Special Legislative Commission to Study Pesticide Control Regulations

Findings and Recommendations

Report Submitted to the

Rhode Island State Senate

June 22, 2018

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SPECIAL LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

Members

Senator V. Susan Sosnowski
Chairperson of the Senate Environment & Agriculture Committee
Chairperson of Commission

Senator Cynthia A. Coyne
Senator
Vice-Chairperson of Commission

Senator Dawn Euer
Senator

Meg Kerr
Representative of the Environment Council of Rhode Island

Jesse Rodrigues
Representative of the Agriculture Industry

Joel Tirrell
Representative of Rhode Island Nursery and Landscape Association

Robert Mann
Representative of the Pest Control Industry

Matt Largess
Licensed Arborist

Pat Hogan
Representative of the Golf Industry

Brian Giblin
Representative of the Pesticide Manufacturing Industry

Steven Alm, Ph.D.
Entomologist
University of Rhode Island

The Honorable Dominick J. Ruggerio
President of the Rhode Island Senate
State House
Providence, RI 02903

Dear President Ruggerio:

We are pleased to submit the Final Report of the Special Legislative Commission to Study Pesticide Control Regulations. Our Report represents the combined input of our Commission members and of those who presented before the Commission to share their expertise and perspective on Rhode Island's pesticide control regulations.

We would like to express our gratitude to all members of the Commission for their willingness to take part in these discussions, and we appreciate the investment of time and talent that they graciously provided.

This final report is the culmination of the hearings and discussions that began in March of 2018 and ended in May of 2018. It contains recommendations presented by various stakeholders to the Senate to update and strengthen the governance of the use of pesticides in Rhode Island. Each recommendation is supported by testimony and input from experts, including arborists, environmentalists, the agriculture industry, the landscape industry, the golf industry and the pest control industry.

The Senate Commission offers these findings and recommendations with full confidence that the quality of life in Rhode Island can be enhanced by the proper use and regulation of pesticides throughout the state.

Respectfully submitted,

Senator V. Susan Sosnowski, Commission Chairperson

EXECUTIVE SUMMARY

On June 22, 2017, the Rhode Island Senate passed Senate Bill 982 to create a Special Legislative Commission to Study Pesticide Control Regulations. The Commission chaired by Senator Sosnowski was authorized to review all pesticide control regulations and to make recommendations to the Senate to update and strengthen the governance of the use of pesticides in Rhode Island. This Special Legislative Commission consists of the following members:

- Three (3) members of the Rhode Island Senate
- One (1) representative of the Environment Council of Rhode Island
- One (1) representative of the agriculture industry
- One (1) representative of the Rhode Island Nursery and Landscape Association
- One (1) representative of the pest control industry
- One (1) of whom shall be a licensed arborist
- One (1) representative of the golf industry
- One (1) representative of the pesticide manufacturing industry
- One (1) of whom shall be a professor with botanical expertise from the University of Rhode Island

The Commission met four times over the course of three months in 2018 – on March 27, April 10, May 1 and May 29 – and was charged with presenting its findings and recommendations to the Senate President. This document represents the final report of the Special Legislative Commission to Study Pesticide Control Regulations.

The Commission process was collaborative, with input and support from all members and presenters. The Commission issued recommendations and findings, along with a list of topics and subjects that Commission members determined require further study and/or exploration.

The Commission's recommendations are:

1. **Fund the Rhode Island Department of Environmental Management's pesticide program and positions to the greatest extent possible. This recommendation includes restoring money to the program and restoring staffing lost to attrition over the past 5 years. The Commission also recommends depositing the licensing and registration fees paid by applicators into a restricted receipt account for the program and positions. Once funding is restored, ensure and enhance the pesticide applicator training program.**

2. **Rhode Island's pesticide applicator training program, which includes segments on reading and interpreting labels and on the misuse of pesticides, should be mandatory prior to taking the test. Rhode Island should require that applicants for**

commercial licenses, commercial certification licenses and private certification licenses attend the two-day core training session.

3. **DEM should offer a mechanism for commercial applicators and growers to dispose of unwanted and unused pesticides.**

4. **The state bee inspector should be a full-time position.**

TIMELINE

March 27, 2018 Agenda

RI Department of Environmental Management (DEM), Division of Agriculture
Kenneth D. Ayars, Chief, Division of Agriculture, RIDEM
Howard Cook, Principal Environmental Scientist, Division of Agriculture, RIDEM
Presentation: Regulation of Pesticides in Rhode Island
RI DEM Pesticide Control Regulations, 250-RICR-40-15-2 et seq.

April 10, 2018 Agenda

Presentation by Dr. Steven Alm, University of Rhode Island
RI DEM/ URI Cooperative Extension,
Overview of the Pesticide Safety Education Program
Written Submissions:
Golf industry, Pat Hogan, Commission member
Audubon Society of Rhode Island, Meg Kerr, Commission member
Bayer Environmental Science, Brian Giblin, Commission member
National Association of Landscape Professionals, Robert Mann, Commission Member
Rhode Island Farm Bureau, Henry Wright
Rhode Island Nursery and Landscape Professionals, Executive Director, Shannon Brawley

May 1, 2018 Agenda

Members discussion of previous testimony, findings and recommendations
Written Submissions:
Largess Forestry, Matthew Largesse, Commission member
Audubon Society of Rhode Island, Meg Kerr, Commission member
URI, Steven Alm, Ph.D., Professor of Entomology and Pesticide Coordinator

May 29, 2018 Agenda

Members discussion of draft findings, recommendations and report
Written Submissions:
Exeter Fire District, Division of Emergency Medical Services Report, 4/24/18

RECOMMENDATIONS AND FINDINGS

1. **Fund the Rhode Island Department of Environmental Management's pesticide program and positions to the greatest extent possible. This recommendation includes restoring money to the program and restoring staffing lost to attrition over the past 5 years. The Commission also recommends depositing the licensing and registration fees paid by applicators into a restricted receipt account for the program and positions. Once funding is restored, ensure and enhance the pesticide applicator training program.**

   The Rhode Island Department of Environmental Management's division of agriculture is charged with regulating pesticides in Rhode Island. The division's four staff members assigned to the pesticide program are: the pesticide project administrator, who is also an inspector; the Certification & Training program coordinator, who is also an inspector; an inspector and the pesticide program administrative support staff person. The division of agriculture registers and collects fees for approximately 9,000 pesticide products. It provides testing and recertification for 2,100 applicators and dealers, and it coordinates with the University of Rhode Island's pesticide training program. The division annually collects $1.5 million in registration fees, which go into the state's general fund, and approximately $71,000 in licensing and certification fees.

   In addition to training, testing, licensing and recertifying more than 9,000 pesticide products and more than 2,000 applicators each year, the division must enforce the safe use of pesticides. The safe use of pesticides is vitally important to all life, which is evidenced in the United States by the fact that people die each year from improper pesticide use, pets and other animals are killed, and pollinators and food sources are destroyed. The division of agriculture's safe use enforcement includes proper labeling laws and regulations, proper distribution and sale, and safe storage and transportation. Inspectors respond to complaints and are required to make routine inspections of applicators, storage areas, retailers and manufacturers. They are also required to inspect the records kept by all those they inspect. Finally, the division of agriculture also implements special projects, such as the Obsolete Pesticide Collection Program; however, that program for commercial users is only in operation when the division has grant money available to fund the program.

