN THE STATE, WATER QUALITY ETC.):

The use of pesticides may impact water quality whether

through atmospheric deposition, indirect discharge, or direct discharge as a result of spillage. The amended rule will reduce these negative water quality impacts related to pesticide use by imposing more stringent requirements related to the application and storage of pesticides. For example, the amended rule: increases the size of buffer zones between application sites and waterways and wells; enhances precautionary safety measures regarding the storage of pesticides; enhances spill responses requirements; and places additional measures on the certification and training of pesticide applicators to ensure competent use.

5. LAND: EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):

The amended rule will reduce negative land impacts related to pesticide use by placing greater restrictions on the use of pesticides. For example, the rule places new requirements relating to certification and training of applicators applying to agricultural fields and forest resources. These requirements will reduce any negative impacts by ensuring proper training. Additionally new invasive plant category and permit will allow for previously prohibited control and will result in improved ecology.

- 6. RECREATION: EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:

 The amended rule will positively impact recreation in the state. The amended rule enhances recreational activity by imposing more stringent requirements on the application of pesticides thereby making recreational spaces more safe. In addition, the amended rule places new notification and posting requirements related to the use of pesticides which will reduce any unintended harm to third parties.
- 7. CLIMATE: EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:

 See #'s 3, 4, and 5. The amended rule will reduce
 negative climate impacts related to pesticide use by
 placing greater restrictions on the use of pesticides.
- 8. OTHER: EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT'S ENVIRONMENT:

Additional protection of pollinators through increased

regulation and new certification category. Mosquito adulticide permit requirement will enhance oversight of applications and allow for better protections of rare, threatened and endangered species.

9. SUFFICIENCY: DESCRIBE HOW THE ANALYSIS WAS CONDUCTED, IDENTIFYING RELEVANT INTERNAL AND/OR EXTERNAL SOURCES OF INFORMATION USED. This environmental analysis is based on State, federal, as well as private analysis and observations of the impacts of pesticides on the environment. State analysis were obtained from extensive data set of ground and surface water analysis from the pesticide monitoring program. Private resources consulted include peer reviewed articles, pesticide safety data sheets as well as confidential statements of formula and communications. Federal analysis were obtained from EPA including, but not limited to, ecological risk assessments, data from the pesticide monitoring program, registration review, and registration eligibility decisions (REDS). EPA's Environmental Fate and Effects Division conducts a thorough review of environmental impacts on each active ingredient prior to federal registration. Vermont relies on this data and studies to further restrict uses in the state.

Public Input Maximization Plan

Instructions:

Agencies are encouraged to hold hearings as part of their strategy to maximize the involvement of the public in the development of rules. Please complete the form below by describing the agency's strategy for maximizing public input (what it did do, or will do to maximize the involvement of the public).

This form must accompany each filing made during the rulemaking process:

1. TITLE OF RULE FILING:

Vermont Regulations for Control of Pesticides

2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

3. PLEASE DESCRIBE THE AGENCY'S STRATEGY TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE, LISTING THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO COMPLY WITH THAT STRATEGY:

Prior to the start of the rulemaking process VAAFM conducted several outreach endeavors that have been incorporated into the amended rule including: extensive comments from the Vermont pesticide advisory council when it was chaired by the Department of Health; as well as language from the Governor's pollinator protection committee. Further, VAAFM has continued to collaborate with the Vermont Department of Fish and Wildlife Department, Department of Environmental Conservation, and Department of Forest Parks and Recreation.

VAAFM will conduct outreach to the general public, during the public commenting period, through public hearings and a complaint process.

VAAFM conducted outreach to pesticide applicators and companies at a PMO meeting in 2021. At the start of the public comment period, VAAFM will conduct outreach to the pesticide industry through direct written contact with Pesticide Dealer License holders; Pesticide

Public Input

Applicator Businesses; and Pesticide Applicator certificate holders. Further, VAAFM will conduct outreach at the commercial agriculture applicator meeting on March 28th, 2022.

VAAFM will conduct outreach and the regulated community, during the public comment period, through public hearings but also through presentations at conferences and in small group meetings to discuss the changes.

VAAFM will conduct outreach to concerned citizens, natural resource interest groups, the forestry community, interested landowners, and members of the public, during the public comment period.

VAAFM has and will continue to conduct outreach to Vermont Legislators at the House Agriculture Committee.

At the start of the public comment period the Agency will post an email address, PHARMrules@vermont.gov, on the Plant Health and Agricultural Resource Management (PHARM) Division's webpage where interested members of the public may submit their comments. The Agency will also include a notification in AgriView and on its social media platform.

VAAFM will hold at least one public hearing for all interested persons. VAAFM will also distribute the proposed rule to entities that have already requested it.

4. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

VAAFM

The Vermont Law School

The Environmental Protection Agency

New England Pest Management Association

Association of American Pesticide Control Officials

Agency of Natural Resources

Crop Life America

Public Input

Incorporation by Reference

THIS FORM IS ONLY REQUIRED WHEN INCORPORATING MATERIALS BY REFERENCE. PLEASE REMOVE PRIOR TO DELIVERY IF IT DOES NOT APPLY TO THIS RULE FILING:

Instructions:

In completing the incorporation by reference statement, an agency describes any materials that are incorporated into the rule by reference and how to obtain copies.

This form is only required when a rule incorporates materials by referencing another source without reproducing the text within the rule itself (e.g., federal or national standards, or regulations).

Incorporated materials will be maintained and available for inspection by the Agency.

1. TITLE OF RULE FILING:

Vermont Regulations for Control of Pesticides

2. ADOPTING AGENCY:

Vermont Agency of Agriculture, Food and Markets (VAAFM)

3. DESCRIPTION (DESCRIBE THE MATERIALS INCORPORATED BY REFERENCE):

The materials being incorporated by reference include a suite of sections, subsections, and parts of the Federal Insecticide, Fungicide, and Rodenticide Act and accompanying regulations regarding certification and training of certified applicators, storage of bulk pesticide, and product registration and use. The materials being incorporated also include the State's Water Supply Rule.

- 4. FORMAL CITATION OF MATERIALS INCORPORATED BY REFERENCE: 7 U.S.C. §§ 136c(a)-(f), 136p, 136v(c); 40 C.F.R. pt. 171 (2017); and 40 C.F.R. part 152, subpart I; Agency of Natural Resources Chapter 21 Water Supply Rule CVR 12-030-003.
- 5. OBTAINING COPIES: (EXPLAIN WHERE THE PUBLIC MAY OBTAIN THE MATERIAL(S) IN WRITTEN OR ELECTRONIC FORM, AND AT WHAT COST):

For individuals with internet access, the incorporated references, which are free to the public, can be accessed through various internet domains such as: the federal register (https://www.federalregister.gov/), US Code (https://uscode.house.gov/), the Cornell online law library (https://www.law.cornell.edu/), and the Agency of Natural Resources webpage (https://anr.vermont.gov/).

For individuals without internet access, VAAFM also suggests the use of libraries as a valuable resource where many of the incorporated references may either be found in hardcopies or online using a public library computer.

For more information on how to obtain copies of these references, please call (802) 828-2431.

6. MODIFICATIONS (PLEASE EXPLAIN ANY MODIFICATION TO THE INCORPORATED MATERIALS E.G., WHETHER ONLY PART OF THE MATERIAL IS ADOPTED AND IF SO, WHICH PART(S) ARE MODIFIED):

Not applicable.

Run Spell Check

State of Vermont Agency of Agriculture, Food and Markets



Public Health & Agricultural Resource Management Division

116 State Street, Montpelier VT, 05620 802-828-2431

Vermont Regulations for Control of Pesticides Chapter 012 Document: CVR 20-031-012

Effective [insert date]

Persons requiring additional information regarding these regulations or other matters relating to pesticides in Vermont should contact:

Cary L. Giguere, Director, Cary.Giguere@vermont.gov, or David M. Huber, Esq., Deputy Director, David.Huber@vermont.gov Public Health and Agricultural Resource Management Division Vermont Agency of Agriculture, Food and Markets 116 State Street, Montpelier, VT 05620-2901

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Vermont Regulations for Control of Pesticides

Subchapter 1 – Definitions; Powers of the Secretary; Licenses, Certificates, and Permits issued by the Agency; Classification of Pesticides and Limitations on Sale

Section 1. Definitions

- 1.01 <u>Accident</u> 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 this regulation.
- 1.02 <u>Aerial Application</u> 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 <u>Agricultural Commodity</u> means any plant, fungus, or algae, or part thereof, or any animal or animal product produced by a person primarily for sale, consumption, propagation, or other use by a human 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 pesticide.
- 1.06 <u>Applicator</u> means any individual using a pesticide. An applicator may be certified as a commercial, non-commercial, or private applicator or may be a noncertified applicator.
- 1.07 <u>Application</u> means the dispersal of a pesticide on, in, at, or directed toward a target site.
- 1.08 <u>Appurtenance</u> means any equipment which is connected to a bulk storage container or pesticide application equipment for the purpose of transferring a pesticide and includes: valves, pumps, fittings, pipes, hoses, metering devices, mixing containers, and dispensing devices.
- 1.09 <u>Bulk Pesticide</u> 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 <u>Bulk Storage Container</u> 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 <u>Certified Commercial Applicator</u> means any person certified pursuant to the requirements of this regulation who uses a pesticide on the land or home of another whether for remuneration or gratis.
- 1.12 <u>Certified Noncommercial Applicator</u> means a noncommercial applicator who has been certified pursuant to the requirements of this regulation.
- 1.13 <u>Certified Private Applicator</u> means a private applicator who has been certified pursuant to the requirements of this regulation.
- 1.14 <u>Chemigation</u> means the use of a pesticide applied through an irrigation system to land or crops.

- 1.15 <u>Class A Pesticide</u> means a pesticide that is classified as federally restricted or state restricted.
- 1.16 <u>Class B Pesticide</u> means a pesticide that the Secretary classifies as a controlled sale product.
- 1.17 <u>Class C Pesticide</u> means a pesticide that the Secretary classifies as a homeowner or specialty product.
- 1.18 <u>Commercial Applicator</u> means a person who uses a pesticide on the land or home of another whether for remuneration or gratis under the direct supervision of a certified commercial applicator.
- 1.19 <u>Company License</u> means a license issued by the Secretary to a business entity which uses a pesticide on the land or home of another person for remuneration or gratis.
- 1.20 <u>Competency</u> means having the practical knowledge, skills, experience, and judgment necessary to perform functions associated with a 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.
- 1.21 <u>Conspicuous Point of Access</u> means the usual and customary entrance or entrances where a person is likely to enter a treated area.
- 1.22 <u>Container</u> means a device in which a pesticide is stored, transported, treated, disposed of, or otherwise handled.
- 1.23 <u>Dealer</u> means any person who distributes a pesticide.
- 1.24 <u>Dealer Outlet</u> means any location where a pesticide is distributed within or into the State.
- 1.25 <u>Direct Supervision</u> means physical, on-site supervision of a pesticide use by a certified applicator who is capable of calibrating equipment, selecting a pesticide, calculating an application rate and responding to an emergency. Direct supervision is not permitted for use of a federally restricted use pesticide.
- 1.26 <u>Discharge</u> means a spill, leak, or other emission of a pesticide from a storage container, container, or appurtenance, and includes a release into secondary containment.
 Discharge shall not mean a fully contained transfer of bulk pesticide which is made pursuant to sale, storage, or distribution that is in accordance with label directions.
- 1.27 <u>Distribute</u> 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 <u>Earth</u> means 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 <u>Economic Poison</u> 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 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.
- 1.31 or threatened species (10 V .S.A. Section 5401(6) and (7).

- 1.32 <u>Experimental Use</u> means the use of an unregistered pesticide or the use of a registered pesticide for an unregistered use conducted under a permit.
- 1.33 <u>Federally Restricted Use Pesticide</u> 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.
- 1.34 <u>Fraud</u> 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.
- 1.35 <u>Golf Course</u> means any contiguous area upon which the game of golf is played including such supporting operations as practice greens, tees, and driving areas.
- 1.36 <u>Groundwater</u> means water below the land surface which occurs in a saturated zone of the soil.
- 1.37 <u>Half-Life</u> means the time required for degradation of one-half of the pesticide residue present.
- 1.38 <u>KOC</u> 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 <u>Label</u> or <u>Labeling</u> 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.
- 1.40 <u>Loading</u> means any act of transferring a pesticide to or from any storage container, or to any application equipment.
- 1.41 <u>Manufacture</u> means to process, produce, formulate, prepare, compound, package, repackage, or label a pesticide.
- 1.42 Mini–bulk container means either:
 - (a) a 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 pesticide; or
 - (b) a container that holds more than 100 pounds (45 kilograms) but not more than 1,000 pounds (454 kilograms) of dry pesticide.
- 1.43 <u>Misuse</u> means an application not made in compliance with the pesticide label or this regulation, including:
 - (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 pesticide, spray mix, equipment wash waters, pesticide containers, and other pesticide-containing materials; or
 - (d) recommending the use of a pesticide.
- 1.44 <u>Mixing</u> means the act of combining a pesticide with another pesticide, or a pesticide with a diluent for the purpose of application.

- 1.45 <u>Noncertified Applicator</u> means a person who is not certified under this regulation and uses a pesticide.
- 1.46 <u>Noncommercial Applicator</u> means a person who uses a Class A or Class B pesticide in the course of their employment on their employer's property.
- 1.47 <u>Ornamental</u> means plants such as flowers, shrubs, and trees used for decorative purposes, shade, or other landscape purposes.
- 1.48 Person means:
 - (a) an individual, partnership, corporation, association, unincorporated organization, trust, or other legal or commercial entity, including a joint venture or affiliated ownership;
 - (b) a municipality or state agency;
 - (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
 - (d) a farmer, rancher, vineyardist, apiarist, plant propagator, Christmas tree grower, aquaculturist, floriculturist, orchardist, forester, or another comparable person.
- 1.49 <u>Pesticide</u> means economic poison as defined in 6 V.S.A. § 911 and section 1.29 of this regulation.
- 1.50 <u>Practical Knowledge</u> means the possession of pertinent facts and comprehension sufficient to properly perform functions associated with the use of a pesticide, including properly responding to reasonably foreseeable problems and situations.
- 1.51 <u>Prescreened Pesticide List</u> means a list of pesticides that, based on their human and ecological toxicity, 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 use, to leave established turf grass and enter surface or ground water.
- 1.52 Private Applicator means any person who uses a non-restricted use pesticide 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 pesticide to the property of a neighboring producer of an agricultural commodity, provided that the applicator receives no compensation other than the trading of personal services between the applicator and their neighbor.
- 1.53 <u>Public Water System</u> 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.
- 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 <u>Restricted Use Pesticide</u> means a pesticide classified as state or federally restricted and is synonymous with a Class A pesticide.

- 1.56 <u>Right-of-way</u> 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 this regulation, it is immaterial whether the right-of-way is owned, leased, or an easement.
- 1.57 <u>Secretary</u> means the Secretary of the Agency of Agriculture, Food and Markets, and their designees.
- 1.58 Service Container 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.
- 1.59 <u>Simple Dilution Analysis</u> 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 <u>Spray Drift</u> 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 <u>State Restricted Use Pesticide</u> means a pesticide classified by the Secretary as Class A but does not bear labeling as Restricted Use.
- 1.62 <u>Storage</u> means the holding of a pesticide for use or distribution in an area other than the sales floor of a licensed retailer.
- 1.63 <u>Storage Facility</u> means a location at which bulk pesticide is held in storage.
- 1.64 <u>Surface Water</u> means all rivers, streams, brooks, reservoirs, ponds, lakes, springs, and all bodies of waters, artificial or natural, which are contained within, flow through, or border the state or any portion of it.
- 1.65 <u>Turf</u> means a covering of mowed grass vegetation growing together with an upper soil stratum of intermingled roots and stems.
- 1.66 Use means:
 - (a) pre-application activities involving mixing and loading a pesticide;
 - (b) applying a pesticide, including 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 pesticide, spray mix, equipment wash water, a pesticide container, and other pesticide-containing material; or
 - (d) recommending the use of a pesticide.
- 1.67 <u>Utility</u> 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 shall mean the utility company inclusive of any wholly owned or controlled subsidiary.
- 1.68 <u>Vapor Drift</u> means the movement of a pesticide in the form of a volatilized gas to any site other than the area intended.