   The Rhode Island Department of Environmental Management's pesticide training program is run in association with and through the University of Rhode Island. While the URI training program is universally viewed as a high-level training, the number of applicants requesting the pesticide training program continues to rise, and the demand for varied pesticide training programs increases, while the funding and staffing levels have decreased. Alternatively, Massachusetts and New Hampshire have increased funding and trainers, and as a result, their pesticide training programs have grown in stature and efficacy. Rhode Island must not lose ground in this important, life-saving training.

In order for Rhode Island to maintain, and improve, both the high level of the pesticide training program and the enforcement of pesticide regulations in Rhode Island, the division of agriculture must have additional funding. The division should have additional funding to determine, among other things: the quantity of pesticides being used by farmers; how homeowners are applying and storing pesticides; and how many unlicensed commercial applicators are working in Rhode Island. Enforcement of pesticide laws, rules and regulations must be enhanced, but additional funding is necessary to do so.

Therefore, funding for the pesticide use and applicator training, homeowner education and enforcement of the pesticide laws, rules and regulations should be increased. At a minimum, the pesticide registration, licensing and certification, and training fees collected should be placed in a restricted receipt account to be used for the life-saving work performed by the division of agriculture, which includes the pesticide training program that takes place at the University of Rhode Island.

2. **Rhode Island's pesticide applicator training which includes segments on reading and interpreting labels and on the misuse of pesticides, should be mandatory prior to taking the test. Rhode Island should require that applicants for commercial licenses, commercial certification licenses and private certification licenses attend the two-day core training session.**

Rhode Island's pesticide training program uses the *National Pesticide Applicator Certification Core Manual* for applicator training and testing. In addition, the University of Rhode Island provides a workbook on the labels used on insecticides, fungicides, rodenticides and herbicides; a Core Supplement compiled by Dr. Steven Alm and others; videos and label reading demonstration segments during the training; segments on Rhode Island pesticide laws. The dangers inherent in working with pesticides is an important aspect emphasized throughout the pesticide training program.

The dangers from the misuse of pesticides and lack of training were succinctly demonstrated at the May 29th Commission hearing. The Commission members learned of an incident that affected laborers who had worked for a Massachusetts landscaper and began experiencing the effects of pesticide poisoning while they were traveling through Exeter, Rhode Island, in late April. As those laborers traveled from a job in Massachusetts to one in Connecticut, one man experienced extreme difficulty breathing. Two paramedics treated the laborer and transported him to the hospital, where he continued to deteriorate. After leaving the hospital, the EMT who treated the laborer during transport also experienced symptoms of poisoning. The EMTs returned to the hospital, where the EMT driver also fell ill. RIDEM-Hazmat responded, investigated and determined that the three men were exposed to pesticides. On his Massachusetts job, the laborer had been required to mix bags of different pesticides. He did not have a pesticide applicator license, nor training in pesticide use, and he did not wear the required protective clothing. As a result, his contaminated clothing caused his poisoning, which required several days of hospitalization and resulted in severe long-term effects. Contact with the laborer's clothing also caused the illness of the two responding EMTs.

The Study Commission also reviewed news reports about the misuse of pesticide applications that led to death and serious injuries. The University of Rhode Island's Pesticide Coordinator, Dr. Steven Alm, presented an overview of the pesticide safety education training program that he oversees in cooperation with the Rhode Island Department of Environmental Management's division of agriculture. During questions, Dr. Alm confirmed the decreased funding and staffing levels for the program.

Before people take the pesticide applicator training test, the two-day pesticide training program should be a mandatory requirement for them because of the inherent dangers of working with pesticides. There's much for people to learn: state and federal laws; state rules and regulations; and safety requirements and precautions.

Note: When the Study Commission voted on this recommendation, two members objected to the recommendation as written. Members Brian Giblin and Joel Tirrell stated that a properly trained pesticide applicator should be allowed to take the test without attending the two-day training session.

3. **DEM should offer a mechanism for commercial applicators and growers to dispose of unwanted and unused pesticides.**

In 2001, the Rhode Island Resource Recovery Corporation began offering a free program for homeowners entitled the Eco-Depot, which helps Rhode Islanders properly dispose of substances in their homes that are flammable, combustible, poisonous, toxic, corrosive or reactive. As a result of that program, approximately 11.9 million pounds of household hazardous waste have been safely recycled or disposed of. That program is still available, but only to homeowners and not to commercial applicators or growers.

In 2013, the Rhode Island division of agriculture and resource marketing implemented a program through which commercial applicators and growers were able to properly dispose of obsolete pesticides. Obsolete pesticides are products that are unregistered, have been banned or have otherwise become unusable (caked, frozen, dried out, etc.). Since those products are no longer able to be used for their intended purpose, they are classified as "Hazardous Waste."

The program, which was free to participants, eliminated the participants' future liability for groundwater contamination, clean-up costs, legal liability and disposal costs for those hazardous materials. Even though possession of the materials may have constituted a violation of the Rhode Island Pest Control Act (RIPCA), the effort was offered as compliance assistance and not enforcement.

The Pesticide Control Regulations Study Commission heard from several witnesses extolling the great success of the 2013-2014 Obsolete Pesticide Collection Program, which was funded by a grant from the United States Environmental Protection Agency. All who testified about the pesticide collection program stated that the proper disposal of

obsolete and unused pesticides is prohibitively costly for commercial applicators and growers, which leads to the accumulation of obsolete pesticides. The witnesses and members of the Study Commission determined that the Obsolete Pesticide Collection Program should again be offered for commercial applicators and growers. The Commission agreed that the program should be funded for commercial applicators and growers out of the $1.5 million that is collected each year from registration fees and deposited into the general fund.

4. **The state bee inspector should be a full-time position**.

   The EPA's Pollinator Risk Assessment Guidance is part of a long-term strategy to advance the science of assessing the risks posed by pesticides to bees, giving risk managers the means to further improve pollinator protection in regulatory decisions. (U.S. EPA: https://www.epa.gov/pollinator-protection/pollinator-risk-assessment-guidance) Rhode Island's State Bee Inspector must adhere to the EPA requirements and guidelines and is also charged with adhering to Rhode Island General Laws Title 4 Chapter 12, Apiculture, as well as protecting RI's pollinators. The Bee Inspector assists and provides guidance to Rhode Island's more than 600 beekeepers and is charged with protecting, increasing and managing the state's pollinators and the wild hives throughout Rhode Island. The state bee inspector also conducts educational seminars around the state. The position is currently a part-time position, yet it should be a full-time position because of the required duties and the importance of pollinators to all living creatures. The division of agriculture collects $1.5 million in pesticide registration fees annually, money that should be used to fund the position.

SUPPLEMENTAL FINDINGS AND RECOMMENDATIONS

1. Approximately $1.5 million is collected each year from pesticide registration; another $71,000 is collected from licensing and certification fees and goes to DEM; and approximately $100,000 is generated by the pesticide training fees each year and goes to URI for the program.
2. Home users of pesticides must be educated about the dangers, about proper application so as not to harm themselves, other people, pollinators and other animals.

State limited use/restricted use pesticides

1. Contemplate requiring label-specific training for license holders for any restricted use/state limited use pesticides and for increasing emphasis on label specific training in the category training sessions.
2. Provide best-practices training for farmers for non-restricted use pesticides

Pollinators

3. Introduce legislation that requires that people buying beekeeping equipment be given notices informing them that state law requires them to register their hives with the state.
4. Request that brick and mortar and online retailers that sell equipment to beekeepers should provide notices stating that Rhode Island law requires beekeepers to register their hives.
5. Require specific portion of classroom instruction for pollinator training.
6. Pollinator-related training should be included in recertification training sessions.
7. DEM regulations should have a section on pollinators: Subchapter 15, Section 3 could be amended.
8. Provide notice to registered pollinators when pesticides will be applied near their hives.

Homeowners and pesticides

9. Pesticides are more widely used in home and garden than in the agriculture industry.
10. Place of purchase educational pamphlets should be provided to all retail pesticide customers.

Unlicensed applicators

11. Explore legislation to impose penalties on those who apply pesticides to another's property without the proper state certification and/or license.

ISSUES TO EXPLORE/STUDY

To Explore:

1. Whether those qualified or licensed in another state with a similar/equal level or better training program should be allowed to opt out of the state training, with DEM approval.

2. How to provide notification to beekeepers before pesticide applications.

3. How to educate homeowners.

4. How to ensure that the unlicensed commercial applicators are found and stopped/trained/cited.

5. Implementation of a pilot school program to teach students about the dangers of misuse of pesticides and herbicide and the training opportunities available. Such a program could be first offered to the high schools through Future Farmers of America or agricultural training programs.

To Study:

6. How to increase use of integrated pest-management (IPM) practices.

7. Whether there should be reciprocity with another state on applicator license training.

ADDENDUM

SENATE RESOLUTIONS

AGENDAS with presentations and written submissions

March 27, 2018 Agenda and Presentation

April 10, 2018 Agenda, Presentation and Written Submissions

May 1, 2018 Agenda and Written Submissions

May 29, 2018 Agenda and Written Submissions

2017 -- S 0982

LC002888

STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2017

S E N A T E R E S O L U T I O N

CREATING A SPECIAL LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

Introduced By: Senators Sosnowski, Coyne, Calkin, Kettle, and Conley

Date Introduced: June 21, 2017

Referred To: Placed on the Senate Consent Calendar

WHEREAS, Pesticides are valuable to our state's agricultural production and to the protection of human life and the environment from harmful insects, rodents, weeds, and other forms of life which may be pests; and

WHEREAS, It is essential to the public health and welfare that they be regulated to prevent potential adverse effects on humans, animals and beneficial insects in addition to the environment; and

WHEREAS, New pesticides are continually being discovered, synthesized, or developed which are valuable for the control of harmful pests and for use as defoliants, desiccants, and plant regulators; and

WHEREAS, Some of these pesticides may be ineffective, may cause injury to humans, animals and beneficial insects, or may cause unreasonable adverse effects on the environment if not properly used; and

WHEREAS, The Rhode Island Department of Environmental Management regulates the proper availability and use of pesticides in the state; now, therefore be it

RESOLVED, That a special legislative commission to be known as the "Commission to Study Pesticide Control Regulations" be and the same is hereby created consisting of eleven (11) members to be appointed by the President of the Senate: three (3) of whom shall be members of the Senate, one of whom shall serve as the chairperson of the commission; one of whom shall be a representative of the Environment Council of Rhode Island; one of whom shall be a

representative of the agriculture industry; one of whom shall be a representative of the Rhode Island Nursery and Landscape Association; one of whom shall be a representative of the pest control industry; one of whom shall be a licensed arborist; one of whom shall be a representative of the golf industry; one of whom shall be a representative of the pesticide manufacturing industry; and one of whom shall be a professor with botanical expertise from the University of Rhode Island.

The purpose of said commission shall be to review all pesticide control regulations and make recommendations to the Senate to update and strengthen the governance of the use of pesticides in Rhode Island.

Forthwith upon passage of this resolution, the members of the commission shall meet at the call of the Chairperson of the commission.

Vacancies in said commission shall be filled in like manner as the original appointment.

The commission shall assemble no less than four (4) times, or more often at the call of the Chairperson, upon written notice of each meeting stating the place, day, and time of the meeting along with the purpose and/or agenda of the meeting.

A quorum of the Commission shall consist of a majority of its membership and the membership shall receive no compensation for their services.

All departments and agencies of the state shall furnish such advice and information, documentary and otherwise, to said commission and its agents as is deemed necessary or desirable by the commission to facilitate the purposes of this resolution; and be it further

RESOLVED, That the commission shall report its findings and recommendations to the President of the Senate no later than March 1, 2018, and said commission shall expire on June 1, 2018.

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LC002888
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LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

NOTICE OF MEETING

DATE: Tuesday, March 27, 2018
TIME: 2:45 P.M.
PLACE: Room 313 - State House

AGENDA:

I. Call Meeting to Order

II. Remarks from the Chairperson, Senator V. Susan Sosnowski

III. Testimony:
1. Kenneth D. Ayars, Chief, Division of Agriculture, RIDEM
   - Pesticide Enforcement Certification Program and Review of Pesticide Control Regulations

IV. Next Meeting Date and adjournment

***No public testimony will be received during this meeting**

Please contact Patricia Breslin, Senate Legal Counsel at (401) 276-5536 or at pbreslin@rilegislature.gov

POSTED: THURSDAY, MARCH 22, 2018, 4:55 PM

Regulation of pesticides in RI

Ken Ayars
Howard Cook
RIDEM Division of Agriculture

About us

- 4 staff members:
- Supervisor
- C&T Person/Marketplace inspection
- Inspector (use inspection, enforcement, PEIs)
- Clerical

DAG Pesticide Staffing Summary

Program Title	Name	% Assigned to Pesticide Program	% Federal Salary	% State Salary
DAG Chief	Ken Ayars	10%	0%	100%
Pesticide Program Administrator/Inspector	Howard Cook	100%	100%	0%
C & T Program Coordinator / Inspector	Robin Mooney	100%	0%	100%
Pesticide Program Inspector / WPS Coordinator	Steve Scandariato	100%	100%	0%
Pesticide Program Admin. Support- Registration*	Dawne Holley	100%	30%	40%

What we do

- Register and collect fees for approximately 9,000 pesticide products
- Provide testing/recertification for:
  - 1,000 licensed applicators
  - 800 certified applicators
  - 160 certified private applicators
  - 50 RUP dealers
- Participate in URI pesticide training program

What we do

- Collect approximately $1.5 million in registration fees
- Collect approximately $71,000 in licensing/certification fees
- All money collected goes into the general fund

Table 1. DAG FY17 Operating Budget Summary

Work Plan Component	EPA Funding	State Funding	Total Funding	Un-Obligated EPA Funds
Program	$151,000	$115,784	$266,784	$0
Enforcement	$137,000	$104,799	$241,799	$0
Total	$288,000	$220,583	$508,583	$0

Inspection Type	Inspections Projected	Inspections Completed	Physical Samples Collected	Documentary Samples Collected
Agricultural Use	15	16	0	22
WPS Tier I	10*	11		11
WPS Tier II		0		0
Agricultural Use For-cause	As needed	0	0	0
WPS Tier I		0	0	0
WPS Tier II		0		
Non-Ag Use	45	45	0	49
Non-Ag Use For-Cause	As needed	7	4	10
Experimental Use				
Producer Establishment	2	2	3	11
Marketplace	45	45		0
Import				
Export				
Applicator Records	45	48		49
Restricted Use Pesticide Dealer	12	13		0
Total	164	176	7	141