1.69 <u>Water Supply</u> 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.

Section 2. Powers of the Secretary

- 2.01 <u>Issuance of Licenses, Certificates, and Permits</u>
 - The Secretary may issue licenses, certificates, and permits.
- 2.02 Denial, Amendment, Suspension, or Revocation of Licenses, Certificates, or Permits
 - (a) The Secretary 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 regulation adopted under its authority or for being subject to a final order imposing a civil penalty under 7 U.S.C. Section 136l or for being convicted under 7 U.S.C. Section 136l 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 days of receipt of a notice of violation.
 - (b) If the Secretary finds that public health, safety, or welfare requires emergency action and the Secretary incorporates a finding to that effect in the order, summary suspension of a license, certificate or permit 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, 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 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 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 may enter any premises, public or private as may be necessary to carry out the provisions of 6 V.S.A. Chapter 87 and this regulation, including pesticide application sites, records, equipment, or obtain pesticide samples.

- 2.06 Reciprocal Agreements
 - (a) The Secretary may enter into a reciprocal agreement with officials of other states and federal agencies and issue 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) 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 45 days from the date of expiration.
- (d) Failure to provide confirmation shall result in the revocation of reciprocal certificates.
- (e) The certified applicator shall notify the Secretary within 30 days of termination of their reciprocal state's certification.

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

3.01 <u>Company License</u>

- (a) 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.
- (b) Exceptions. The following are exempted from the requirement of section 3.01(a):
 - (1) A Doctor of Medicine or Doctor of Veterinary Medicine applying a pesticide as a drug or medication during the course of practice.
 - (2) Applicators certified under research, demonstration, or sales programs only making recommendations and applying a pesticide in research, demonstration, or sales programs.
 - (3) Private applicators.
 - (4) Noncommercial applicators.
- (c) Business entities required to obtain a company license shall:
 - (1) be responsible for ensuring that they employ pesticide applicators that are properly certified under these regulations, except those employees working under the direct supervision of a certified applicator need not be certified; Licensed companies shall
 - (2) send written notice to the Secretary within 30 days whenever a certified commercial applicator is terminated from employment; and
 - (3) renew the company license annually.

3.02 Dealer License

- (a) Any dealer who distributes a pesticide shall obtain the appropriate dealer license:
 - (1) A person who distributes a Class A pesticide shall obtain a Class A license and, employ a full-time employee that has the appropriate license for the pesticide class being distributed.

- (2) A person who distributes a Class B pesticide shall obtain a Class B license, which also entitles the licensee to sell a Class C pesticide.
- (3) A person who distributes a Class C pesticide shall obtain a Retail/Class C license and is exempt from the examination requirements of Section 3.03.

(b) Dealer Outlets

- (1) No outlet shall distribute a pesticide into or within the state without the appropriate license.
- (2) Outlets that distribute a Class A or Class B pesticide shall employ a full-time employee that has the appropriate license for the pesticide class being distributed. A full-time employee shall be a person who works at least 32 hours per week on a year-round basis
- (3) Outlets that distribute only Class C pesticides shall obtain a Retail/Class C license.

3.03 Dealer Licensure Examination Requirements

- (a) A candidate for Class A and B licenses shall submit to a written examination covering competency standards and recordkeeping requirements, including, but not limited to, adequate knowledge of regulations, Vermont classification of a pesticide, pesticide labels, safe handling, hazards, spill cleanup, and proper disposal.
- (b) 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 calendar days to retake the examination. If a candidate fails twice, there shall be at least a 28 calendar day waiting period from the first examination date before taking the exam for the third time.
- (c) Licensed Class A and Class B dealers are required to notify the Secretary, in writing, within 30 days of termination or a change of employment, including a change from one branch store location to another.
- (d) A license may be renewed without examination provided that the conditions under which the original license was issued have not changed. The Secretary may determine that additional instruction or examination is necessary to meet new criteria relative to any use and require re-examination or training prior to renewal.
- (e) A license not renewed in 365 days shall be considered lapsed and shall require re-examination prior to any re-issuance.

3.04 Applicator Certificates

- (a) Commercial and noncommercial applicator certificates.
 - (1) A person who uses or supervises the use of a pesticide to the lands and homes of others whether for remuneration or gratis shall obtain certification as a commercial applicator.
 - (2) A person who uses or supervises the use of a Class A or Class B pesticide in the course of their employment on their employer's property shall obtain certification as a noncommercial applicator.

- (b) 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.
- (c) 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.
 - (2) Any person conducting laboratory research involving a pesticide.
- (d) A person who 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. A noncertified applicator shall not use a federally restricted use pesticide under direct supervision.

3.05 General Requirements for Applicator Certification

- (a) A candidate for certification shall be at least 18 years of age.
- (b) A candidate for certification shall submit to a written examination(s) covering the applicable competency standards described in Sections 8 and 9.
- (c) A candidate for certification must be certified in each category and subcategory, if applicable, in which they intend to work.
- (d) A candidate for certification shall have a maximum of three opportunities to achieve a passing score on the certification examination during a 12-month period which shall begin on the date the candidate takes the first examination. After an initial failing score, a candidate must wait at least 7 calendar days to retake the examination. If a candidate fails twice, there shall be at least a 28-calendar day waiting period from the first examination date before taking the exam for the third time.

3.06 Certification of Commercial and Noncommercial Applicators

- (a) Certification shall expire on December 31st of the year in which the certificate was obtained.
- (b) Certification of noncommercial and commercial applicators may be renewed annually for up to five years, after which recertification shall be required, either through training or re-examination.
- (c) The Secretary may require recertification whenever necessary and determine the procedure for additional training or re-examination.
- (d) Certified noncommercial or commercial applicators shall send written notice to the Agency within 30 days of termination or changing employers.
- (e) A certificate not renewed in 365 days shall be considered lapsed and shall require re-examination prior to any re-issuance.

3.07 <u>Certification of Private Applicators</u>

- (a) Certification of private applicators is valid for five years, after which recertification shall be required either through training or re-examination.
- (b) The Secretary may require recertification whenever necessary and shall determine the procedure for additional training or re-examination.

- (c) The Secretary shall require that private applicators obtain 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 <u>Certificate Revocation or Restriction</u>

Any pesticide applicator certificate issued may be revoked or further restricted when the Secretary determines that the restrictions are necessary to protect human health or the environment.

3.08 Permits

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:

- (a) Right-of-way, exclusive of terrestrial invasive plant control.
- (b) Aerial.
- (c) Experimental use.
- (d) Bird or animal control.
- (e) Golf course.
- (f) Mosquito larvicide.
- (g) Mosquito adulticide.
- (h) Terrestrial invasive plant control.

3.09 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 Secretary.

3.10 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 a person:
 - (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 Secretary; or
 - (4) who fails to remit appropriate fees to the Secretary; or
 - (5) for any other reason that the Secretary deems appropriate.
- (b) The Secretary may amend a license, certificate, or permit upon written request and after review.
- (c) A person whose 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 <u>Identification of Class A – Restricted Use, Class B – Controlled Sale and Class C – Homeowner Pesticides</u>

- (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 thuringienesis* 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 chlorodiebenzo-para-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:
 - (1) 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.
 - (2) 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

Section 5. General Standards for Pesticide Use

5.01 Registered and Recommended Uses of Pesticides

- (a) A pesticide use shall comply with that pesticide's label, which shall be registered with the EPA and the Agency, except as provided under authority for pesticide use in Sections 18 and 24(c) of FIFRA.
- (b) A pesticide shall be used under conditions known to minimize spray and vapor drift.

5.02 Standards of Operations

All applicators and licensed companies shall:

- (a) 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) use equipment with an effective anti-siphoning device to prevent backflow when drawing or pumping water to fill pesticide application devices;
- (c) use equipment with an effective anti-siphoning device to prevent backflow when drawing or pumping water to be used in chemigation operations;
- (d) operate in a careful manner and only when climatic, pest, or other conditions are proper for controlling pests;
- (e) make no false or fraudulent claims;
- (f) 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) conform to the use restrictions established in 6 V.S.A. Chapter 87, the Regulations for Control of Pesticides, and permits issued thereunder;
- (h) cooperate with Agency requests for information related to pesticide application, to observe pesticide applications, to inspect equipment, to inspect pesticide related records, to inspect business premises, to conduct pesticide-related sampling;
- (i) use a pesticide consistent 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.

- (j) 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 in Section 6:
 - (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 treated for;
 - (6) the name 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) use a pesticide so as not to exceed the maximum contaminant level or primary groundwater quality enforcement standards pursuant to Appendix One of the "Ground Water Protection Rule and Strategy" in accordance with 10 V.S.A. Chapter 48;
- (l) manage the use of a pesticide to reduce the concentrations of a pesticide in groundwater to the preventive action limits pursuant to Appendix One of the "Ground Water Protection Rule and Strategy" when monitoring indicates the presence of pesticide concentrations in groundwater that exceed the preventive action limits;
- (m) maintain a minimum 50-foot buffer when applying a pesticide to soil or vegetation around any 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 pesticide 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 Applicators, Licensed Companies, and Dealers

- (a) A federally restricted use pesticide shall only be used by a certified applicator.
- (b) Applicators, licensed companies, and dealers shall maintain legible labels on pesticide containers at all times.
- (c) Applicators, licensed companies, and dealers shall not re-use 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:
 - (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.

5.04 Protection of Bees

- (a) No person shall apply a pesticide to a flowering crop, including but not limited to, alfalfa, apple, blueberry, clover, pumpkin, raspberry, squash, or trefoil without prior notification to an apiculturist who has an established apiary on the premises.
- (b) A person hiring a commercial applicator for an application under section 5.04(a) shall notify, or cause to be notified, the application to the application.
- (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 Right-of-Way Clearing and Maintenance Permit

- (a) No utility shall apply an herbicide for the purpose of clearing or maintaining a right-of-way without first obtaining an approved permit from the Secretary 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.
- (b) 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.
- (c) A complete and accurate permit application shall be made, on a form provided by the Secretary before March 1 of the year of the proposed application.
- (d) The application form shall be accompanied by 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 a copy of the notice of intent to use an herbicide which shall be published.
- (e) 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 application;
 - (2) be published for one day a week for two consecutive weeks in each of two newspapers, for every county to be affected by the right-of-way 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 right-of-way; the names of the towns where the application is to be done; the approximate date of the herbicide application; that a permit has been requested from the Secretary; the method by which the herbicide 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; a notice to residents along the right-of-way that drinking water supplies should be buffered 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.
- (f) In addition to the notice of intent to use an herbicide, further notification by one of the following methods containing the information set forth in subdivision 6.01(e)(4) shall be provided by:
 - (1) 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
 - (2) 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
 - (3) 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.
- (g) Permit applicants shall submit a long-term integrated vegetative management plan to the Secretary at least every five years which shall include:
 - (1) a general statement of policy and goals;
 - (2) identification of the species to be maintained; the scheduled frequency and method of maintenance; and an evaluation of non-chemical options;
 - (3) identification of other applicable utility and federal guidelines and standards to be maintained on the right-of-way;
 - (4) establishment of right-of-way inspection and monitoring standards including frequency and method of inspection; and
 - (5) establishment of standards and practices for:
 - (A) wetlands;
 - (B) pollinator habitat;
 - (C) wildlife;
 - (D) erosion control; and
 - (E) aesthetic considerations.
- (h) Right-of-Way clearing and maintenance permits issued by the Secretary shall establish buffer distances which shall be determined according to the type of

- application, properties of a pesticide to be used, and the characteristics of the area to be treated.
- (i) Permit applications shall be published by the Secretary for a 30-day comment period prior to any issuance of a permit.

6.02 Aerial Permit

- (a) No person shall make an aerial application without first obtaining an approved permit from the Secretary as provided in this section.
- (b) A complete and accurate permit application shall be made, on a form provided by the Secretary, before the proposed application.
- (c) 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.
- (d) An aerial application shall be conducted by a certified applicator in the appropriate categories and/or sub-categories.

6.03 Experimental Use Permit

- (a) No person shall use an unregistered, or a registered, pesticide for an unregistered use without first obtaining an approved experimental use permit from the Secretary.
- (b) A complete and accurate permit application shall be made on a form provided by the Secretary before the proposed application.
- (c) The Secretary may issue permits for three types of experimental uses:
 - (1) A state-issued permit as authorized under Section 4(f) of FIFRA to accumulate information or data necessary to register a pesticide use for special local needs.
 - (2) A state-issued permit to conduct laboratory, greenhouse, or limited replicated field trials to test or validate a substance for pesticidal activity, determine its toxicity, or other related chemical properties to the extent allowed under FIFRA.
 - (3) A state-issued authorization to conduct an experimental use in the State for all or some of the uses provided on the label under the experimental use permit issued by the EPA pursuant to Sections 4(a)-(e) of FIFRA.
- (d) No experimental use permit shall exceed one year.
- (e) 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.
- (f) The permittee shall report to the Secretary, upon identification, any adverse effects from the use of or exposure to the pesticide.
- (g) The application of a pesticide under an experimental use permit shall be made by a certified applicator.

- (h) 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 crop and use pattern, then:
 - (1) the crop shall be destroyed after harvest; or
 - (2) the crop may be used for further testing, provided that the crop shall not be consumed by humans. If the crop is consumed by test animals, the animals or animal products shall not be used for human or animal consumption.

6.04 Bird and Other Vertebrate Pest Control Permit

- (a) No person shall use a pesticide 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.
- (c) A pesticide application may only be made after the Secretary has deemed the bird or animal a pest.
- (d) Types of use that may be authorized by this permit:
 - (1) Area-wide application for the protection of agricultural commodities, wildlife, and human health.
 - (2) Limited-area applications where the use of that pesticide could have a detrimental effect on non-target animals or may affect food or food products.
- (e) A permit application for an area-wide treatment shall be reviewed by the Vermont Fish and Wildlife Department and the Vermont Department of Health prior to any permit issuance.
- (f) Notification of all permitted limited-area pesticide applications shall be submitted to the Vermont Fish and Wildlife Department and the Vermont Department of Health.
- (g) A permit is not required for the following:
 - (1) animal or bird repellents; or
 - (2) pesticide applications for members of the *Cricetidae* and *Muridae* families.

6.05 Golf Course Permit

- (a) No person shall use a pesticide on a golf course without first obtaining a permit from the Secretary.
- (b) 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.
- (c) For a new or expanded golf course the Secretary may require proof that the course was built as represented in the submitted sit plan.
- (d) 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.
 - (2) An application for a golf course permit shall contain all information requested in the application, which shall include:
 - (A) the name and contact information of the golf course;

- (B) the mailing address and E911 golf course address;
- (C) a general description of the golf course as it exists or is designed;
- (D) a mapped site plan;
- (E) an integrated pest management plan; and
- (F) a long-term integrated nutrient management plan.
- (3) The mapped site plan provided to the Secretary shall include:
 - (A) the tees, greens, and fairways;
 - (B) all surface waters;
 - (C) all private water supplies on or within 200 feet of an abutting property line;
 - (D) all public water supplies on or within 200 feet of an abutting property line;
 - (E) property boundary lines;
 - (F) all buildings and a description of their uses;
 - (G) a legend, scale, and north designation;
 - surface acreage and average depth of ponded surface waters and identification of primary source of water supply;
 - (I) a soils map and key as mapped by the U. S. Natural Resources Conservation Service;
 - (J) the square footage of each green and tee and an identification of each green or tee located within 100 feet of surface water;
 - (K) an approximate acreage of fairways and roughs; and
 - (L) the location of any proposed buffer to protect surface water, groundwater, and environmentally sensitive areas.
- (4) The long-term integrated pest management plan provided to the Secretary shall include:
 - (A) a general statement of policy and goals;
 - (B) an identification of the species to be maintained, the scheduled frequency and method of maintenance, and an evaluation of non-chemical options;
 - (C) a description of biological and cultural pest management strategies and practices that will be used and will identify pest thresholds;
 - (D) a description of the location of pesticide storage and handling areas including a spill response plan;
 - (E) a description of irrigation practices used;
 - (F) a description of any unique features or practices that may minimize pest pressure; and
 - (G) the description, including the location, of any proposed buffer established to protect surface water, groundwater, and environmentally sensitive areas.