FIFRA

- Federal Insecticide, Fungicide, and Rodenticide Act

- Pesticides are substances or mixtures of substances intended for preventing, destroying, repelling, or mitigating pests.
  - Desiccants, plant growth regulators, defoliant, nitrogen stabilizers

FIFRA

Main focus is to ensure that pesticides distributed in the US do not pose an "Unreasonable risk to man or the environment"

- Register Pesticides
- Register Producer Establishments
- Regulate imports/exports of pesticides
- Allow experimental use permits

STATE AUTHORITY

- Section 23 (a)(1) allows the Administrator (EPA) to enter into cooperative agreements to delegate to any state or Indian tribe the authority to cooperate in the enforcement of FIFRA
- Rhode Island Pest Control Act (RIPCA)
  - 1976

The Rules and Regulations Relating to Pesticides

- The “rules”
- RIPCA (23-25-9) authorizes the Director to adopt regulations for the enforcement of RIPCA

RIPCA and the Rules regulate:

- Labeling
- Distribution and sale (registration)
- Storage
- Transportation
- Use

Registration

- All pesticides distributed in Rhode Island must be registered
- Any product bearing an EPA registration number must be federally registered
- All products including 25(b) products must be registered with the state of Rhode Island

PULL HERE TO OPEN ▲

RESTRICTED USE PESTICIDE

Due to acute toxicity to humans, aquatic organisms, and avian species. For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

Thionex® 50W

INSECTICIDE

Not for use or storage in or around residential sites – see DIRECTIONS FOR USE/GENERAL INSTRUCTIONS for prohibited areas
For Agricultural or Commercial Use Only
(Wettable Powder in Water-Soluble Bags)

ACTIVE INGREDIENT	% BY WT.
Endosulfan: (Hexachlorohexahydromethano-2,4,3-benzodioxathiepin-3-oxide)	50.0%
INERT INGREDIENTS:	50.0%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER-POISON
PELIGRO

SEE OTHER PANELS FOR ADDITIONAL PRECAUTIONARY INFORMATION.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious or convulsing person.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

FIRST AID *(continued)*	
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.

NOTE TO PHYSICIAN: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation, or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulsions persist. This type of drug may be used *only* if complete control of respiration can be maintained. Epinephrine derivatives are absolutely contraindicated. Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 66222-62 EPA Est. No. 67545-AZ-001

M A N A

Manufactured for:
Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road
Suite 300
Raleigh, NC 27609

12617
EPA 092410/Rev C

Net Contents: 5 Pounds (5 x 1 Pound Water-Soluble Bag)

GROUP 4A INSECTICIDE

MERIT® 2F

INSECTICIDE

For foliar and systemic insect control in turfgrass (including sod farms), landscape ornamentals, fruit and nut trees and interior plantscapes.

ACTIVE INGREDIENT:

*Imidacloprid,1-[(6-Chloro-3-pyridinyl) methyl]-N-nitro-2-imidazolidinimin	21.4%
OTHER INGREDIENTS:	78.6%
TOTAL:	100.0%

*Contains 2 pounds of imidacloprid per gallon.

SHAKE WELL BEFORE USING.

EPA Reg. No. 432-1312

STOP - READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN
CAUTION

PARA EL USUARIO: Si usted no lee o entiende inglés, no use este producto hasta que le hayan explicado completamente las instrucciones que figuran en la etiqueta.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

BACKED by BAYER™

Net Contents

1 Gallon

02406377

03407954E 131205AV1

Ingredients

Active Ingredients	2.03%
Clove Oil	1.50%
Rosemary Oil	0.53%
Other Ingredients	97.97%
Purified Water, Polyglyceryl Oleate, Lauric Acid	
Total	100.00%

This product has not been registered by the United States Environmental Protection Agency. Sierra Natural Science Inc. represents that this product qualifies for exemption from registration under the Federal Insecticide, Fungicide and Rodenticide Act. (FIFRA)

Directions for Use: *Shake Well Before Use*
Do not use with other products.
Soil Drench - Plant Site *Use For All Plants* (Roots), Coverage = 1 gallon of mixed solution to 10 gallon potted plant or 230 square feet.
Mix 4-8 TBSP (2-4oz)* of concentrate to 1 gallon of water. Thoroughly drench affected and surrounding areas.
Foliar Spray - Plant Site Use *For All Plants & Turf* (Leaves (Foliage), Stems, Stalk, Fruit and around Flowers), **Coverage** = 1 gallon of mixed solution will cover approximately 550 square feet. No restricted entry interval (REI)=0.
Mix 4-12 TBSP (2-6oz)* of concentrate to 1 gallon of water. Spray Foliage to point of runoff. Apply 2-5 times every 2-3 days*.
*Depending upon severity of infestation.

Directions for Use in Hydroponics:
If you can remove plant(s) from system-
Place plant in 5 gal bucket. Pour solution over root system & drain into bucket (solution is reusable). Let sit for 5-10 minutes. Rinse with water and return plant to system.
If you cannot remove plant(s) from system-
Pour solution over root system & drain into the system. Make sure to flush system after use. SNS-203™ should not be left in a reservoir. Use on a 7-14 day schedule as preventative maintenance. May be used up to the day prior to harvest.

SNS 203™

Safe Around Children And Pets When Used As Directed

Concentrated All Natural Pesticide Soil Drench/Foliar Spray

Kills/Repels Fungus Gnats, Root Aphids, Thrips, Shore Flies & White Flies

Use in Herb, Vegetable & Flower Gardens, Greenhouses and Hydroponics

SNS 203™ active ingredients will cause the pests to dehydrate and die while also attacking fungus & algae to reduce the food source for the pests.

1 Gallon (3.79L) 128 FL. OZ.

Rev7

Caution, Keep Out of Reach of Children.
Caution, Use Eye Protection, Chemical Rated Gloves & Long Sleeve Shirt.

First Aid
Not intended for human consumption.
As with any insecticide, avoid contact with eyes and skin.
If in eyes, flush eyes with water for a minimum of 15-20 minutes.
If on skin, wash skin with soap and water.
If irritation persists contact a physician.
Have the product container or label with you when calling a poison control center or doctor, or going in for treatment.
Poison control center hotline 1-800-222-1222 if over exposure occurs.

Storage and Disposal
Store in a cool, dry area away from heat or open flame.
Do not reuse container.
Dispose in trash or offer for recycling if available.
Warranty and Disclaimer Notice
Please visit www.sierranaturalscience.com/warranty.html for more information
Thoroughly wash all food areas and food materials contacted with soap and water.
Do not use near heat or open flame. Store in cool location out of direct sunlight. Do not freeze.