- (5) The long-term integrated nutrient management plan provided to the Secretary shall include:
 - (A) a brief description of the goals of the nutrient management plan;
 - (B) an identification of any area where a nutrient application will be made including greens, tees, fairways and roughs; and
 - (C) a description of the process in which soil test results are interpreted based on accepted University or Agency recommendations and consistent with the nitrate leaching index.
- (6) A permit applicant shall provide information for any pesticide being requested for use at the golf course, which shall include:
 - (A) the pesticide product name and EPA Registration Number;
 - (B) any active ingredient;
 - (C) the proposed rate of application, site of application, number of applications per year, acres to be treated, and target pest for each application;
 - (D) the anticipated total annual amount of each active ingredient; and
 - (E) a demonstration that use of the pesticide will not exceed ground or surface water standards using dilution analyses calculations or other methods approved by the Secretary.
- (7) All initial permit applications shall be published by 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.
- (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 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.
- (g) A complete and accurate permit renewal for the maintenance of golf course turf shall be made on a form provided by the Secretary annually at the end of the calendar year and prior to any application in the subsequent year. An application for a golf course permit renewal shall contain all information requested in the application, which may include:
 - (1) A report of the previous year's pesticide usage.
 - (2) A report of the previous year's fertilizer usage containing:
 - (3) The total amount nitrogen and phosphorus used in the preceding calendar year
 - (4) The total amount of nitrogen and phosphorous applied at each application site including tees, greens, fairways and roughs.
 - (5) The average rate of nitrogen and phosphorus used per acre (or per 1000 sq. ft.) for each site of application.

6.06 Mosquito Larvicide Permit

- (a) Any person who makes a mosquito larvicide application must first obtain a permit from the Secretary as provided in this section.
- (b) A complete and accurate permit application shall be made, on a form provided by the Secretary before the proposed application.
- (c) 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, and a copy of the notice of intent to use a larvicide which shall be published.
- (d) The notice of intent to use a mosquito larvicide 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 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) 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 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 a provision for an opportunity for individuals to refuse treatment of their property or request a buffer around their private water supply.
- (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 larvicide, further notification by one of the following methods containing the information set forth in subdivision 6.06(d)(4) shall be provided by:
 - (1) written communication to residents in or abutting the larvicide treatment area during the calendar year of application, at least two weeks prior to such application, by U.S. Mail or electronic mail; or
 - (2) a hand-delivered, printed statement to residents in or abutting the larvicide treatment area at least fourteen (14) days prior to such application.
- (g) The permit applicant shall only use products allowed for and in accordance with the conditions specified in the Vermont Mosquito Control Permitting Procedures, which the Secretary shall publish.
- (h) The Secretary shall publish all permit applications for a 30-day comment period prior to any issuance of a permit.
- (i) A mosquito larvicide permit may be issued for a maximum of 5 years before renewal.
- (j) A private, certified commercial, 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 <u>Mosquito Adulticid</u>e Permit

- (a) No person shall apply a mosquito adulticide for nuisance mosquitos using ground-based truck-mounted sprayers without first obtaining an approved permit from the Secretary as provided in this subsection.
- (b) 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.
- (c) 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, and a copy of the notice of intent to use a mosquito adulticide which shall be published.
- (d) 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 town to be affected by the 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;
- (4) set forth the name and address of the permit applicant; a reasonable identification of the affected treatment areas; 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; and
- (5) set forth the provision for an opportunity for individuals to request a no-treatment area on or abutting their 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, further notification by one of the following methods containing the information set forth in subdivisions 6.07(d)(4), (5) shall be provided by:
 - (1) 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;
 - (2) 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
 - (3) other means of public notification deemed acceptable by the Secretary.
- (g) Permit applicants shall submit a long-term integrated pest management plan to the Secretary at least every five years which shall include:
 - (1) a general statement of policy and goals;
 - (2) identification of the species to be controlled; the thresholds at which adult control will be conducted; a commitment to larvicide control options prior to the use of an adulticide; and an evaluation of non-chemical options;
 - (3) an assessment or inventory of mosquito breeding habitat and proposed mechanisms to reduce this habitat in the proposed treatment area.
 - (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.
- (h) 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 pesticide to be used, and the characteristics of the area to be treated.
- (i) The Secretary shall publish all permit applications for a 30-day comment period prior to any issuance of a permit.

6.08 Terrestrial Invasive Plant Control Permits

- (a) 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 an approved permit from the Secretary as provided in this section.
- (b) 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.
- (c) A terrestrial invasive plant control application shall be conducted by a certified applicator in the appropriate categories and/or sub-categories.
- (d) A terrestrial invasive plant control shall be conducted in accordance with recommendations provided by the Secretary's Invasive Plant Advisory Committee and in the permit applications shall include a plan demonstrating how the permit applicant will either be able to eradicate or otherwise further control the spread of the invasive species with a reduction in any continued chemical applications.
- (e) Landowner permission for chemical control shall be required.
- (f) The Secretary shall publish all permit applications for a 10-day comment period prior to any issuance of a permit.

Section 7. Notification and Posting of Pesticide Applications

- 7.01 <u>Turf-grass and Ornamental Pesticide Application General Requirements</u>
 No outdoor application by a commercial or non-commercial applicator to turf-grass or ornamental plants shall be made without the following provisions having been met:
 - (a) Prior to the application, the applicator or their employer shall provide the customer written information containing the common name and EPA registration number of the pesticide, proposed rate, and availability of product label and safety data sheet.
 - (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.
 - (c) Before beginning an application, the applicator shall post at least one sign, prescribed below, at each conspicuous point of access to the treated area. The applicator shall leave the sign posted with instructions to remove the sign 24 hours following the application. The specifications of the sign shall:
 - (1) be at least four by five inches, of sturdy, weather resistant material;

- (2) be made with contrasting colors;
- (3) contain no additional words or symbols on the front panel;
- (4) contain the date and time of application; and
- (5) be posted at least 12 inches above the ground.

CAUTION

Pesticide Application

KEEP OFF UNTIL DRY

CUSTOMER: Please remove after 24 Hours.

- (d) 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, a statement that contains:
 - (1) the name, address, and telephone number of the applicator or company providing service;
 - (2) the pesticide applicator's name and certification number;
 - (3) the common or trade name, EPA registration number, amount used and pest treated for each pesticide applied;
 - (4) any required post-application label safety precaution;
 - (5) the application date, time, and location; and
 - (6) instructions that the sign should be removed after 24 hours.
- (e) 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.
- (f) The applicator or their employer shall provide the customer with prior notification of the timing of each pesticide application upon request.
- (g) This section does not apply to golf courses.
- 7.02 <u>Turf-grass and Ornamental Application Condominiums or Apartment Buildings</u>
 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 pesticide application to turf-grass or ornamental plants made on property of condominiums or apartment buildings the applicator or their employer shall provide a template form to the customer at the property that contains:
 - (1) the name, address, and telephone number of the 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, 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 application to turf-grass or 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 application to turf-grass or ornamental plants made on property of a condominium or apartment building, the applicator or their employer shall complete and post, or cause to be completed and posted, a written notice containing the information provided in subdivisions (1) and (2) of section 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.
- (d) This section does not apply to owner-occupied dwellings.

7.03 <u>Indoor Application – Residential Dwelling Unit</u>

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) At least 24 hours and no more than seven days in advance of any private, commercial or noncommercial pesticide application made inside a residential dwelling unit not owned by the occupant, the owner, or landlord of the residential dwelling unit shall complete and provide or cause to be provided a written notice to the occupant of the residential dwelling unit, where the occupant of that unit did not request the impending pesticide application.
- (b) The written notice may be mailed, sent electronically, or provided directly to the occupant 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 owner or landlord for more information.
- (c) Upon request by an occupant, the property owner or landlord shall provide any additional information requested relating to the application of pesticide.
- (d) The following are exempt from the requirements of section 7.03(a):
 - (1) Application of a pesticide by hand or with non-powered equipment to control or repel stinging 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 antimicrobial product 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 paint, stain or wood preservative that is not a State-restricted use product;
- (4) Application of a pesticide by an occupant to their own unit.
- (5) Commercial application of a pesticide where the occupant has contracted for application to their own unit.
- (6) Indoor applications of a pesticide injected into closed systems for control of nuisance microbial organisms.
- (e) This section does not apply to owner-occupied dwellings.

Section 8. Maintenance of Records by Certified Applicators, Licensed Companies, Licensed Pesticide Dealers, and Pesticide Producing Establishments

8.01 Requirements for Certified Private Applicators

- (a) A certified private applicator shall maintain routine operational records for any Class A pesticide applied.
- (b) Routine operational records shall be maintained on a daily basis and shall contain:
 - (1) The pest treated for
 - (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.
 - (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.
- (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) These records must be maintained for a period of three years and shall be made available to the Secretary upon request.
- (d) Certified commercial and non-commercial applicators shall submit an annual pesticide application report to the Secretary.
 - (2) The report shall state the EPA Registration Number, the product name, the amount applied, the general purpose for which it was applied and the county in which it was applied.
 - (3) The report shall be submitted together with an application for the renewal of certification to the Secretary. Commercial and noncommercial pesticide applicator certificates shall not be renewed without the submission of an annual application report. Annual pesticide application reports shall be submitted regardless of whether a pesticide was applied during a given year.

8.03 Requirements for Permittees

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

8.04 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.
- (b) The licensed company shall collect operational records required by this section from its certified applicators, hold them for a period of three years, and make them available to the Secretary upon request.
- (c) The annual pesticide application report shall be submitted together with the company license renewal application to the Secretary prior to January 1 of each year.

8.05 Requirements for Class A dealers

- (a) Class A dealers shall keep and maintain records of the sales of any pesticide and shall make them available for inspection to the Secretary.
- (b) Class A dealers shall record and maintain at each outlet, for the period of at least three years, records of each transaction where a Class A pesticide is distributed to any person, excluding transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail sellers, acting only in those capacities.

- (c) A record of each Class A pesticide transaction shall include the following information:
 - (1) The name and address of the residence or principal place of business of the certified applicator to whom the 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 applicator to whom the Class A pesticide was distributed or sold for application by a certified applicator.
 - (2) The certification number presented to the 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 in which the applicator is certified relevant to the pesticide sold.
 - (5) The product name and EPA registration number of the Class A pesticide 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 distributed or sold in the transaction.
 - (7) The date of the transaction.
- (c) A report of special permit and any Class A pesticide sold on a calendar year basis shall be submitted together with the application for license renewal to the Secretary by all Class A pesticide dealers prior to January 31 of the following year. Reports may be required by the Secretary at any other time, provided the request is made in writing.
- (d) Annual sales reports shall include the product name, the EPA registration number, the total amount of Class A pesticide sold and the county of intended use. For reporting the county of intended use, pesticide dealers may use the applicator's county of residence.
- (e) Annual sales reports shall be submitted regardless of whether a Class A pesticide was sold.

8.06 Requirements for Pesticide Producing Establishments

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

8.07 Additional Record Keeping Requirements

- (a) Annual records may be required for the treatment of a pest as deemed necessary by the 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.

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

Section 9. Certification Standards for Commercial Applicators and Noncommercial Applicators Using Other than Class C Pesticides

9.01 <u>General Certification Requirements</u>

- (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 <u>Description of Certification Categories</u>

- (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).
- (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).
- (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 applicator 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 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 <u>Specific Standards of Competency for Each Category of Commercial and</u> 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 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.
 - (4) Best management practices of pests and diseases associated with honeybees.
 - (5) 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 <u>Category 3: Ornamental and Turf Pest Control</u>

- (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.
 - (2) Application methods that will minimize or prevent hazards to humans, pets, and other domestic animals due to the frequent proximity of human habilitations to application activities.
 - (3) Knowledge of state-required posting.
- (b) 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.
- (3) Knowledge of state-required posting.

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 <u>Category 5: Aquatic Pest Control</u>

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 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
 - (A) avoid contamination of food, food processing equipment, and packaging materials;
 - (B) avoid damage and contamination of the processing area and exposure of people;
 - (C) minimize acute and chronic exposure of people and pets; and
 - (D) 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
 - (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 <u>Category 8: Public Health Pest Control</u>

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.
- (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

- (a) Applicators shall demonstrate practical knowledge of the following:
 - (1) Regulated pests.
 - (2) Applicable laws relating to quarantine and other regulation of pests.
 - (3) The potential impact on the environment of a pesticide used in suppression and eradication programs.
 - (4) Factors influencing introduction, spread and population dynamics or relevant pests.
- (b) 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 demonstrate competency in each pest control category 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:
 - (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) 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.

9.17 <u>Category 13. Non-soil fumigation</u>

Applicators 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, noncertified 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.
 - (3) Signs and symptoms of human 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.
 - (8) First aid measures to take in the event of exposure to a fumigant.
 - (9) 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.

Section 10. Certification Standards for Private Applicators

10.01 General requirements

- (a) A person applying a Class A pesticide on property owned by them or on land rented by them to produce agricultural commodities shall be certified as having the necessary competency in accordance with the requirements set forth by the Secretary as the core standards for pesticide use for private applicator certification, which shall include the ability to read and understand pesticide labels and labeling requirements. Competency shall be established by passing a written examination.
- (b) 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 by written examination in the relevant subcategory as provided in Sections 10.03 10.05.

10.02 Core standards of Competency for Private Applicators

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:

- (a) Label and labeling comprehension. Ability to read and understand pesticide labels, labeling, and their functions, including all the following:
 - (1) The general format and terminology of pesticide labels and labeling.
 - (2) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.

- (3) Understanding that it is a violation of Federal law to use any registered pesticide in a manner inconsistent with its labeling.
- (4) Understanding when a certified applicator must be physically present at the site of the application based on labeling requirements.
- (5) 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.
- (6) Understanding the meaning of product classification.
- (7) Understanding and complying with product-specific notification requirements.
- (8) Recognizing and understanding the difference between mandatory and advisory labeling language.
- (b) Safety. Measures to avoid or minimize adverse health effects, including the following:
 - (1) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of a pesticide.
 - (2) Understanding that a pesticide's risk is a function of exposure and the pesticide's toxicity.
 - (3) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.
 - (4) Common types and causes of pesticide mishaps.
 - (5) Precautions to prevent injury to applicators and other individuals in or near treated areas.
 - (6) Need for, and proper use of, protective clothing and personal protective equipment.
 - (7) Symptoms of pesticide poisoning.
 - (8) First aid and other procedures to be followed in case of a pesticide mishap.
 - (9) 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 a pesticide and pesticide containers.
- (c) Environment. The potential environmental consequences of the use and misuse of pesticides, including the influence of the following:
 - (1) Weather and other climatic conditions.
 - (2) Types of terrain, soil, or other substrate.
 - (3) Presence of fish, wildlife, and other non-target organisms.
 - (4) Drainage patterns.
- (d) Pests. The proper identification and effective control of pests, including the following:
 - (1) The importance of correctly identifying target pests and selecting the proper pesticide product(s).
 - (2) Verifying that the labeling does not prohibit the use of the product to control the target pest(s).

- (e) Pesticides. Characteristics of pesticides, including the following:
 - (1) Types of pesticides.
 - (2) Types of formulations.
 - (3) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations.
 - (4) Hazards and residues associated with use.
 - (5) Factors that influence effectiveness or lead to problems such as pesticide resistance.
 - (6) Dilution procedures.
- (f) Equipment. Application equipment, including the following:
 - (1) Types of equipment and advantages and limitations of each type.
 - (2) Uses, maintenance, and calibration procedures.
- (g) Application methods. Selecting appropriate application methods, including the following:
 - (1) Methods used to apply various forms and formulations of pesticides.
 - (2) 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.
 - (3) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
 - (4) 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 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 a pesticide is applied to animal or animal product agricultural commodities.
 - (5) Relative hazards associated with using a pesticide on animals or places in which animals are confined based on formulation, application technique, age of animal, stress, and extent of treatment.

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) Labeling. Labeling requirements 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.
 - (4) Labeling-mandated recordkeeping requirements for aerial pesticide applications including application conditions if applicable
- (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 must 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 must 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 aerial application. The applicator must 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.

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) 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.
 - (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.

- (b) Safety. Measures to minimize adverse health effects, including 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) 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:
 - (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.

- (f) 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.

10.05 <u>Sub-category: Non-Soil Fumigation</u>

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:

- (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, noncertified 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.
 - (3) Signs and symptoms of human 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.
 - (8) First aid measures to take in the event of exposure to a fumigant.
 - (9) 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 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.

10.06 Certification and renewal

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 Secretary or by reexamination.

Section 11. Transportation and Storage of Pesticides.

11.01 Transportation

- (a) To prevent any discharges, applicators and dealers shall ensure that containers are secured during transportation so they may not shift, become punctured, or otherwise compromised.
- (b) 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.

11.02 Pesticide and Container Storage by Applicators and Class A and B Dealers

Applicators and Class A and B Dealers shall comply with the following requirements.

- (a) Any pesticide shall be stored in accordance with requirements and precautionary storage instructions contained on the product label.
- (b) Containers shall have legible labeling indicating the contents.
- (c) Any pesticide or container that has 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 a pesticide, the leakage or breakage of containers, or other causes.

- (d) Any pesticide shall be stored inside, and protected and secured in such a manner to prevent access from unauthorized persons and wildlife.
- (e) The floor surface of the pesticide storage area shall be smooth, facilitating the complete recovery of any discharge. Floor surfaces may include, but shall not be limited to, sealed concrete and plastic.
- (f) Earthen floors shall be prohibited in a pesticide storage area unless all containers are placed in a containment vessel designed to recover and contain any discharge.
- (g) 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.
- (h) The pesticide storage area shall be vented to the outdoors.
- (i) 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 discharge.
- (j) 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.
- (k) A pesticide storage area shall maintain sufficient lighting to allow the observation of containers and their labeling.
- (l) Storage of pesticide in bulk shall comply with the bulk pesticide storage rules under Section 12.
- (m) Cabinets, storage bins, lockers, or similar type storage compartment shall be considered a pesticide storage area provided that the storage compartment complies with subsections (a) (d), and (i) (k) of this section.
- (n) Floor drains not used in conjunction with catch basins shall be prohibited in a pesticide storage area.
- (o) A pesticide storage area may be equipped with a catch basin, provided that:
 - (1) there are no pipes attached;
 - (2) it is constructed for complete recovery of a 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.
- (p) A pesticide storage area shall be maintained in a clean condition.
- (q) At a minimum, any discharge shall be cleaned up within 60 minutes.
- (r) Any container having the capacity for holding greater than 55 gallons but less than 300 gallons of bulk pesticide, known as mini-bulk containers, shall be exempt from subsections (c), (e) (h), (j)–(p) of this section 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:
 - (A) returned to the dealer;
 - (B) emptied;
 - (C) disposed; and
 - (D) triple rinsed.

Section 12. Bulk Pesticide Storage

12.01 Dry Bulk Pesticide

- (a) Dry bulk pesticide shall be covered by an impermeable roof or tarpaulin.
- (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.

12.02 <u>Bulk Pesticide Security</u>

- (a) Bulk 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, 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.

12.02 <u>Bulk Storage Containers and Appurtenances</u>

- (a) Design, construction, and maintenance of bulk storage containers and appurtenances.
 - (1) Bulk storage containers and appurtenances shall be constructed, installed and maintained to prevent the discharge of liquid bulk pesticide.
 - (2) Bulk 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 container or appurtenance.

- (4) Materials used in the construction or repair of bulk storage containers and appurtenances shall not be constructed of materials 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 airtight 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) 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.

12.03 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 shall 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, using brooms or manually activated pumps, 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 10 V.S.A. Chapter 159: Waste Management.

12.04 Secondary Containment for Liquid Bulk Pesticide

- (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 surface or groundwater.
 - (2) A secondary containment facility shall consist of a wall and liner as provided under subsections (d) and (e) or a prefabricated facility as provided under subsection (f) of this section. 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 shall 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 subsection (e) of this section. 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.
 - (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.
 - (D) The use of synthetic liners for the construction of secondary containment facilities shall be approved by the Secretary provided the manufacturer of the liner provides the Agency with a written confirmation of chemical compatibility and a written estimate of the life of the liner.
 - (E) 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.
- (f) 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.
- (g) 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 10 V.S.A. Chapter 159: Waste Management.

12.05 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 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 12.06(a)(3).
- (c) Secondary containment facilities shall be inspected annually to assure compliance with section 12.04.
- (d) All equipment and supplies mandated by the Discharge and Response Plan shall be maintained in sound working order.
- (e) 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.

12.06 Recordkeeping

- (a) 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.
 - (1) 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.

- (2) 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 section 12.05(b).
- (3) 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.
- (4) Inspection and maintenance records pertaining to storage containers, appurtenances, and secondary containment facilities, as provided under sections 12.05(a), and (c).
- (5) A record of manufacturers' compatibility statements as provided under sections 12.04(e)(2)(D), and 12.04(f)(4).
- (b) Records shall be maintained for at least five years and shall be made available for inspection and copying by the Secretary upon request.

12.07 Preparations for Control and Recovery of Pesticide Discharges

- (a) Discharge response plan.
 - (1) The operator of a storage facility shall prepare a written discharge response plan for the storage facility.
 - (2) 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 Agency.
 - (3) 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 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 Safety Data Sheet (SDS) 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 Community Right-to-Know and Accident Reporting.
- (c) Equipment and supplies.
 - (1) Applicators, manufacturers, and distributors who store bulk pesticide 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.

12.08 <u>Prohibition of Underground Liquid Storage</u>

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.

12.09 Alternative Technology

- (a) The Secretary may exempt any person or company from a requirement under this regulation if compliance is not technically feasible, but only if the 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 Secretary with adequate information to show that the alternative measures requested provide substantially similar protection for the environment.

Section 13. Disposal of Pesticides and 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.

stState of Vermont Agency of Agriculture, Food and Markets



Public Health & Agricultural Resource Management Division

116 State Street, Montpelier VT, 05620 802-828-2431

Vermont Regulations for Control of Pesticides

Chapter 012

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<u>Persons requiring additional information regarding these regulations or other matters relating to pesticides in Vermont should contact:</u>

Cary L. Giguere, Director, Cary.Giguere@vermont.gov, or
David M. Huber, Esq., Deputy Director, David.Huber@vermont.gov
Public Health and Agricultural Resource Management Division
Vermont Agency of Agriculture, Food and Markets
116 State Street, Montpelier, VT 05620-2901

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Pesticides

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 Argiculture, 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 <u>Section</u> <u>I 1. - DEFINITION</u> <u>Definitions</u>

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 1.—Accident: means any release of a pesticide or pesticide mix from its container or application equipment which is contrary to a label instructions for use of that pesticide, or erwhichwhich violates these this 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 manhuman or animals.
- 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 materials being injected at the same time, such as a fertilizers or other pesticides.
- 1.06 Applicator means any individual using a pesticide. An applicator may be certified as a cCommercial, 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 pesticides 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 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 It 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 mayit can 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 Ruleregulation who appliesuses 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 Pesticidespursuant to the requirements of this Ruleregulation. 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.

- 1.13 Certified pPrivate aApplicator means: a private applicator who has been certified pursuant to under the requirements of Section IX, Vermont Regulations for Control of Pesticides. this Ruleregulation 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 injectionuse -ofprocess whereby a pesticide(s) is (are) mixed with intoapplied through-water and applied through-an irrigation systems to land and/or 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 Agencythe Secretary classifies as a controlled sale product.
- 1.17 Class C Pesticide means a pesticide that the Agencythe Secretary classifies as a homeowner or specialty product.
- 1.18 Commercial Applicator means a person who applies uses a pesticides toon 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 Agencythe Secretary Department of Agriculture to a business entityies which apply 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 Ppoint of aAccess means: the usual and customary entrance or entrances(s) where people a person is are likely to enter a treated area, and observe warning signs pursuant to Section IV 8.
- 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. (it may be mobile or portable)
- <u>1.23</u> <u>Pesticide dDealer means</u>: any person who distributes <u>a</u>, takes orders for sale, offers for sale or sells pesticide from an establishments.
- 1.24 Dealer Outlet means any establishment location where a pesticide is distributed within or into the State.
- 1.25 <u>Direct sSupervision: means physical, on-site supervision of a pesticide application use</u>
 by a certified applicator who is capable of calibrating ion of equipment, prescribing
 selecting a pesticides, calculating an application rate calculating a volumes of a
 pesticides to be applied, and dealing responding with to an emergency situationan
 emergencys which might occur. Direct supervision is not permitted for use of a federally
 restricted use use product pesticide.

- 1.26 <u>Discharge: means</u> 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. It <u>Discharge shall not meandoes not include</u> a fully contained transfer of bulk pesticide which is made pursuant to sale, storage, or distribution or releases that are is in accordance with label directions.
- 1.27 <u>19. Distribute means:</u> to import, consign, sell, offer for sale, solicit <u>an</u> orders for sale, or otherwise supply <u>a pesticide</u> for sale or use in this State: <u>through any means</u>, including sales outlets, catalogues, the telephone, the Internet, or any electronic means.
- 1.28 Earth -should be understood to mean; means sSoil, defined as; a three phase system comprised of various combinations of naturally-derived naturally derived solids including fine to coarse-grained rocks and minerals, organic matter (including living organisms), weathered rock, and precipitates.
- 1.29 Economic Ppoison 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. Drift: the airborne movement of a pesticide during or immediately after its use or application to a site unintended for its use or application.
- 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,
 - —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.
- 1.33 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.
- 1.34 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.
 - FIFRA? We use in EUP.
- 1.35 Golf Course means :- 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.
- 1.36 Ground-water means: water below the land surface which occurs in a saturated zone of the soil.
- 1.37 35. Half-Life means: the time required for disappearance degradation of one-half of the pesticide residue present.
 - Homeowner Applicator means
- 1.38 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.

<u>Loading means</u>: any act of transferring <u>a</u> 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 any 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 regulations, including but not limited to:
 - (a) pPre-application activities involving mixing and loading the pesticide;
 - (b) aApplying the pesticide, including, but not limited to, supervising the use of a pesticide by a noncertified applicator;
 - oOther 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) rRecommending the use of a pesticide.
- 1.44 Mixing means: the act of-a combining a pesticides with another pesticide, or a pesticide with another pesticide with a pesticide
- 1.45 Noncertified Applicator means a person who is not certified under this Ruleregulation 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

1.48 Person means:

- (a) any an individual, partnership, corporation, association, corporationunincorporated 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., 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 otheranother comparable persons.
- 1.49 Pesticide means economic poison as defined in 6 V.S.A. § Section-911 and SectionDefinitionSection 1.I-2981 of the Regulations For the Control of Pesticides this regulation.
- 1.50 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.

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-eenter surface and/or ground water.
- 1.52 Private Applicator means any person who uses or supervises the use of anya 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 commodityies, provideding 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 50. 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.
- 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 pesticides.
 - 53. Restricted Uuse Ppesticides means: those a pesticides classified for restricted use under the provisions of 3(d) of Tthe Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and 40 CFR part 152, subpart I Section 3(d) of FIFRA as amended, U.S. Environmental Protection Agency or those pesticides classified by the Commissioner as Class "A" and a pesticide classified by the state as Class A state restricted. ...
- 54. 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 Ruleregulation, 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 Ccontainers 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 is 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 iss are filled by an end users at the site where the product will be used. A secondary container is used to apply and/or store an
- 1.57 Secretary means the Secretary of the Agency of Agriculture, Food and Markets, and their her or his designees.

EPA registered pesticide and, when it holds the pesticide, is neither sold nor distributed.

1.58 Service Ceontainers means aare containers that are is 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 thea 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

1.01

- 1.59 <u>56. Simple Dilution Analysis means</u>: 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 Usedoes not bear labeling indicating Restricted Use.
- 1.62 57.—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. 5 manufactures, or distributes a pesticide.
- Bulk 58. Storage Ccontainer 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.
- 1.63 59. Storage Ffacility means :- a location at which bulk pesticide is held in storage.
- 1.64 60. 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 61. Turf means ÷a covering of mowed grass vegetation growing together with an upper soil stratum of intermingled roots and stems.
 - 62. Turf grass means : a species or cultivar of the plant family Graminae usually of spreading or upright habitat, which is maintained as a mowed turf.
- 1.66 63. Use of a pesticide means: any of the following:
 - (a) Ppre-application activities involving mixing and loading thea pesticide;
 - (b) Apapplying thea pesticide, including, but not limited to, supervising the use of a pesticide by a noncertified applicator;
 - (c) Oother pesticide-related activities, including, but not limited to, transporting or storing a pesticide containers that hasve 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) rRecommending the use of a pesticide.
 - handling, release or exposure of a pesticide to a human or the environment including, but not limited to:
 - <u>a. application of a pesticide, which includes mixing or loading of equipment and any required supervisory action in or near the areas of application;</u>
 - b. storage of pesticides and pesticide containers;
 - c. disposal of pesticides and pesticide containers; and
 - <u>d. recommendation of pesticide applications.</u>

- 1.67 64. Utility ""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
- 1.68 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.
 - 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.
- 1.02 67. 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.
- 1.03 2. 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.
 - 3. Aircraft: a motorized device used for flight.
 - 4. 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.
 - 5. 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.
 - 6. Application of a pesticide: the placement for effect of any pesticide at or on the site where pest control or other response is desired.
 - 7. Applicators regulated in Vermont are defined as follows:
 - a. <u>Certified commercial applicator</u>: any person certified under the categories and standards of Section VIII, Vermont Regulations for Control of Pesticides.

- b. <u>Commercial applicator</u>: 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 Vermon
- 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 8.
- 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.
- 16. Department: the Vermont Department of Agriculture, Food and Markets.
- 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.
- 1.451.6934. 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 I 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.

SECTIONSection H12.— Powers of the POWERS OF THE COMMISSIONER Secretary

- 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) (1). Denial, Amendment, Suspension, or rRevocation of Llicenses, Ccertificates, or pPermits.
 - a. The CommissionerSecretary 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(jl) or for being convicted under 7 U.S.C. Section 136(jl) 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 Commissioner-within five-(5) days of receipt of a notice of violation.
 - (b) b.—If the CommissionerSecretary finds that public health, safetysafety, or welfare imperatively requires emergency action and the Secretary Commissioner incorporates a finding to that effect in histhe order, summary suspension of a license, permit or certificate or permit may be ordered, pending proceedings for revocation or other action.
- 2.03 2.—Restriction and Regulation of Ineffective and Hazardous Products or Devices
 - (a) The Secretary Commissioner-may restrict, -or-regulate, deny any pesticide product or device which is deemed to be ineffective ineffective, or which constitutes an undue hazard to the public or the environment.
 - (b) Any person aggrieved by a decision of the Secretary 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 its use-of this product.
- 2.0413. Pesticide Ceease and Delesist Oorder-
 - (a)a. The Secretary 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 Secretary Commissioner within five (5)-days of receipt of the cease and desist order.
 - (b)b. It shall be unlawful to violate a cease and desist order.
- 2.015 ——Right of Entry4.
 - The Secretary Commissioner may, in furtherance of the purpose of 6 V.S.A. Chapter 87 and the regulations adopted pursuant to this chapter, enter the businessany 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 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 Agreements5.

- (a) The Secretary Commissioner-may enter into a reciprocal agreement with officials of other states and federal agencies and grantissue certificates to a certified applicator of another state on a reciprocal basis provided that:
 - (1)a. the cCertification requirements are substantially the same as those required by -Vermont;
 - (2)b. tThe certified applicator knows and abides by Vermont's pesticide control law and regulations;
 - (3) e. tThe certified applicator pays all appropriate fees; and
 - (4)d. tThe 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
- (b)e. TtThe certified applicator's reciprocal certificate is valid for anthe entire calendear year.
- (c) 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.
- (d) Failure to provide confirmation willshall result in the revocation of reciprocal certificates.; and :
- (e)f. The certified applicator shall notify the Agencythe Secretary is responsible for notifying Vermont-within 30 days of whentermination of their reciprocal state's certification is terminated.