Questions/Comments?
1-877-626-5505

Patents Pending

www.sierranaturalscience.com
Sierra Natural Science Inc.
1031 Industrial St. Unit C
Salinas, CA. 93901

Made in USA

7 05105 22918 8

State Limited Use

- If a product is not designated by the EPA as an RUP, the director may, after a public hearing, determine a product or use to be a “state Limited Use”

- Must be shown to pose an unreasonable risk to man or the environment

Transportation

- Establishes minimum requirements to safely transport Pesticides
- Provides requirements for transporting pesticides in service containers or Application equipment
- Provides requirements for spill mitigation/clean-up

Applicators

- RIPCA recognizes five different types of pesticide applicators:

- Private
- Certified Private
- Commercial
- Licensed commercial
- Certified commercial

Routine use and records inspection

WE WILL ENSURE……

- THE PRODUCT IS LABELED FOR THE PEST AND LOCATION TO WHICH IT IS APPLIED
- THE PRODUCT IS BEING APPLIED IN ACCORDANCE WITH THE LABEL
- THE APPLICATOR IS WEARING THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) AS PER THE LABEL

RECORDS

- Commercial Applicators – Every commercial applicator is required to keep, for a minimum of two years from the date of application, true and accurate records containing the following information on his or her application of general use, “restricted use”, and “state-limited use” pesticides:

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF AGRICULTURE & RESOURCE MARKETING
PESTICIDES UNIT
235 PROMENADE STREET, ROOM 370
PROVIDENCE, RI 02908
401-222-2781

COMMERCIAL APPLICATOR
PESTICIDE USE RECORDS & REPORTING FORM

Report each use and application of general use, restricted use, and state limited use pesticides on the form below.

APPLICATOR NAME: _____ CERTIFICATION/LICENSE NUMBER: _____

COMPANY: _____

STREET: _____ CITY: _____ STATE: ____ ZIP: _____

NAME OF PESTICIDE PRODUCT	FORMULATION (INCLUDE FORMULATION AND % ACTIVE INGREDIENT)	AMOUNT OF FORMULATION USED	APPLICATION RATE e.g. 3 LBS/1000 1oz/100 GALS.	TOTAL AMOUNT OF DILUTION OR LBS. USED	EPA REG. NUMBER	TARGET PEST	DATE	CONSIGNEES NAME AND ADDRESS
1	2	3	4	5	6	7	8	9

LEAVE BEHIND NOTICES

- A “LEAVE BEHIND NOTICE” IS REQUIRED TO BE LEFT AT THE SITE WHERE PESTICIDES HAVE BEEN APPLIED.

- IT IS LEFT WITH THE EITHER THE CUSTOMER OR INDIVIDUAL IN CHARGE OF THE APPLICATION SITE, SUCH AS A BUILDING MANAGER OF AN APARTMENT COMPLEX

STORAGE


WARNING
PESTICIDES
FIRE WILL CAUSE
TOXIC FUMES

Market Place Inspections

- Conduct 45 marketplace inspections per year
- Ensure all products being sold are registered
- Ensure all products are safely displayed


Moletox
Baited gel
MOLEMAX
Organic
BIOME DEFENSE
MAX
BIOME DEFENSE
MAX
JAPANESE BEETLE LIFE CYCLE

Pesticide Establishment Inspection

- Conduct inspections of facilities in RI that produce pesticides
- Federal Function which requires federal credentials
- Includes sampling to verify product meets the description on the label
- 2 per year


L402
L402
L402
USA/R-1311/13/RL


LIQUICHLOR® 12.5% SOLUTION
NET CONTENTS: 15 GAL.
NSF
NFPA Ratings
Health 3
Fire 0
Reactivity 1
FOR INSTITUTIONAL AND INDUSTRIAL USE
DO NOT STORE IN OR ABOUT DWELLING
DIRECTIONS FOR USE
CONTAINER ADVICE
KEEP CONTAINER CLOSED
EMERGENCY RESPONSE
CORROSIVE
8
LOT NO: RP09839269
PROD NO: 714702
UNIVAR

RUP Dealer Records

- All RUP/SLP dealers must possess a license
- Sales must be reported each year upon renewal

SPECIAL PROJECTS

ENFORCEMENT

- Trugreen: Issued two NOVs totaling $13,000
- Waltham Services: Issued a penalty of $8,500
- Main Street Market: Issued a penalty of $10,000
- Pending enforcement actions: proposed penalties of $5,000 and $2,500.
- All of the formal enforcement actions contained a public health component.

TRAINING SCHEDULE

2018 CORE TRAINING SESSIONS

Core I	Day 1: Thursday, January 25	Day 2: Friday, February 2	8:00 – 4:00 p.m.
Core II	Day 1: Wednesday, February 28	Day 2: Friday, March 14	8:00 – 4:00 p.m.
Core III	Day 1: Wednesday, March 28	Day 2: Friday, April 6	8:00 – 4:00 p.m.
Core IV	Day 1: Wednesday, May 16	Day 2: Wednesday, May 23	8:00 – 4:00 p.m.
Core V	Day 1: Wednesday, July 18	Day 2: Wednesday, July 25	8:00 – 4:00 p.m.

2018 COMMERICIAL CATEGORY & IPM TRAINING SESSIONS*

Category 7A (Household)	Friday, March 30	8:00 – 4:00 p.m.
Category 7D (Vertebrate)	Friday, March 30	8:00 – 4:00 p.m.
Category 7B (Termite)	Thursday, April 5	8:00 – 4:00 p.m.
Category 2 (Forestry)	Friday, April 27	8:00 – 4:00 p.m.
Category 3A (Shade Tree)	Friday, April 27	8:00 – 4:00 p.m.
Category 3B (Turf & Ornamentals)	Friday, April 27	8:00 – 4:00 p.m.
Category 7E (Mosquito)	Thursday, May 17	8:00 – 4:00 p.m.
Category 8 (Public Health)	Thursday, May 17	8:00 – 4:00 p.m.

**These sessions fulfill "RUP" certification requirements and IPM Training.*

What we know about pesticide use

- Certified private applicators report RUP use
- Dealers submit RUP sales
- Approximately 9,000 registered pesticide products
- Few reported drift complaints
- Few reported bee kills

What we don’t know

- How much GUP is used by farmers
  - Many farmers are not certified
- Whether or not homeowners follow labels
- Whether or not homeowners over-apply
- How many unlicensed applications are made
  - We have a very limited enforcement presence

250-RICR-40-15-2

TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 40 - AGRICULTURE AND RESOURCE MARKETING

SUBCHAPTER 15 - PESTICIDES

PART 2 - Rules and Regulations Relating to Pesticides

2.1 Purpose

The purpose of these Rules and Regulations is to ensure the enforcement and administration of the Rhode Island Pesticide Control Act and its amendments, the protection of public health and to avoid degradation of the environment of the State. The regulations as herein set forth include, but are not limited to, providing for the collection, examination, and reporting of samples of pesticides or devices; the safe use, handling, transportation, storage, display, distribution, and disposal of pesticides and their containers; provide for labeling requirements of all pesticides; prescribe methods to be used in the application of pesticides; and establish standards of minimum competence levels for applicators of pesticides.

2.2 Authority

A. These Rules and Regulations are promulgated pursuant to the requirements and provisions of R.I. Gen. Laws Chapters 42-17.1, “Department of Environmental Management”, 42-17.6, “Administrative Penalties for Environmental Violations”, and R.I. Gen. Laws § 23-25-1, “Pesticide Control Act”, and in accordance with the provisions of R.I. Gen. Laws Chapter 42-35, the "Administrative Procedures Act".

B. Pursuant to the above cited provisions of the R.I. Gen. Laws, the Department of Environmental Management’s Division of Agriculture & Resource Marketing its Chief and designated agents shall be responsible for carrying out the provisions of these Rules and Regulations.

2.3 Applicability

The terms and provisions of these Rules and Regulations shall be liberally construed to permit the Department to effectuate the purposes of state law, goals, and policies.

2.4 Definitions

A. For the purpose of these regulations, the following terms shall have the following meanings:

1. "Director" means the Director of the Department of Environmental Management as defined in R.I. Gen. Laws § 23-25-4.