2.6 Variances. DAVE help.

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 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 Agencythe Secretary

1	Licences -	The foll	owing licer	CAC OTA	icenad	hw the	Department
	Licenses	THE TOIL	owing neer	ises are	155000	oy me	ъеранинень.
3.01 (a)	Comp	oany Lice	nse Compai	ny Licei	<u>nse</u>		

- <u>a(a+)</u> —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 andor Doctors of Veterinary

 Medicine applying a pesticides as a drugs or medication during the course of practice.
 - b(2B). -Applicators certified under Category 10research, demonstration, or sales programs only making , making recommendations and applying a pesticides in research, demonstration, or sales demonstration or research programs.
 - e(3C). -Private applicators who apply pesticides to a neighbor's propertythe 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.
 - <u>d(4D)</u>. <u>Certified and noncertified nNoncommercial applicators.</u>
- 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; -

<u>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.</u>

(F) Licensed companies shall

- (2) send written notice to the Agencythe Secretary within 30 days whenever a certified commercial applicator is terminated from their employment; and:
- (3)
- (5) Companies shall renew the company license annually. -

3.02(b). Dealer lLicense Classifications

are issued in the following categories:

- (1) Classes
- (aA) 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 . Also entitles the licensee to sell Class "B" and Class "C" pesticides. See Section X.
 - (2B2)— A person who distributes a Class "B": pesticides shall be obtained a Class B license by persons who sell Class "B" pesticides, which also Also entitles the licensee to sell a Class "C" pesticides, See Section X.
 - (33C)— A person who distributes a Class "C": pesticides shall be obtained a Class CRetail/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 selldistribute 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 licensurelicense 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) A -cCandidates for Class A and B licensurelicenses 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 a pesticide, 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.
- (biii) 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 scorescore, a candidate must wait at least seven calendar days to retake the examination. If a candidate fails twice, there shall be at least a 28 calendar day waiting period from the first examination date 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 before taking the exam for the third time.
- (cB) Licensed
- e. Holders of Class "A" and Class "B" dealers licenses are required to notify the Agencythe 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.
- (dC) A license may be renewed without examination provided that the conditions under which the original license was issued have not changed. However, t 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.
- <u>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.</u>
- 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 cCommercial aApplicator.
- (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 nNoncommercial aApplicator.
- (Cb) Private applicator certificate. A person who uses or supervises the use of a Class A pesticides on property owned or rented by the person for the production of an agricultural commodity shall obtain certification as a pPrivate aApplicator.
- (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 pPersons conducting laboratory research involving a pesticides.
- (dE) A person who strictly retails 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 shall not use a federally restricted use pesticide under direct supervision.
- (2)3.045 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.-(CHECK CITE)-CITE>.SECTION VII—REQUIREMENTS FOR CERTIFIED COMMERCIAL AND CERTIFIED NONCOMMERCIAL APPLICATORS.
 - (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 that he or she intends to work in.
 - (dD) a. A candidate 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 scorescore, a candidate must wait at least seven7 calendar (7) 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 cCertificates 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 31stst 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 Yyears, 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 eitherfor additional training or re-examination.
 - (53d42) 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.
 - (7c) The Secretary may require will shall require that private applicators obtain additional certification, regardless of the Cclass 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 further restricted by the Secretary as a condition of issuance, when the Secretary determines that the restrictions are necessary to protect human lifehealth 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. 3.0815(d) Permits—The following permits are issued by the Department:
 - (1)-A person who intends to use a pesticide in any of the following areas, or manners, shall first obtain a-an approved permit from the Secretary:
 - <u>a. Right-of-way, -(exclusive of terrestrial invasive plant control)-Aerial</u> <u>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.</u>
 - b. (bB) Right-of-way Aerial application.; permits: shall be obtained before applying pesticides to rights of way, as defined in Section I. See Section IV.
 - e.(cC) -Experimental use.; permits: shall be obtained to use an unregistered pesticide or to use a registered pesticide for an unregistered use. See Section IV.
 - d.(dD)—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.
 - e.(5E) ___Special permits for the sale or use of sSpecially restricted pesticides: shall be obtained before using specially restricted compounds as established by statute or these regulations.; See Section IV.
 - f.(eF)—Golf course.; and permit: shall be obtained in accordance with the provisions herein before applying pesticides to a golf course. See Section IV.
 - (fG) Mosquito larvicide.;
 - (gH) Mosquito adulticide.; and.
 - (hI) Terrestrial invasive plant controls in a right-of-ways.
- 3.0916(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 Agencythe Secretary.4. Procedures for obtaining licenses, certificates, or permits.

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:
- 3.1017(f) Denial, Amendment, or Revocation of Licenses, Certificates, and Permits
 - (a1) 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 Agencythe Secretary; or
 - (4) who fails to remit appropriate fees to the Agencythe Secretary; or
 - (5) or Unreasonable adverse effects? (see FIFRA EUP language);
 - (6) fails for any other reason that the Secretary deems appropriate.
 - (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 a 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.
- <u>4.02</u> <u>Identification of Class A Restricted Use, Class B Controlled Sale and Class C Homeowner Pesticides</u>
 - (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 thuringienesis* 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 Presticides

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 chlorodiebenzo-para-dioxin (TCDD) shall not be sold or used in the State of Vermont.

4.04 Limitations on the sSale of Ppesticides

- (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:

- (1) 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.
- (2) 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(3) The Secretary may amend or revoke a permit at any time if....

- 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 calender 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.

<u>SECTION Section IV-54. General Restrictions on the Use and Application of Pesticides Standards for Pesticide Use - RESTRICTIONS ON THE USE AND APPLICATION OF PESTICIDES</u>

5.01(1). Registered and Recommended Uuses of pPesticides.

(a).—_All pesticide uses or recommendations for use shall comply with that pesticide's label, which shall be registered with the U.S. Environmental

- <u>Protection Agency EPA</u> and the <u>Department Agency (,</u> except as provided under authority for pesticide use in Sections 18 and 24(c) of FIFRA as amended).
- (b).— <u>Pesticide Drift Pesticide applicators shall use pesticides and A pesticide shall be used-conduct operations</u> under conditions known to minimize <u>both-spray</u> and vapor drift. <u>eontamination of non-target land and water areas.</u>

5.0(2). Standards of Operations—

All pesticide applicators and licensed companies shall:

- (a).— Shall use only methods and equipment which insure safe and efficient application of materials a pesticide.;
- (b) use properly functioning equipment that is free of leaks and defects and is calibrated according to manufacturer's calibration instructions.
- (b).—<u>Shall</u>-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 usese 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 applicationsspraying operations, to inspect equipment, to inspect, to inspect pesticide related records, to inspect business premises, and to conduct pesticide-related sampling; —
- (i)— Shall apply use all a pesticide s consistent with their its labeling. Use of a pesticide in the following manner shall be considered application consistent with the labeling:
 - (1)— applying Applying a pesticide at any dosage, concentration, or frequency less than specified on the labeling.;
 - (2)— applying 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 inexcept for applications under Section IV 4.6: (8):
 - (1)—___the common or trade name for each pesticide appliedused;
 - (2)—the EPA registration number for each pesticide appliedused;
 - (3) ____-the amount of each pesticide appliedused;
 - (4) the amount of total dilution used, if applicable;
 - $(\underline{54})$ __-the pest(s) treated for; and
 - (<u>65</u>)- __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.
- I. Shall use a pesticides so as not to exceed the maximum contaminant level or primary groundwater quality enforcement standards <u>pursuant to identified in Appendix OneChapter 12.702</u> of the "Ground Water Protection Rule and Strategy" in accordance with 10 V.S.A. Chapter 48;-
- (ml).—Shall-manage the use of <u>a</u> pesticides to reduce the concentrations of <u>a</u> pesticides in groundwater to the preventive action limits <u>pursuant</u> toestablished by <u>Appendix OneChapter 12.702</u> 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.
- (mo).—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 federally restricted use -pesticide shall only be applied used by a certified (ao) applicator. (b) Applicators, licensed companies, and and dealers shall maintain legible labels on all pesticide containers pesticide containers at all times. (cb) Applicators, licensed companies, and dealers shall not re-use pesticide containers for use in any manner other than what is specified on the container's original labeling. Applicators, licensed companies, and dealers shall not reuse..... (debp) 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, . Aat a minimum, the service container label shall contain the following information on the label: The name, address and telephone number of the applicator or commercial company, if applicable. (2) Product name. EPA registration number. (3) (4) Name and percentage of active ingredient in container. Indication whether the material is dilute or concentrate. (5) (6) Signal word of original pesticide Service containers shall bear abbreviated labeling, affixed to the container, which includes: 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. 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) To prevent destruction of pollinating insects and contamination of honey crop, all No persons are prohibited from shall apply spraying a pesticides to a flowering crops, including but not limited to, alfalfa, apples, blueberryies, clover, pumpkins, raspberryies, squash, or trefoil without prior notification of to an apiculturists who have has an established apiaryies on the premises.s.
- (b) A person ny individual-hiring a commercial applicators for an application under section 5.04(a) shall be responsible for notifnotify, or cause to be notified, ication of _the 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 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-r-attractive plants when in bloom.

Section 6. Permitting Requirements

<u>6.01</u> 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 orthocylcohexylphenol.

b. Fungicides.

- (4). Rights-of-Wway Celearing and Mmaintenance Ppermit
 - (<u>aa</u>). No <u>entity? Company? Person?</u> person, including utilityies as defined in Section I., shall use apply an herbicides for the purpose of clearing or

- maintaining a right-of-way without first obtaining awithout 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<u>complete and accurate</u> permit application shall be made<u>made</u>, 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 s does not interfere with
- (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 mapsa 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 marked 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:

 - (22) ______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 s are printed in a daily newspaper, then the notice

shall be published on Thursdays. If <u>the notice s are is</u> printed in a weekly newspaper, the<u>n the</u> 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 permitcontact person 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 herbicidenewspaper advertisements, further notification by one of the following methods containing the information set forth in subdivision 6.014.(egb).-(4) shall be provided by:
 - 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:
 - 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. mMail 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.

- (4) The applicator shall not spray near the flagged areas.
- <u>c.</u> 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.
- (gded). Permit Aapplicants conducting vegetative management along rights of way shall submit a long-term integrated vegetative management plan which shall include: to the Agencythe Secretary at least every five years . This which plan shall include:
 - (14) 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 nonchemical 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) 6) establishmentidentification of other applicable utility and federal elearanceguidelines and standards to be maintained onsought, based on kilowatt of transmission line and the the part of the right-of-way to be controlledmaintained;
- (4) establishment of right-of-way inspection and monitoring standards including frequency and method of inspection; and
- (547) establishment of standards and practices for:
 - (Aa) wetlands;
 - (Bii) pollinator habitat;
 - (Cib) wildlife;
 - (Dviie)-erosion control; and-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(f) 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.
- F(g). 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.
- (h)g. 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 brownout.
- h.(i) Right-of-Way clearing and maintenance p 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.
- i. 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.
- j. 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.
- k. PAll permits issued by the Commissioner Secretary shall establish buffer strip distances to protect the waters of the state which. Buffer strip distances shall be determined according to the type of spray operation application, properties of a chemicals pesticides to be used, and the characteristics of the areas to be treated.
- (i8) PAll permit applications shall be publicized published by the Agencythe Secretary 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.

(5).-6.02 Aerial applications Ppermitof pesticides

- (aaa). No person shall make an aerial application without first obtaining awithout 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.
- An applicant applying for an aerial company license or certificate permit to engage in aerial application of pesticides shall meet demonstrate compliance with all 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)dd).— An aAerial applications shall be conducted by a <u>-certified</u> applicator in the appropriate categories and/or subcategoriess only.
- 6.03c. 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.

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4.6(6). Experimental uUse Ppermit

- (<u>aa</u>).— <u>NoAny</u> person who desires to intends to shall use an unregistered, <u>or pesticide</u> or who desires to use a registered, pesticide for an unregistered use <u>withoutshall</u> first obtaining an <u>approved</u> experimental use permit from the <u>CommissionerSecretary</u>.
- (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 pPermits may be issued for three (3) kinds types of experimental uses:
 - (4<u>1</u>)— A state-issued permit as authorized under Section <u>4</u>5(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, or-greenhouse, tests 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 thea substance for pesticideal activity, purposes or to-determine its its-toxicity, or other related chemical properties to the extent allowed under FIFRA. permitted under EPA regulations.

- (<u>33</u>)—A state-issued authorization to conduct an experimental use in Vermont-the State for all or some of the uses provided <u>onin</u> the label under the experimental use permit issued by <u>the US EPA</u> pursuant to Sections <u>45(a)-(e)</u> 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 permitThe permit shall be for a specified period commensurate with the experimental program submitted, but in any caseshall notshall to 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:-
 - (14) the chemical or pesticide product used;
 - (22) the location of the application;
 - (33) the rate of application;
 - (44) the dates of application; and
 - (55) any adverse effects of the application.
- <u>(fge)</u> The permittee shall report immediately to the Commissioner Secretary, upon identification, any adverse effects from the use of or exposure to the pesticide.
- (fc). _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.
- (ghgd).— The application of a pesticide under an state experimental use permit shall be made be under the supervision of 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:
 - (14)— the crop must shall be destroyed after harvest; or
 - (22)—the crop may be used for further testing, provided that 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 Oother Vvertebrate animal Ppest Ceontrol Ppermit, 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 Commissionerbird or animal a pest. 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.
- (de1)— Types of use that may be authorized by this permit:
 - (<u>11a</u>)—Area-wide application <u>of pesticides on for the protection of</u> agricultural commodities, wildlife, and <u>for human health</u> <u>protection</u>.
 - (22b)—Limited-area applicationss of pesticides where the use of thatose 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.
- (e(1) 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.
- <u>de</u>).— 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.
- (fe) and nNotification 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 CommissionerSecretary.
- (d.) 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.
- (gfe).— A pPermits are is not required for the following:
 - (11) -athe use of animal or bird repellents; or-

(22) (2) pesticide applications for members of the *Cricetidae* and *Muridae* families.

6.054.9 -Golf Ceourse Ppermit

- (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, amendamend, 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 Tthe 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 sit planto submit proof that the course was built as represented.

-(1d2a) Initial application (initial application)

- (14) 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) tThe name and contact information of the golf course;
 - (BB) The mailing address and E911 golf course address:
 - (CC) tThe telephone number of the golf course;
 - (4) tThe email address of the golf course;
 - (5) Tthe golf course superintendent's name and the golf course officer's name.;
 - (6) Tthe golf course officer name;
 - (7) Tthe date of application:
 - (48)—a general A description of the golf course as it exists or is designed;
 - (DD4) a mapped site plan;
 - (EE559) aAn integrated pest management plan; and-
 - (4FF660) a long-term integrated A nutrient management plan.
- (23) The application form shall be accompanied by a mapped of the 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;

- (HH8) surface acreage and average depth of ponded surface waters and identification of primary source of water supply;
- (II9) 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:
- (110) 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 description, including the location, of, any proposed buffer and "no treatment" areas established to protect surface water, groundwater, orand environmentally sensitive areas.
- (54) A Ppermit applicants shall provide a 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 applications 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) PA permit applicants shall provide the following information for all any pesticides being requested for use at the golf course, which shall include:
 - (AA) tThe pesticide product name and EPA Registration Number;
 - (BB) any 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;
 - (DD) tThe anticipated total annual amount of each active ingredient; and-
 - (EC) aA 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 Agencythe 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 AgencySecretarySecretary 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.