2. "C.F.R." means Code of Federal Regulations published in the Federal Register by the executive department and agencies of the Federal Government of the United States of America.

3. "Community water supply" means any public water supply, which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round individuals.

4. "Conspicuous points of access" means the usual and customary entrance(s) where people are likely to enter a treated area and observe posted signs pursuant to § 2.24 of this Part.

5. "Department" means the Rhode Island Department of Environmental Management.

6. "Immediate farm family member" means only the spouse, children, stepchildren, foster children, parents, stepparents, foster parents, brothers and sisters.

7. "Original container" means the package the pesticide or device was placed in by the manufacturer for distribution, sale, consumption, use or storage. The term does not include any shipping or bulk container used for transporting or delivering the pesticide unless it is the only such package.

8. "Public health" means the optimal well-being of the general public both individually and collectively as communities of the human race.

9. "Public water supply" means a system for the provision of the public of piped water for human consumption, if such system has at least fifteen service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days of the year.

10. "RIPCA" means R.I. Gen. Laws Chapter 23-25, Rhode Island Pest Control Act.

11. "School" means a public or private elementary or secondary school having kindergarten or any of grades one (1) through twelve (12). The term school includes any school building and any area outside of a school (including a lawn, playfield, sports field) that is used, managed or owned by the school or school district for school related activities.

12. "School emergency" means an urgent need to mitigate or eliminate a pest that threatens the health or safety of a student or staff member at a school.

13. "Service container" means any container, other than the original container of a registered pesticide provided by the registrant, or pesticide application equipment, which contains the original material that is utilized to hold, store, or transport a pesticide concentrate or a pesticide use-dilution preparation.

14. "Use of a pesticide" means any act of handling or release of a pesticide or the exposure of public health or the environment to a pesticide, but excluding normal handling associated with pesticide distribution, through acts including but not limited to:

    a. Application of a pesticide including mixing or loading of equipment and any required supervisory action in or near the area of application.

    b. Storage actions for pesticides and pesticide containers.

    c. Disposal actions for pesticides and pesticide containers.

    d. Recommendation of a pesticide application; and/or

    e. Other activities as defined by the Federal Worker Protection Standard 40 C.F.R. § 156 (2008).

2.5 "Restricted Use" and "State Limited Use" Pesticides

A. "Restricted Use" Pesticides – Any pesticide which is classified as "restricted use" by the administrator of EPA under 7 U.S.C. § 136a(d)(1), or as a "state-limited use" pesticide under the R.I. Gen. Laws § 23-25-9 of the Rhode Island Pesticide Control Act. A listing of such "restricted use" pesticides shall be maintained with the Division of Agriculture.

B. "State Limited Use" Pesticides – In accordance with R.I. Gen. Laws § 23-25-9 of the Rhode Island Pest Control Act, the pesticides contained herein are classified as "state limited use". As such, the following restrictions and/or conditions of use shall apply:

    1. Effective January 31, 1987, all uses, distribution and sale of pesticide products containing Chlordane have been canceled and banned:

        a. Products containing Chlordane shall not be distributed or used in the State of Rhode Island.

        b. Products containing Chlordane shall not be distributed or offered for sale by any person, dealer, store, or company in the State of Rhode Island.

2. The registration of products containing Alar (daminozide) shall be subject to the requirements “state limited use” effective May 15, 1986.

3. Effective September 1, 2006, the following pesticides shall be classified as “state limited use” pesticides in the State of Rhode Island due to their potential as ground water contaminants:

    a. Acetochlor {2-chloro-N-ethoxymethyl-6’-ethylacet-o-toluidide, 2-chlolo-N-(ethoxymethyl)-N-(2-ethyl-6- methylphenyl) acetamide, or related compounds.}

    b. Alachlor {2-Chloro-2,6’-diethyl-N-(methoxymethyl)- acetanilide or related compounds}

    c. Cyanazine {2-[[4-chloro-6-(ethylamino)1,3,5-triazin-2-yl]amino]-2-methylpropionitrile or related compounds}

    d. Metolachlor {2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide or related compounds}

    e. Simazine {2-Chloro-4,6-bis(ethlamino)-s-triazine or related compounds}

    f. Dacthal DCPA (dimethyl tetrachloroterephthalate).

4. All applicators must report annually applications of pesticides containing wholly or in part any of the chemicals listed in § 2.5(B)(3) of this Part. At a minimum the following information must be reported:

    a. The brand name or trade name of the pesticide;

    b. The EPA registration number of the pesticide;

    c. The total amount of pesticide applied;

    d. The purpose for which the pesticide was applied; including the target pest(s) and the exact location where the pesticide was applied on the property.

    e. The name and address of the place of application;

    f. The specific field or land area of the application, if different from § 2.5(B)(4)(e) of this Part;

    g. If applied to a food crop, the crop to which the application was made; and

    h. And the month, day, and year of the application.

5. Pesticides listed in § 2.5(B)(3) of this Part must be applied in accordance with its EPA approved label and the Pesticide State Management Plan, if the Department has developed such a plan. A copy of such plans shall be available for review upon request at the Department's Bureau of Natural Resource, Agriculture and Resource Marketing. If a plan is not required, then the pesticide must be applied in accordance with its approved EPA label.

2.6 Record Keeping Requirements

A. Dealer Records – Any person issued a dealer's license is required to keep, for at least two full years, true and accurate records containing the following information:

1. The delivery, distribution, movement, storage, or holding of any "restricted use" or "state limited use" pesticide, including the quantity;

2. The date of shipment, sale and receipt;

3. The EPA registration number;

4. The name of consignor and name and certification number of the consignee.

B. Commercial Applicators – Every commercial applicator is required to keep, for a minimum of two years from the date of application, true and accurate records containing the following information on his or her application of general use, "restricted use", and "state-limited use" pesticides:

1. The brand names or trade names of the pesticides;

2. The formulation used and the quantity of that formulation used at each site or property, as well as the total amount of the dilution spray applied of each pesticide product, when listed on the pesticide label.

3. The EPA registration number for each pesticide product;

4. The purposes for which the pesticides were applied; the target pest(s) and the exact locations where the pesticide(s) were applied on the property. For spot treatments, list site (e.g. lawn) and "spot treatment."

5. The month, day, and year of the application;

6. The consignees name and address;

7. Upon completion of the application, the applicator shall leave a detailed invoice at the property treated containing the following information:

a. The product name and EPA Registration Number of the pesticide(s) and the amount applied;

b. The name of the persons certified or licensed by the Department as well as person(s) applying the pesticide under the direct supervision of a certified or licensed commercial applicator who participated in the planning and execution of the application;

c. The applicators certification and/or license number;

d. Any post-application, safety, environment or health instructions specified on the label for the end use product. This information may also be provided to the customer prior to the application; and

e. In the case of pesticide applications made to rights-of-way owned by a Public Agency and/or Utility Companies, this notification shall be made by the applicator(s) to the Utility Company or Public Agency. When requested by adjacent or abutting property owners whose lands abuts the right-of-ways, it will be the responsibility of the Public Agency or Utility Company to provide the information stated in §§ 2.6(C)(8)(a) through (d) of this Part.

8. Termiticide application records shall also include:

a. A diagram of the structure depicting the lower level treated and exterior treatments;

b. The location of the active termite infestation(s) or evidence of an untreated termite infestation, except when applying as a pretreatment application; and

c. Location of known wells, drainage systems, and any water bodies such as streams and ponds located within 100 feet from the treated structure.

C. Private Applicators – Certified private applicators are required to keep, for a period of at least two full calendar years, true and accurate records containing the following information on their yearly use of each “restricted use” and “state limited use” pesticide:

1. The brand name or trade name of the pesticide;

2. The EPA registration number of the pesticide;

3. The amount of pesticide applied;

4. The purpose or target pest(s) for which the pesticide was applied;

5. If the application is made to a crop, a commodity, stored product or site:

    a. Name and address of the farm;

    b. The specific field or land area of the application;

    c. The size of the area treated.

6. The month, day, and year of the application;

7. Name of the applicator applying or supervising the application and certification number;

8. Application records of restricted use pesticides to a total area of less than one-tenth (1/10) of an acre (spot treatments) must include:

    a. The brand name or registered name of the pesticide;

    b. The EPA Registration Number;

    c. The total amount applied;

    d. The field location, which must also be designated as a “spot treatment.”

    e. The site, crop or commodity;

    f. The month, day and year of the application Greenhouse and Nursery Applications are excluded from the spot treatment provisions, if treating less than 1/10 acre.

9. Applications of restricted use pesticides must be recorded no later than 14 days following pesticide applications and must be maintained for 2 years following the application.

D. Records Availability – Records required by §§ 2.6(A) through (C) of this Part shall be made promptly available to the Director, or his designee, upon a reasonable demand.

2.7 Categories for Commercial Applicators

A. The Director may, after a public hearing, add additional categories or subcategories as needed for the certification of commercial applicators.

B. Every commercial applicator who uses or supervises the use of a “restricted use” or “state limited use” pesticide in any of the following categories and subcategories must be certified pursuant to § 2.9 of this Part for that category and sub-category. The categories and sub-categories for commercial applicators are:

2.7.1 Category 1: Agricultural Pest Control

A. Category 1A - Plant – This category includes commercial applicators using or supervising the use of “restricted use” or “state limited use” pesticides in the production of agricultural crops, such as feed grains, forage, vegetables, fruits & nuts, as well as on grasslands and non-crop agricultural lands.

B. Category 1B - Animal – This category includes applicators using or supervising the use of “restricted use” or “state limited use” pesticides on animals, such as beef cattle, dairy cattle, swine, sheep, horses, goats, poultry, and livestock, and to places on or in which animals are confined. Veterinarians and physicians who only apply pesticides as drugs or medication during the course of their normal practice need not become certified (or licensed). This exclusion is not applicable to physicians and veterinarians who apply pesticides for hire, who publicly hold themselves out as pesticide applicators, or who engage in large-scale use of pesticides in this category.

2.7.2 Category 2: Forest Pest Control

This category includes commercial applicators using or supervising the use of “restricted use” or “state limited use” pesticides in forests, forest nurseries, and forest seed producing areas.

2.7.3 Category 3: Ornamental and Turf Pest Control

A. This category includes applicators using or supervising the use of “restricted use” or “state limited use” pesticides as stated in the sub-categories below:

1. Category 3A - Shade Tree (Arborist) – Applicators using or supervising the use of pesticides in the maintenance and production of ornamental trees.

2. Category 3B - Custom Grounds – Applicators using or supervising the use of pesticides in the maintenance and production of ornamental shrubs, flowers and turf.

3. Category 3C - Interior Scape - Applicators using or supervising the use of pesticides in the maintenance and production of plants inside buildings.

2.7.4 Category 4: Seed Treatment

This includes commercial applicators using or supervising the use of “restricted use” or “state limited use” pesticides on seeds.

2.7.5 Category 5: Aquatic Pest Control

A. This category includes applicators using or supervising the use of “restricted use” or “state limited use” pesticides as stated in the sub-categories below:

1. Category 5A - Aquatic Weed Control: This category includes commercial applicators using or supervising the use of “restricted use” or “state limited use” pesticides purposefully applied to standing or running water such as lakes, ponds, reservoirs, rivers and streams for the purpose of controlling aquatic weed and insect pests. Applicators engaged in public health related activities included in Category 8 (§ 2.7.8 of this Part) are excluded.

2. Category 5B - Anti-Fouling Paints: This category includes applicators and/or employees of commercial boatyard facilities engaged in the construction, storage, maintenance, repair or refurbishing of vessels who are applying anti-fouling paints.

3. Category 5C - Sewer Root Control: Applicators using or supervising the use of pesticides in the maintenance of sewer line and wastewater plant systems.

2.7.6 Category 6: Right-of-Way Pest Control

This category includes commercial applicators using or supervising the use of “restricted use” or “state limited use” pesticides in the maintenance of public roads, electric power lines, pipelines, railway rights-of-way of other similar areas.

2.7.7 Category 7: Industrial, Structural and Health Related Pest Control

A. This category includes applicators using or supervising the use of “restricted use” or “state limited use” pesticides as stated in the sub-categories below:

1. Category 7A - General Pest – Applicators who use or supervise the use of pesticides for the control of general household pests such as fleas, cockroaches, bedbugs, ants, ticks, chiggers, mites, rats, mice, yellow jackets, hornets.

2. Category 7B - Termite and Structural Pest – Applicators who use or supervise the use of pesticides for control of termites, carpenter ants, powder post beetles, dry rot and other wood destroying organisms.

3. Category 7C - Fumigation – Applicators who use or supervise the use of pesticides that vaporize, or are in a gaseous phase, and kill by action of a toxic gas in houses, warehouses, box cars, etc.

4. Category 7D - Vertebrate – Applicators who use or supervise the use of pesticides for the control of bats, birds, etc.

5. Category 7E - Mosquitoes and Biting Flies – Applicators who use or supervise the use of pesticides for the control of such biting or stinging arthropods such as mosquitoes, and black flies, horseflies.

6. Category 7F - Food Processing Pest Control – Applicators who use or supervise the use of pesticides to control pests in, on or around food processing plants which may include, but not be limited to bakeries, dairy product processing plants, canning and frozen food packing, confection manufacturing and meat product processing plants.

2.7.8 Category 8: Public Health Pest Control

This category includes State, Federal or other government employees using or supervising the of “restricted use” or “state limited use” pesticides in public health programs for the management and control of pests having medical and public health importance.

2.7.9 Category 9: Regulatory Pest Control

This category includes State, Federal or other government employees who use or supervise the use of “restricted use” or “state limited use” pesticides in the control of regulated pests.

2.7.10 Category 10: Demonstration and Research Pest Control

A. This category includes:

1. Category 10A - Individuals who demonstrate the proper use and techniques of application of “restricted use” or “state limited use” pesticides or supervise such demonstrations, including extension specialists and county agents, sales representatives demonstrating pesticide products, and those individuals demonstrating methods used in public programs and

2. Category 10B - Persons conducting field research with “restricted use” or “state limited use” pesticides, and, in doing so, use or supervise the use of “restricted use” or “state limited use” pesticides including extension specialists and county agents, State or Federal, commercial and other persons conducting field research on or utilizing pesticides.

2.7.11 Category 11: Wood Preservation

A. This category includes applicators using or supervising the use of “restricted use” or “state limited use” pesticides as stated in the subcategories below:

1. Category 11A - Pole Treatment – Applicators who use or supervise the use of pesticides for the control of fungi, and insects to utility poles and posts.