3Required Permit ConditionsPermittee Testing and Buffer Requirements

- (A1) Soil Sampling Testing.
- A golf course (A) pPermit 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 Uuniversity recommendations or standardother methods approved by the Secretary 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
- (iiii) Potassium
- Hq (iiiii)
- (iviv) Reactive aluminum
- (vv) 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)xx.
- (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;
- (iiii) be 200 feet from all public, non-transient drinking water supplies;
- (iiiiii) be 25 feet from all flowing surface waters and Class II wetlands;
- (iviv) be 10 feet from impounded surface waters wholly on the golf course property; and
- (vv) be 25 feet from impounded surface waters not wholly on the golf course property.
- (D)B) The Secretary may modify these buffers upon written request. Buffer modifications shall be considered on a case by casecase-by-case basis.
- (E4) Plan Maintenance.
- (A) The permittee shall review and update thehave an up-to-date 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 courseat 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) permittee shall keepRoutine pesticide application records application records shall be maintained on a daily basis and shall contain
- (iA) The date and time of application.
- (Bii) 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.
- (viF) 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 and 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 turf grass 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(

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 sectionsection 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.

- (g54ej) (1) GoEach permits shall be renewed annually at the end of the calendar year aprior to anynd 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 turfannually 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 years year's pesticide usage. (222)

A report of the previous yearsyear's fertilizer usage containing:

- (33iii3) The total amount nitrogen and phosphorus used in the preceding calendar year
- (44ivx) The total amount of nitrogen and phosphorous applied at each application site including tees, greens, fairways and roughs.
- (55vx) 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).
 - (k) (1), amend and nutrient s

(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; 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
 - Hq (iii)
 - (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 phosphorus applied per thousand square feet.
- (E) 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.
 - 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 Ppermits

- (aa) No person, except homeowners making applications of Bacillus thuringensis israelensis products specifically-labeled for that usesite on their wholly-owned property, Any person, except a homeownerprivate applicator or certified commercial and noncommercial applicator making an application of Bacillus thuringensis israelensis products specifically-labeled for that site on their wholly-owned property, who makes ashall make an mosquito larvicide application withoutmust first obtaining a permit from the Secretary as provided in this sectionsection. This shall not apply to homeowners making applications All mosquito larvicide applications of Bacillus thuringensis israelensis products specifically-labeled for that site on their wholly-owned property
- (bb) A complete and accurate permit application shall be made, on a form provided by the Secretary, before Secretary before the proposed application.
- (ce) 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:
 - (11A) be published not less than 25 days nor more than 60 days before the commencement of application;
 - (22B) 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;
 - (43C) 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 applicanta 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; 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; 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)
 - (D4D) set forth thea 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

- eontacted for further information; provision for an opportunity for individuals to refuse treatment of their property or request a buffer r 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)

- (eD) Following publication of the notice of intentafter publication, the permittee shall provide any tear sheets and distribution lists used shall be provided to the Agencythe Secretary as proof of public notice. VAAFM
- (fe5) In addition to the notice of intent to use a mosquito larvicidenewspaper 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 in the or abutting to the larvicide application treatment area during the calendar year of application, at least two weeks prior to such application, by U.S. Mmail 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 Permitteepermit applicant shall publish or distribute a Notice of Intent

 (NOI) to use the products listed inouly use products VAAFMallowed for and in accordance -use inwith the conditions specified in the Vermont Mosquito Control Permitting Procedures, which the Secretary shall be madepublicizepublish-public by the Agencys, which will be posted annually.
- (h8) The Secretary shall publishAll 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.
- (j10) A private, -applicator or certified commercial, -andor 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

4.11 (a) Mosquito Aadulticide Ppermits

(aa1) No person shall apply a mosquito adulticide for nuisance mosquitos using ground-based truck-mounted sprayers **x**x**x**x** 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, beforeSecretary, beforeSecretary before FebruaryApril 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)A) be published not less than 25 days nor more than 60 days before the commencement of application;
 - (22B) be published for one day a week for two consecutive weeks in each of two newspapers, for every countytown to be affected by the right of wayadulticide 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;
 - (33C) be at least two columns wide by three inches high; and
 - (4) (D4D) 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; ;
 - 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 refuserequest a no-treatment area on or abutting of their property or request a buffer around their private water supplyproperty.
- (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.
- (fe5) In addition to the notice of intent to use a mosquito adulticideo 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) wwritten 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. Mmail 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) or other means of public notification deemed acceptable by the Secretary.
- (gf6) Permit applicants shall submit a long-term integrated pest management plan to the Agencythe Secretary at least every twofive years which. This plan shall include:
 - (11A) 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 optionscontrol options prior to the use of an adulticide; and an evaluation of non-chemical options;
 - 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;
 - () endangered species protectionhabitat;
 - (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 pPAll permits issued by the Secretary shall establish buffer distances. Buffer distances shall be determined according to the type of application, properties of any chemicals pesticides to be used, and the characteristics of the area to be treated.
- (i9) The Secretary shall publishAll 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 Ceontrol Ppermits

- (a1) No No-person shall make-use a pesticide to control terrestrial invasive plants, on- property which they do not have a legal right to control without not wholly owned by onea person or not required for treatment for maintenance of the right of way, without first obtaining afirst obtaining an approved 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 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 tn-errestrial 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 madeconducted in accordance with procedures recommendations developed provided by the VermontSecretaryAgency's Invasive Plant Advisory Committee and in the permit applications—which shalland include a plan demonstrating how the permit applicant mustshall 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 anyout the need for continued chemical applications.
- (e5) Landowner permission for chemical control shall be required.
- (f6) AllThe 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.

Section 57. Notification and Posting of Pesticide Applications

turf-grass and landscape pesticide

- 75.01 NotTurf-grass and landscapeOornamental Ppesticide Aapplication General Requirements
- (a) No outdoor application by a certified commercial or non-commercial applicators of pesticide applicators to turf-grass or landscapeornamental plants shall be made without the following provisions having been met:
 - (a1) At the time the service is being requestedPrior to the pesticide application, the applicator or their employer shall provide the customer-shall be provided with written information containing the common name and EPA registration number of the pesticide, proposed rate, and availability of copy of product label and Ssafety dData sSheets.
 - (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 applicationAt the beginning of each application, the applicator shall post at least one sign(s), prescribed below, at each conspicuous points of access to the treated area(s). The applicator shall leave such the sign(s) posted with instructions to remove the sign 24 hours afterfollowing 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 four4 by* five5 inches, of sturdy, weather resistant material;
 - (2B) be made with contrasting colors using the indicated point stype 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

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 siteor at the residence, or with the property manager a statement containing the following informationthat contains:
 - (1A) the nName, address, and telephone number of the non-commercial applicator or company or non-commercial facility providing service;
 - (2B) the Ppesticide applicator's name and certification number;
 - (3C) the Common or trade name, EPA registration number, amount used and pest(s) treated for each pesticide applied;
 - (4D) any required Ppost-application label safety precautions, if applicable;
 - (5 \pm) the Aapplication date, time, and location.; and
 - (6F) iInstructions that the signs should remainbe removed-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, r 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 landscapeOornamental pesticide-Aapplication Non-Private
 ResidentialDwelling UnitResidential Dwelling UnitCondominiums or Apartment Buildings,
 Non-Private

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 landscapeornamental 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 customerownerperson contracting for the servicee or property manager of the residential non-privatat 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 for:
 - (A) the cContact information of the for 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 seven7 days before any outdoor commercial or noncommercial pesticide application to turf-grass or landscapeornamental 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 noncommercial outdoor-application of Class A or Class B products, toto turf-grass
 or ornamental plants made on property of amade condominiums or apartment
 buildingson residential dwelling unit property, the applicator or their employer
 shall complete and post, or cause to be completed and posted, athe 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
 noticeinformation 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.a.
 - (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.a.
- (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.
- (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.
- (cd) 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 Iindoor pesticide Aapplication —, publicResidential —Rresidential 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 Iindoor 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 beforein 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 postprovide or cause to be provided the ae written notice provided in 5.4(a) to in a central area accessible the to all residentoccupant of the residential dwelling unit, or residents s. of an apartment unit, condominium unit or other rented residential unit to be treated, where the residents 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 residents 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 Section 5.7.034(a):
 - (1) Aapplication 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) Aapplication 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) Aapplication of any paints, stains or wood preservatives that isare not a State-restricted use productsclassified as general use pesticides;
 - (4) Aapplication of a pesticides by an residentoccupant to his or hertheir own residential-unit.;
 - (5) Ceommercial application of a pesticides where the occupant resident has contracted for application to his or her owntheir own personal residential unit.; and

- (6) <u>Iindoor applications of a pesticides injected into closed systems for control of nuisance microbial organisms.</u>
- (e) This section does not apply to owner-occupied dwellings.

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all conspisious 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 eexempt 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.
- (<u>b</u>)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 <u>5</u>IV 8.a.
- (1) ____The written notice shall contain information as specified under Section <u>4.2</u>IV 8a. (<u>j</u>3) (<u>1</u>a-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.

- (3) _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.
- (4) _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.
- (5) _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.
- g. _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.
- h. _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.

<u>SECTIONSection</u> 8.V 5 — <u>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</u>

PESTICIDE PRODUCING ESTABLISHMENTS

- 8.01.— Requirements for Certified Certified Pprivate Aapplicators
 - (a) A certified CCertified pPprivate applicators shall shall maintain routine operational records, for anyll restricted useClass A pesticide applieds, 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 three years and shall be furnished to the Commissioner Secretary upon request.
 - (ba.) 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 brand or product name 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 twothree years and shall be made available to the Secretary upon request.
- 8.02.— CRequirements for Certified certified Ceommercial and certified Nnoncommercial Anapplicators

- (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.
- (ba).—Routine operational records shall be maintained on a daily basis and shall maintain contain:
 - (1) The name and address of the person for whom the pesticide was applied.
 - (2) Pest treated for.
 - (32) The location of the pesticide application.
 - (34) The size of the area treated.
 - (54) The crop, commodity, stored product, or site to which the pesticide was applied.
 - (65) The time and date of the pesticide application.
 - (76) The brand or product name of the pesticide applied. The brand or product name of the pesticide applied
 - (8) The EPA registration number of the pesticide applied.
 - 8The EPA registration number of the pesticide applied.
 - (998) The total amount of the pesticide applied per location per application.
 - (109) 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 maintainsubmit an annual pesticide application report to the Secretary.b. A pesticide use report shall be submitted to the Commissioner Secretary annually.
 - The report shall state the EPA Registration Number, the product name, the manufacturer, the amount appliedused, the general purpose for which it was appliedused and the county in which it was appliedused.
 - (3e).—Annual pesticide use rThe reports shall be submitted together with an application for the renewal of certification to the CommissionerSecretary prior to January 1 of each year.

 Commercial and noncommercial pesticide applicator certificates shall not be renewed without the submission of an annual applicationuse report. Annual pesticide use application reports shall be submitted regardless of whether a pesticides wasere applied during a given year-or not.

8.03.— Requirements for Ppermittees

Persons applying <u>a pesticides</u> under the authority of a permit issued by the <u>Department Agency</u> shall comply with <u>all all record keeping and reporting requirements imposed by the <u>Commissioner Secretary</u> as conditions of the permit, in addition to complying with all <u>other requirements of this rule</u>.</u>

8.044. Requirements for LLlicensed Ceompanies

- (a) <u>Licensed companies</u> shall be responsible for maintaining routine operational records and submitting the annual pesticide <u>application</u> report to the <u>Secretary</u>. Certified noncommercial applicators, who do not work for licensed companies, will continue to be responsible for the maintenance and submission of these records.
- (b)a.—The licensed company shall collect operational records required by this section from its certified applicators, <u>-and</u>-hold them for a period of two three years, <u>and</u>. These records shall be make themde available to the <u>Commissioner Secretary</u> upon request.
- (c)b. The annual pesticide <u>applicationuse</u> report shall be submitted together with the company license renewal application to the <u>Commissioner-Secretary</u> prior to January 1 of each year.

875.05 Requirements for Llicensed-Class A dealers

- (a) Class A dealers shall keep and maintain records of the saless of anyll pesticides and shall make them available for inspection to the CommissionerSecretary. Records shall be maintained on forms provided by the Commissioner.
- (b)

<u>Licensed-Class A dealers shall record and maintain at each individual</u> <u>dealership</u>outlet, for the period of at least twothree years, records of each transaction where a restricted use pesticideClass 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:
- Provide a legible written permission from the certified applicator to buy the pesticides, and
 - Pesticides sold are unopened and able to be transported safely.
- <u>–(c) A Rrecords of each suchClass A pesticide transaction shall include all of the</u> following information:
 - (1) The Nname and address of the residence or principal place of business of each the certified applicator to whom the restricted useClass A pesticide was distributed or sold, or if applicable, the name and address of the residence or principal place of business of each noncertified personapplicator to whom the restricted useClass A pesticide was distributed or sold for application by a certified applicator.

- (2) The certification number presented to the sellerdealer 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) and tThe 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.—A report of special permit and <u>any restricted useClass A</u> pesticides sold on a calendar year basis shall be submitted together with the application for license renewal to the <u>Commissioner Secretary</u> by all Class "A" pesticide dealers prior to January 31 of the following year. Reports may be required by the <u>Commissioner Secretary</u> at any other time, provided the request is made in writing.
- (d)b. 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 soldused, 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)e. __Annual sales reports must shall be submitted regardless of whether a or not restricted useClass A pesticides werase sold.
- 6.8.06 Requirements for Pesticide Producing Establishments-

A pesticide producing establishment shall

(a) shall-maintain records required by FIFRA, and-

(b) shall make those records available to the Secretary upon request.

- 8.076. Additional Record Keeping Requirements
 - (a) Annual records may be required for <u>the</u> treatments of <u>a</u> pests as deemed necessary by the CommissionerSecretary.
 - (b) 7. In the event that a certified applicator, licensed eompanycompany, 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.

<u>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</u>

- 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 subcategory 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.

<u>SECTIONSection VIII-9.— Certification Standards for Commercial Applicators and Noncommercial Applicators Using Other Tthan Class C Pesticides</u>

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 Ceategories

- (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 applicator 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 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 sStandards of Ceompetency for Eeach Ceategory of Ceommercial and Neoncommercial Aapplicators

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 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.

- (4) Best management practices of pests and diseases associated with honeybees.
- (5) 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.

- (2) Application methods that will minimize or prevent hazards to humans, pets, and other domestic animals due to the frequent proximity of human habilitations to application activities.
- (3) Knowledge of state-required posting.
- (b) 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.
 - (3) Knowledge of state-required posting.

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 wateraquatic 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;
 - (Bii) avoid damage and contamination of the processing area and exposure of people;
 - (iCii) minimize acute and chronic exposure of people and pets; and
 - (ivD) 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

- (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) Vvector-disease transmission as it relates to and influences application programs:
- (ba) types 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
- (cb) Application methods to minimize damage to and contamination of areas treated, acute and chronic exposure of people and pets, and non-target exposures.:
- (d) Tthe importance and employment of such nonchemical control methods as sanitation, waste disposal and drainage.

9.13 Category 9: Regulatory Pest Control

- (a) Applicators shall demonstrate practical knowledge of the following:
 - (1) Regulated pests.
 - (2) Applicable laws relating to quarantine and other regulation of pests.

- (3) The potential impact on the environment of a pesticide used in suppression and eradication programs.
- (4) Factors influencing introduction, spread and population dynamics or relevant pests.
- (b) 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:

- (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) 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.

9.17 Category 13. Non-soil fumigation

Applicators 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, noncertified 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.
 - (3) Signs and symptoms of human 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.

- (8) First aid measures to take in the event of exposure to a fumigant.
- (9) 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

- <u>6.1.</u> 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.

- <u>bc</u>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 n individual expects to operate underuses pesticides.
- <u>6.2.</u> <u>Description of categories</u> and sub-categories.
 - a. Category 1: Agricultural Pest Control.
 - (A) Plant For use in production of food, forage and fiber agricultural erops.(a) Category 1A Agricultural Agricultural pPlant. 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 aAnimal. 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.

- c. _Category 3: Ornamental and Turf Pest Control.
 - (A) Ornamentals and Shade TreesOrnamental & 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.
- d. <u>Category 4: Seed Treatment This category applies to applicators using or supervising the use of pesticides on seeds in seed treatment facilities.</u>For use on seeds.
- e. 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.
- f. 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.
- g. _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 Control (non-public health) This category applies to applicators using or supervising the use of pesticides For out of outdoor 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 Pest Control This category applies to applicators using or supervising the use of pesticides fFor control of pests which degrade or prematurely destroy the service, life and usefulness of wood and fiber products.
- (E) <u>Cooling Towers and Biocides</u> Antimicrobial (non-potable water)Pest

 Control—<u>This category applies to applicators using or supervising the use of pesticides</u> For the use of pesticides 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.
- (F) Disinfection and Antimicrobial Pest 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. <u>Category 9: Regulatory Pest Control</u> <u>This category applies to applicators using or supervising the use of pesticides</u> 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 For 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.
- (1) 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 for 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 mustwill 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, controlledsale, or homeowner as related to Vermont Class A, B,
 and C classifications, general or restricted use and that
 a product maybe 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.
- (109) 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 <u>seeking certification</u> shall demonstrate practical knowledge of the principles and practices of pest control and safe use of

pesticides. Testing <u>Examination</u> shall be based on examples of problems and situations appropriate to the particular category or sub-category<u>category</u> (ies) of the applicator's certification and the following areas of competence in Section 7.4.ce:

- (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) <u>Equipment. Factors including:</u>
- (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 <u>listed</u> below:

- a. _Category 1: Agricultural Pest Control.
 - (11AA) 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 bases 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 used 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 population dynamics as a basis for programming pesticide applications, pplication techniques in aA practical knowledge of 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 used 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.

c. 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 humanof 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. 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. <u>Category 5: Aquatic Pest Control.</u> 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 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.

(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 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. Because general pest control may involve outdoor applications, applicators must shall 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 eycles, 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 eycles and habitats be understood as a basis for control strategy. The aApplicators shall have a practical knowledge of the importance of such nonchemical control methods as sanitation, waste disposal and drainage. CBecause health related pest control may involve outdoor applications, a Applicators shall demonstrate practical knowledge of methods to minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications. pplicators must shall 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 subcategory.

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
 shall 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.

h.

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 habitats, 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. <u>Category 9: Regulatory Pest Control</u>. 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 <u>Applicators</u> shall demonstrate knowledge factors influencing introduction, spread and population dynamics or relevant pests.
- Their The 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 Persons demonstrating and recommending 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, 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. 2Applicators shall Further, they should demonstrate an understanding of pesticide orgganism 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. 3Applicators In addition, 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. <u>Category 11: Aircraft Aerial Pest Control. Applicators mustshall demonstrate</u> <u>practical knowledge of the pest problems and pest control practices associated with performing aerial application of pesticides, including the following:</u>

(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 nonwater 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.

- <u>Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:</u>
 - (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 furnigants 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 furnigant 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.

<u>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:</u>

(i) Label & labeling comprehension.

Familiarity with the pesticide labels and labeling for products used to perform nonsoil 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.

- <u>Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:</u>
 - (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 forof Private Applicators CERTIFICATION OF PRIVATE APPLICATORS

10.01— General requirements

- (a) A Pepersons applying restricted usea Class A pesticides on property owned by them or on land rented by them for the production ofto produce 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, tThe 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) 3. Standards of competency for private applicators.
- 3. Certification in this coreas 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 fumigationIn 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 SSections 10.03 – 10.05.

- 10.024. Core sStandards of Ceompetency for core for Pprivate Aapplicators.
 - (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:
 - (a1) Label and labeling comprehension.
 - <u>Familiarity with</u>Ability to read and understand pesticide labels, <u>and</u> labeling, and their functions, including <u>all of</u>all the following:
 - (1Ai) The general format and terminology of pesticide labels and <u>labeling.</u>
 - (2Bii) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.
 - (3Ciii) Understanding that it is a violation of Federal law to use any registered pesticide in a manner inconsistent with its labeling.
 - (4Div) Understanding when a certified applicator must be physically present at the site of the application based on labeling requirements.
 - (5Ev) 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 pesticides a pesticide for fumigation or aerial application.
 - (6Fvii) Understanding the meaning of product classification.
 - (viii7G) Understanding and complying with product-specific notification requirements.
 - (8Hix) Recognizing and understanding the difference between mandatory and advisory labeling language.

(b2) Safety.

Measures to avoid or minimize adverse health effects, including the following:

- (1Ai) Understanding the different natures of the risks of acute toxicity
 and chronic toxicity, as well as the long-term effects of pesticidesa
 pesticide.
- (2Bii) Understanding that a pesticide's risk is a function of exposure and the pesticide's toxicity.
- (3Ciii) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.
- (4Div) Common types and causes of pesticide mishaps.
- (5Ev) Precautions to prevent injury to applicators and other individuals in or near treated areas.
- (6Fvi) Need for, and proper use of, protective clothing and personal protective equipment.

- (7Gvii) Symptoms of pesticide poisoning.
- (8Hviii) First aid and other procedures to be followed in case of a pesticide mishap.
- (9lix) 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 a 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.
- (5Ev) Factors that influence effectiveness or lead to problems such as pesticide resistance.
- (6Fvi) 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.
- (4Diii) Prevention of drift and pesticide loss into the environment.

- (h8) 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.
- (i9) Stewardship. Understanding the importance of the following:
 - (1Ai) Maintaining chemical security for restricted use pesticides.
 - (2Bii) How to communicate information about pesticide exposures and risks with agricultural workers and handlers and other persons.
- (j11) Agricultural pest control.
- <u>Practical knowledge of pest control applications to agricultural commodities including the following:</u>
 - (1Ai) Specific pests of relevant agricultural commodities.
 - (2Bii) How to avoid contamination of ground and surface waters.
 - (3Ciii) Understanding pre-harvest and restricted entry intervals and entryrestricted periods and areas.
 - (4Div) Understanding specific pesticide toxicity and residue potential when pesticides a pesticide are applied to animal or animal product agricultural commodities.
 - (5Ev) Relative hazards associated with using pesticides pesticide 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.

(b) In addition to satisfying the requirements in paragraphsubsection 987.2(aXX) of this section, private applicators that use or supervise the use of pesticidesa pesticide to make a fumigation applications to soil, fumigate soilnon 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.

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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 a pesticide including:
 - (1A) Spray volumes.
 - (B2) Buffers and no-spray zones.
 - $(3\mathbb{C})$ Weather conditions specific to wind and inversions.
 - (4) 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.

- (94) How to calculate required and actual flow rates.
- (104) 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.

(ev) 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.

<u>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:</u>

- (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.
- $(3\mathbb{C})$ 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.
- (91) Labeling requirements for transportation, storage, spill clean upclean-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.
- (B2) 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.
- (B2) 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.
- (5\overline{E}) Conducting pre-application inspection of application equipment.
- (6F) 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.
- (94) Understanding the basic techniques for calibrating soil fumigant application equipment.

(ev) 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.

(6F) The importance of proper application depth and timing.

(fvi) Personal protective equipment.

<u>Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:</u>

- (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.

<u>Information about fumigant management plans, including all of the following:</u>

- (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-Ssoil Ffumigation-

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:

(a) 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.
- (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 fumigant.
- (94) Labeling requirements for transportation, storage, spill elean
 upclean-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.

- (4D) Conducting pre-application inspection of application equipment and the site to be fumigated.
- (5E) Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.
- (6F) Calculating the amount of product required for a specific treatment area.
- (7G) Understanding the basic techniques for calibrating non-soil fumigant application equipment.
- (8H) Understanding when and how to conduct air monitoring and when it is required.

(ev) Pest factors.

Pest factors that influence fumigant activity, including all of the following:

- (1A) Influence of pest factors on fumigant volatility.
- (2B) Factors that influence gaseous movement through the area being fumigated and into the air.
- (3C) Identifying pests causing the damage and verifying they can be controlled with fumigation.
- (4D) Understanding the relationship between pest density and application rate.
- (5E) The importance of proper application rate and timing.

(fvi) Personal protective equipment.

<u>Understanding</u> 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.
- (2B) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
- (3C) 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.
- (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.

<u>Information about fumigant management plans and when they are required, including all of the following:</u>

- (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.

(hviii) Posting requirements.

<u>Understanding posting requirements, including all of the following:</u>

- (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.

10.06 4.	Certification and renewal.
	d DVM 111
£	Exceptions DVMs and lab peeps.

- 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.
- e. 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, 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. <u>Identification of Class "A" - Restricted Use, Class "B" - Controlled Sale and Class "C" - Homeowner/Specialty pesticides.</u>

- 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) <u>Toxicological profile, including acute, subchronic sub chronic and chronic effects.</u>
 - (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.
 - (76) Container construction and size.
 - (78) Those requiring training due to special concerns.
 - (89) 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<u>The Agency shall make</u> 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 CommissionerSecretary. Pesticides are classified Class "A" Restricted Use by permit only by the Commissioner Secretary with the advice of the Vermont Pesticide Advisory CouncilSecretary 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 CommissionerSecretary:

Aldrin

Daminozide (Alar - food uses)

Endrin

Mercury

Sodium Arsenite

Sodium Fluoroacetate (Compound 1080)

Dieldrin

Heptachlor

Dibromo-chloro-propane (DBCP)

Chlordane

<u>cd.</u> <u>Class "B" - Controlled sale:</u>

- 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, excludinguding aerosols or products_products containing either Bacillus thuringienesis 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:
- <u>Class C</u> shall be those pesticides which are generally used in and around the home and are marketed as ready-to-use eor have total active ingredient less than 3% and which contain not more than 3% total active ingredient; however
- , the Commissioner <u>Secretary</u> reserves the right to classify additional pesticides including non-homeowner specialty products as Class "C".
- The Commissioner <u>Secretary</u> has classified the following additional pesticides as <u>Class "C"</u>:
 - (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.
 - (<u>Bc</u>) <u>DDVP impregnated strips (Vapona strips) concentrations not over 20% in resin strips and pet collars.</u>
 - (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, mildeweides, mildewstats, viricides, sanitizers, slimicides, sterilants and industrial preservatives
 - (Bc) Animal Animal rRepellents, indoors and outdoors
 - (C)d) Insect repellents for human use
 - (e) Moth flakes, crystals, cakes and nuggets
 - (Df) Indoor aquarium suppliesproducts
 - (Eg) _Swimming pool suppliesproducts
 - (Fh) Pediculocides and mange cure on humans

- (Hi) Pheromone baits and floral luresand lures
- (<u>Dj</u>) <u>Premixed paints containing preservatives and which make pesticidal claims</u>
- (k) Aerosols, excluding Class A; including fumigator bombs
- (<u>Jl</u>) <u>Insecticides containing bacillus thuringiensis, bacillus popilliae, bacillus lentimorbus or potassium fatty acid</u>
- (m) Colorants used to control algae growth by providing shade
- (n) AAnimal ear tags

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

- (3) _The petroleum solvent fraction of the product's formula shall not be considered an active ingredient for the purpose of Class "C" classification procedures.
- 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-trichlorothane 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 chlorodiebenzo-para-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 useClass 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 <u>Secretary</u> 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, elassification 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.

Section ECTION 11.XIII — Transportation, and Storage, and Disposal of Pesticides TRANSPORTATION, STORAGE AND DISPOSAL OF PESTICIDES.

13119.01 Transportation.

- (a)— <u>To prevent any discharges, Pesticide</u> applicators <u>and dealers</u> shall <u>ensure that</u> <u>secure pesticide containers are secureds</u> during transportation <u>so they may not shift, become punctured, or otherwise compromised to prevent spillage any discharges</u>.
- (b)—<u>Pesticide aApplicators</u> and dealers shall ensure that vehicles owned, leased, rented, or borrowed by them for the purpose of transporting <u>a pesticides</u> are placarded in accordance with state and federal transportation regulations.

? Spill kit for larger containers?

<u>13119.0122.</u> Storage Pesticide and Container Storage by: The storage of pesticides and pesticide containers by Certified Applicators and Class A and B Dealersprivate, Non-commercial and commercial applicators of pesticides

ACertified applicators and Class A and B Dealers, non-commercial shall comply with the

ACertified 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 pPesticides shall be stored in accordance with requirements and precautionary storage instructions contained on the product label.
- (b) CPesticide containers shall have legible labeling indicating the contents of the container.
- (c) Any Ppesticides orand cpesticide containers that haves 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 pesticide, the leakage or breakage of pesticide-containers, or other causes.;
- (d) Any Pesticide storage roomsPpesticides 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 pesticide storage roomstorage area shall be smooth, facilitating the complete recovery of of any discharge spills. Floor surfaces may include, but shall not be limited to, sealed concrete and plastic.
- (f) Earthenen floors shall be prohibited in afor pesticide pesticide storage areas unless all containers are placed in a containment second containersvessel which designed to recover and contain any discharge can contain any dischargerooms.;
- (gf) The pesticide storage roomarea shall be identified by legible signage clearly indicating that a pesticides is are in storage, as follows:
 - (1) Sign(s) shall include the word "Warning," "Danger," or "Pesticides" followed by wording that indicates a pesticides isare in storage.; and
 - (2) Lettering of the words "Warning," "Danger," or "Pesticides" shall be a minimum of one and 1/2 inches in height.;
- (hg) Pesticide The pesticide storage rooms area shall be vented to the outdoors.;
- (h) Pesticides shall be stored in a dry place and in accordance with temperature requirements on the label.
- (ihi) 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 spilldischarge.
- (ij) Pesticides shall be stored, wherever possible, down gradient from water wells and surface water.
- (kjij) 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.
- (kjkl) A pesticide Pesticide sSstorage roomsareas 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 roomarea prior to disposal;
- (lln) Storage of pesticides in bulk shall be in compliance comply with the bulk pesticide storage rules under CITES ection 12;

- (mmo) Cabinets, storage bins, lockers, or similar type storage facilities compartment shall be considered a pesticide storage room area provided that :
- (1) The storage facility compartment complies with -subsections (a) $-(\frac{1}{2}, \frac{1}{2}, \frac{1}{2})$, (ik), and (kkl) of 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;
- (nnp) Floor drains not used in conjunction with catch basins shall be prohibited in a pesticide storage arearooms.;
- (00q) PA pesticide storage arearoom floors may be equipped with a catch basin, provided that:
 - (1) Tthere are no pipes attached;
 - (2) iItt is constructed for complete recovery of a spilldischarge; and
 - (3) iIt 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.:
- (ppr) Areas used for storage of pesticides A pesticide storage area shall be maintained in a clean condition.;
- (qqs) At a minimum, any spills and leaks discharges shall be cleaned up by the end within an hour 60 minutes. of the day during which the pesticides have been spilled or leaked discharged occurred.;
- (rrt) Any cPesticide 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)-(ppr) of this section-(s) << CHECK CITE >>> provided that:
 - (1) tThe 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
 - (32) wWithin 90 days of receipt of the pesticide in the mini-bulk container, the container is:
 - (A) a. rReturned to the dealer;
 - (bB) emptied;

(

- (C) . Ddisposed; and
- (D)c. Emptied and triple rinsed; and.
- (3) There is a mechanism attached to the container for the purpose of securing the dispensing apparatus.
- 10.43 Storage RequirementsPesticide and Container Storage by. Class A and B Dealers

 Dealers. Dealers of Class A orand 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) CPesticide containers shall have legible labeling indicating the contents of the containers.;
- (c) Pesticides and pesticide containersc 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 roomsareas shall be protected and locked in such a manner that they are not readily accessible to unauthorized persons or wildlifeo children and the general public.;
- (e) The floor surface of the pesticide storage room shall be smooth and impervious, facilitating the complete recovery of spillsdischarges. 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 Presticide storage roomarea 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 spilldischarge.
 - (ij) 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 Ppesticide storage roomsareas shall have sufficient lighting to allow the observation of containers and their labeling.;
 - (kl) Storage of pesticides in bulkbulk pesticide shall be in compliancecomply with the bulk pesticide storage rules under CITESection 11.
 - (mlo) 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 CITE); 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) tThere are no pipes attached; and
 - (2) iIt is constructed for complete recovery of a spilldischarge;
- (op) Areas used for storage of pesticides shall be maintained in a clean condition.; and
- (ps) At a minimum, spills and leaksdischarges 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 useSection 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 unlikely 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 a 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, livestocklivestock, 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.

(d) Containers left unattended for 15 consecutive days are considered storage containers.

<u>13109.13(2)</u> <u>Labeling of storage containers. of Pesticides in Storage</u>

- (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."
- (ca) __In addition to federal regulatory requirements concerning the labeling of a pesticide storage containers, applicators and dealers shall maintain legible labels shall be maintained on all storage containers containing bulk pesticstoragestorage containers pesticide at all times.
- 13129.011(3) Storage of dDry bBulk pesticide storage in bulk quantity.
- (a) Except during loading and unloadingg, stored dDry bBulk Ppesticide
 - (a) Dry bulk pesticide shall be covered by an impermeable roof or tarpaulin which will keep precipitation off the pesticides.
 - (bb) Dry bulk pesticide stored outdoors shall be kept in bulk storage containers.
 - (ce) <u>Dry bulk s</u>Storage containers shall be placed on pallets or on a raised concrete platform.
- 12.02 Bulk Pesticide Security(d) Bulk Sstorage facilities shall be secured against entry by unauthorized persons, livestock or wildlife.
 - (ae) Bulk sStorage 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 pestoc

13129.0124(4) Bulk SSSstorage Cecontainers - and Aappurtenances-

- (a)— Design, construction, and maintenance of bulk storage containers and appurtenances. General requirements.
 - (1) Bulk Storage 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) SBulk 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 mMaterials used in the construction or repair of a storage containers or and appurtenance: shall meet or exceed the manufacturer's recommendations
 - (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 shallMaterials 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; and.

- (6) Bulk storage containers and appurtenances shall 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 <u>bulk</u> 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 <u>bulk</u> storage container dictated by standard engineering practices.
 - 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.
 - All other <u>bulk</u> 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 <u>bulk</u> storage container shall be equipped with a liquid level gauging device by which the level of liquid in the <u>bulk</u> storage container can be readily and safely determined.
 - A liquid level gauging device is not required if the level of liquid in a <u>bulk</u> storage container can be readily and reliably measured by other means. <u>External sight glass gauges are prohibited EXTERNAL SIGHT GLASS GAUGES ARE PROHIBITED.</u>
 - (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 to 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. <u>Bulk Sstorage</u> 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, Lloading, and FRinsate Ceollection Aareas-

(a)(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 <u>bulk</u> storage facilities <u>must-shall</u> take place on a pad which is paved with asphalt or concrete.
- 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. <u>SBulk storage</u> 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 Ddischarges incidental to loading or unloading of pesticide shall be promptly (immediately upon detection) recovered, immediately upon detection, (using brooms or manually activated pumps,) from the paved surface and catch basin.
 - 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 Ceontainment for Liquid Bbulk Ppesticides.

- (a)– General requirements.
 - (1) <u>SLiquid bulk storage</u> 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 statesurface or groundwater. including groundwater.
 - 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. 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 shall 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, <u>or</u> an approved synthetic liner <u>in accordance with the following requirements.</u>-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.
 - (<u>22</u>)___Synthetic Liners.-
 - (A) Synthetic liners shall have a minimum thickness of 30 mils (0.8 millimeters), and) and be chemically compatible with the materials being stored within the facility.
 - (B) The synthetic liner shall be protected by a 6 inch 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.

- (D) 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.
- (E) 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 repaired, if necessary, in accordance with the manufacturer's recommendations.

13(f)91(f) 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, <u>puncture puncture</u>, 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.

(gg)—Recovery of discharges.

- 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.

13912.051(7) Inspection and Mmaintenance

The operator of a-<u>pesticide</u> storage facility shall routinely inspect and maintain storage facilities, <u>bulk</u> storage containers, and appurtenances in accordance with the following schedule <u>in order toto</u> minimize the risk of a discharge.

- (<u>aa</u>)—__Valves and other appurtenances shall be inspected for leakage and proper operation at least weekly.
- (<u>bb</u>)— 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)8(d).

- (<u>ce</u>)—Secondary containment facilities shall be inspected annually to assure compliance with subsection 12.04(6).
- (dd)—All equipment and supplies mandated by the Discharge and Response Plan shall be maintained in sound working order.
- (ee)—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.

13912.061(8) - Recordkeeping

(a)— 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.

- (1b)—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 discovered and shall be promptly updated to show measures taken to control, recover, use or dispose of the discharge.
- (2e)—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).
- (3d)—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.
- (<u>4e</u>)—Inspection and maintenance records pertaining to storage containers, appurtenances, and secondary containment facilities, as provided under <u>paragraphs sections 12.05(a)</u>, and <u>7(a)</u> and <u>7(ce)</u>.
- ($\underline{5}$ f)—A record of manufacturers' compatibility statements as provided under paragraphs sections 12.046(e)($\underline{22}$)(D), and $\underline{12.04}$ (f)(4)6(f).
- (b) Records shall be maintained for at least five years and shall be made available for inspection and copying by the Secretary upon request.

13129.071(9) Preparations for Ceontrol and Rrecovery of Presticide Delischarges

- (a)—___Discharge response plan_-
 - (1) 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 administered and shall be available for inspection and copying by the Department Agency.

- (3) The operator of the storage facility shall inform the local fire and police departments of the existence of the plan, and plan and shall provide a current copy of the plan to the local fire department.
- (b) The discharge response The plan shall include:
 - (1)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 <u>bulk</u> storage container, the <u>Material</u>-Safety Data Sheet (<u>MSDS</u>) and a complete copy of the labeling that would ordinarily accompany sale of the pesticide.
 - (3)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.
- (<u>c</u>b)-__Equipment and supplies_-
 - (1) Applicators, manufacturers 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.
 - Pumps, recovery containers, personal protective equipment and clothing and persons capable of deploying and operating them, shall be readily available in an emergency.
 - 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 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.
- (de)— Training. Persons employed at the storage facility shall be made aware of and trained in discharge response procedures, pursuant to the discharge response plan.

13912.024(10) 138 Prohibition of Underground Liquid Sstorage pProhibited

(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.

13129.025(11) 914 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 stateenvironment.

39. 15 Disposal of Presticides and presticide Containers.

- a. Pesticide containers prior to disposal.
 - (1) <u>Unused or unwanted pesticides being stored prior to disposal,</u>
 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.
 - <u>(2)</u> <u>Disposal of pesticide containers shall comply with instructions on the labeling and with other state and federal regulations.</u>
 - (<u>32</u>) <u>If practical, pesticide drums shall be shipped to recycling centers capable of handling pesticide containers.</u>
 - (43) Empty pesticide containers shall not be stored or accumulated within a secondary containment facility.
- 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 that
paper shall be triple rinsed prior to disposal.
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165

166

167

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-172.5

-

173 174 179 209 Aquatic uses 229 cancelled. (Non-aquatic wood preservative uses excepted) 242.5 All above 0.05% 250.1 All above 0.005% 261 All

263	All; discontinued by
-	manufacturer
-	
-	
265	All above 3%
-	
-	
267	All
-	
277	All; discontinued
_,,	by
-	manufacturer
-	
-	
-	
-	4.77
312	All
330	All
-	
-	
-	4.11
355	All
3 56	All
-	
-	
-	
-	4.77
359	All
360	All
361	All
-	
-	.11
374	All above 5%
386	By permit only
-	
-	

-	
-	
-	
391	All pressurized
	containers of
-	chlorine
-	gas
-	
-	
-	
-	
412	All
-	
-	
-	
-	
-	
-	
-	
-	
_	
-	
422	All
-	
-	
432	All above 3%
-	
_	All above 2%
_	
_	
_	
	All tracking
481	powders,
	• ′

-	dust and ready-to- use,
-	0.2% or greater
-	
-	
-	
490	All
-	
491	All granular
499	All
-	
509	All above 13%
-	All
_	
_	
_	All
	7111
_	
-	
- -	
-	
-	
-	A 11 1
514	All wood preservative
-	uses except brush on
570	All
<u>-</u>	
_	
590	All above 2%
_	All above 270
	All
- -	/MI
-	
-	
-	A 11
-	All
596	All

-	
601	All
-	
_	All above 2%
_	All above 2%
-	
-	
-	
-	
-	
619	All non-food uses. All
-	food uses cancelled,
-	1989.
-	
-	
-	
-	
-	
-	
_	
-	
632	All
-	
656	Cancelled, 1985
-	
671	All above 8%
679	All
682	All
-	
_	
	All wettable
690	powder equal
-	to or above 50%
693	Cancelled, 1971

	All; aquatic use
-	requires Water
	Quality
700	Permit
708	All above 20% or
-	containers larger than 1
-	gallon. Aquatic use
-	requires Water Quality
-	Permit
765	All above 20% or
-	containers larger than 1
_	gallon
774	All above 20% or
- -	containers larger than 1
-	gallon
-	8
-	
-	
-	
- -	
- - -	
- - - 786	Cancelled, 1984
- - - 786 -	Cancelled, 1984
- - - 786 -	Cancelled, 1984
- -	All; discontinued
- - - 786 - - -	All; discontinued by
- - 790 -	All; discontinued by manufacturer
- -	All; discontinued by
- - 790 -	All; discontinued by manufacturer All
- - 790 -	All; discontinued by manufacturer All All above 1%; (20% resin
- - 7 90 - - 790.5	All; discontinued by manufacturer All
- - 7 90 - - 790.5	All; discontinued by manufacturer All All above 1%; (20% resin
- - 7 90 - - 790.5	All; discontinued by manufacturer All All above 1%; (20% resin strips & pet collars

-	
-	
-	
806	Cancelled, 1987
823	All; (granular &
	tablets of 2% or less
-	excepted
	All
-	
-	
-	
_	
-	
824	All above 15% with
	the
_	following exceptions: 1)
	Up to 25% EC &
-	packaged
-	1 0
-	
-	
-	
825	All
-	
-	
-	
-	
828	All
-	
- -	
- -	Alle discontinued
834	All; discontinued by
<u>-</u>	manufacturer
-	
-	

839	All
-	
-	
-	
-	
-	
-	
-	
-	
-	A 11 1 20/
-	All above 2%
· -	
-	
-	
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-	
-	
-	A 11
886	All
-	
-	
- 8 96	A 11
3 70	All

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_		
Ş	897	All forestry uses
-		-
5	899	All above 1%
_		
-		
-		
-		
-		
-		
Č	900	All
=		
-		
Č	901	Cancelled, 1988
-		
-		
-		
-		
-		
-		
-		
_		
٥	911	All above 20%
-		
-		
-		
è	921	Banned in U.S.
(923	All; discontinued
,	723	by
-		manufacturer
-		
Č	933	Cancelled, 1989
-		
_		
-		
-		
Č	941	All above 2%

-	A 11 1 10/
942	All above 1%
-	
-	
- 059	Alle aquatia yaa
958	All; aquatic use requires Water
-	Quality
<u>-</u>	Permit
-	
-	
_	
-	
-	
-	Banned
975	All above 6%
-	
976	All; discontinued
	by manufacturer
-	manuracturer
-	
_	
_	
_	
-	
<u>-</u>	
1001	All above 3%
1002	All; aquatic use
1002	requires
<u>-</u>	Water Quality
1000	Permit
1009	Cancelled, 1985
-	
-	
-	
_	
- -	All above 2%
	1111 000 10 270

-	All
-	
-	
1020	All
1021	All
<u>-</u>	
-	
1039	All above 6%
-	
1042	All above 6%
-	
-	
-	
1056	All
-	
1061	All
1078	All
-	
1079	All
-	
-	
-	
1-080	Cancelled, 1987
-	,
-	
1081	All
-	
-	
-	
-	
-	
-	
1084	All
-	
-	
-	
-	
_	

1093	All above 1%
-	
-	
-	
-	All above 2%
-	
-	
-	
1098	All above 1%
-	
-	
-	All above 5 gallons
-	All
1109	All
1113.5	All; aquatic use
-	requires Water
	Quality
-	Permit
-	
-	
1115	All above 2.5%
1117	All
-	
-	
-	
-	
-	
-	
-	
-	
-	
1120	D
1139	By permit only
-	
-	
-	
-	

All All All 1178 All All above 3% 1238 All 1241 1257 All above 6% All All above 3% with 1282 the following exceptions: 1) emulsifiable concentrates up to 20% packaged in 1 pint less; and 2) seed treatment products 1284 All above 6%

-	
-	
-	
-	
-	
1316	By permit only; (outdoor
-	paints excepted); indoor
-	paint use cancelled, 1990
-	
-	
-	
1325	All
1327	All
1328	All
-	
-	
1341	All
-	
-	
-	
-	
-	
-	
-	
1391.3	All liquids 65% or
-	greater
-	
1398	All
-	
-	
-	
-	
-	
-	
-	

-	
-	
1436	All agricultural and
-	commercial outdoor use
_	outdoor use
1440	All above 10%
- -	1111 1100 (0 10) 0
-	
1441	All above 2%; (slug &
-	snail baits excepted);
-	discontinued by
-	manufacturer
-	
-	
-	
-	
-	
-	
-	
1457	A 11
1457	All
-	All; discontinued
1472	by
_	manufacturer
-	
-	
-	
-	
-	
-	
1479	All
1480	All above 40%
-	A 11
1400	All Dry magnit and y
1499	By permit only

All; discontinued 1508 by manufacturer 1509.5 All All All All 1543 All above 5% 1551 All All All above 0.5% 1555 cation All above 0.2% 1556 cation 1558 All All All above 5% 1559.5 1564 All 1575.5 All above 2%

1639	All above 1%
- 1640	All above 2%
- 1641	All above 1%
1644	By permit only
-	By permit omy
_	
1645	All above 2%
-	
-	All
- 1661	All above 3%
-	
-	
1669	All; discontinued by
_	manufacturer
_	manuracturer
_	
_	
_	
_	
_	
_	
_	
_	
1735	All above 8%
1736	All above 6%
-	
-	
1740	All above 8%
1741.5	All emulsifiable
	concentrates 50%
-	Or
-	greater
-	

All 1784 All All above 10% 1816 1823 By permit only If sold as single 1833 ingredient (fire hazard) All; brush-on 1845 excepted 1851 By permit only All containers 1865 larger than 1 quart All; uses below 1900 ground & applied by hand excepted 1914 All; dessicants

1916	All
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	All granular
-	
-	
-	
-	
-	
1924	All
-	All; sales and use
_	restricted to U.S.
	Fish &
-	Wildlife Service
1927	All above 5%
-	
-	
-	
1948	All
-	
-	
-	
1949	All
1952	All;industrial
-	mic robiocides
-	are excepted
-	
1964	Cancelled, 1972
-	
-	
-	

All 1986 All above 2% All antifouling 1997 paint All antifouling paint 2024 Cancelled 2081 All; sales and use restricted to US Fish & Wildlife Service 2101 All All 2117 All above 3% All 2141 All above 2%

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APPENDIX B

APPENDIX B

GRAND ISLE WASHINGTON

-The Islander - The Times-Argus

-Burlington Free Press -Burlington Free Press

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FRANKLIN ADDISON

- The Messenger - Addison County Independent

-Burlington Free Press - Rutland Herald

-

ORLEANS ORANGE

-Newport Daily Express - The Times Argus

Burlington Free Press The Valley News (West Lebanon)

-

ESSEX RUTLAND

-Caledonian Record -Rutland Herald

-Burlington Free Press -Burlington Free Press

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LAMOILLE WINDSOR

- Burlington Free Press - The Valley News (West Lebanon)

-The Times-Argus - Claremont Eagle

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CHITTENDEN WINDHAM

-Burlington Free Press - Brattleboro Reformer

- The Times-Argus - The Town Crier (Bellows Falls)

-

CALEDONIA BENNINGTON

- Caledonian Record - Bennington Banner

- Hardwick Gazette - Rutland Herald

Statutory Authority:

Do we still need the following?

6 V.S.A. ChatperChapter 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].
- (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 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 Pesticide Containers Pprior to Ddisposal

- (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 ean not 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 Rrinse Rrequirement

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)

CODE OF VERMONT RULES

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