2. Category 11B - Pressure Treatment – Applicators who use or supervise the use of pesticides to preserve wood either by utilizing pressure and non-pressure processes to control fungi and insects.

2.8 Commercial Applicator Certification Procedure

A. Each person engaged in the application of any “restricted use” or “state limited use” pesticide” as a commercial applicator shall possess a valid commercial applicator certificate issued by the Director, except that a person who is applying a “restricted use” or “state limited use” pesticide under the direct supervision of an appropriately certified commercial applicator shall not be required to possess such a certificate.

B. Application for certification shall be filed with the Department on forms supplied by the Department, and shall contain such information, as the Director shall require.

C. A fee of $45.00 shall be charged prior to the issuance of the initial certification document and at the time of each annual renewal or re-certification thereafter.

D. A certification document shall be valid for a period beginning with the actual date of issuance and ending on January 31st, unless it has been revoked or suspended prior thereto by the Director for cause;

E. Competence in the use and handling of pesticides by commercial applicators, who wish to become certified shall be determined on the basis of written examinations, and, as appropriate, performance testing, based upon standards set forth in §§ 2.10 and 2.11 of this Part. Such examination and testing shall include the general standards applicable to all categories and the additional standards specifically identified for each category or sub-category in which an applicator is to be classified under § 2.8 of this Part.

F. A person shall not be determined certifiable in any category or sub-category until such person passes the required examinations as provided by § 2.8(B) of this Part.

G. Any person who has failed to renew their commercial certification within a year of their certification expiration date shall regain their certification solely by reexamination. Such re-examination shall include the required core exam plus any categories for which certification was previously held. Persons who have failed to renew their commercial certification beyond one year of their certification expiration date shall regain their certification by attending the training course and by taking the exam for the commercial core and for any categories for which certification was previously held.

H. Commercial applicators shall cooperate with the Department requests to observe spraying operations, to inspect equipment, to inspect pesticide related records, to inspect business premises and to conduct pesticide related sampling.

I. The Director may deny certification or may suspend, revoke, or otherwise modify a certificate once issued for reasons including any of the following:

1. That the applicant made a false or misleading statement in the application for certification;

2. That the applicant or certificate holder has violated any provision of the Rhode Island Pest Control Act or regulations promulgated thereunder;

3. That the applicant or certificate holder does not have in effect or fails to maintain in effect financial responsibility in the amounts specified in § 2.22 of this Part.

4. That the applicant or certificate holder uses or applies a pesticide, excluding pesticides for which an EPA experimental use permit has been issued, which has not been duly registered under the provisions of R.I. Gen. Laws § 23-25-6.

J. No person under eighteen (18) years of age shall be eligible for certification as a commercial applicator or be eligible to apply pesticides under the direct supervision of a certified applicator.

2.9 General Standards for all Categories and Subcategories of Commercial Applicators

A. All commercial applicators must demonstrate practical knowledge of the principles and practices of pest control and safe use of pesticides. Testing shall be based on examples of problems and situations appropriate to the particular category or sub-category, if any, in which the applicant wishes to be certified in the following areas:

1. Label and Labeling Comprehension

   a. General format and terminology;

   b. Understanding of instruction, warnings, terms, symbols, and other information commonly appearing on pesticide labels;

   c. Classification of the products, general or restricted; and

   d. Necessity for use consistent with the label, or as otherwise allowed by interpretation or regulations.

2. Safety

   a. Pesticide toxicity and hazard to human health 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. Groundwater and surface water drainage patterns.

4. Pests

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.

d. Knowledge of Integrated Pest Management (IPM) practices and procedures.

e. Non-chemical procedures or sets of procedures where available that could substitute for a pesticide or decrease the amount required.

5. Pesticides

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 which influence effectiveness or lead to such problems as resistance to pesticides; and

f. Dilution procedures.

g. Residues associated with use.

6. Equipment

a. Types of equipment and advantages and limitations of each type; and

b. Uses, maintenance and calibration.

7. Application Techniques

a. Methods of procedures used to apply various formulations of pesticides, solutions, and gases, together with a knowledge of which technique of application to use in a given situation;

b. Relationship to discharge and placement of pesticides to proper use, unnecessary use, and misuse; and

c. Prevention of drift and pesticide loss into the environment.

8. Laws and Regulations Applicable State and Federal Laws and Regulations.

2.10 Specific Standards of Competency for Each Category and Sub-category of Commercial Applicators

Commercial applicators in each category shall be particularly qualified with the respect to the specific standards elaborated.

2.10.1 Agricultural Pest Control

A. Plant – Applicators must demonstrate practical knowledge of crops grown and the specific pests of those crops on which they may be using “restricted use” or “state limited use” pesticides. The impact 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, pre-harvest intervals, re-entry intervals, phytotoxicity, and potential for environmental contamination, non-target injury

and community problems resulting from the use of “restricted use” or “state limited use” pesticides in agricultural areas.

B. 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 residue potential, since host animals will frequently be used for food. Further, the applicator must know the relative hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.

2.10.2 Forest Pest Control

Applicators shall demonstrate practical knowledge of types of forests, forest nurseries, and seed production in their state 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 access. The applicator must therefore demonstrate practical knowledge of control methods, which will minimize the possibility of secondary problems such as unintended effects on beneficial insects, fish, birds and wildlife. Proper use of specialized equipment must be demonstrated, especially as it may relate to meteorological factors and adjacent land use.

2.10.3 Ornamental and Turf Pest Control

A. Shade Tree – Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental and shade trees, including cognizance of potential phytotoxicity due to a wide variety of plant material, drift, and persistence beyond the intended period of pest control. Because of the frequent proximity of human habitations to application activities, applicators in this sub-category must demonstrate practical knowledge of application methods, which minimize or prevent hazards to humans, pets, and other domestic animals, wells and water bodies.

B. Custom Grounds – Applicators shall demonstrate practical knowledge of pesticide problems associated with the production and maintenance of shrubs, plantings, and turf, including cognizance of potential phytotoxicity due to a wide variety of plant material, drift, and persistence beyond the intended period of pest control. Because of the frequent proximity of human habitations to application activities, applicators in this sub-category must demonstrate practical knowledge of application methods, which will minimize or prevent hazards to humans, pets, and other domestic animals, wells and water bodies.

C. Interior Scape – Applicators shall demonstrate a practical knowledge of pesticide problems associated with the production and maintenance of indoor plantings maintained for aesthetic purposes, including cognizance of potential phytotoxicity due to a wide variety of plant material, drift, and persistence beyond the intended period of pest control. Since human exposure including babies, children, pregnant women and elderly people is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this subcategory.

D. Seed-Treatment – Applicators shall demonstrate practical knowledge of types of seeds that require chemical protection against pests and factors such as seed coloration, carriers, and surface active agents, which influence pesticide binding and may affect germination. They must demonstrate practical knowledge of hazards associated with handling, sorting and mixing, and misuse of treated seed such as introduction of treated seed into food and feed channels, as well as proper disposal of unused treated seeds.

2.10.5 Aquatic Pest Control

A. Aquatic Weed Control – Applicators shall demonstrate practical knowledge of the secondary effects which can be caused by improper application rates, incorrect formulations, and faulty application of “restricted use” or “state limited use” 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.

B. Anti-Fouling Paints – Applicators shall demonstrate practical knowledge of the fouling control mechanism of anti-fouling paints and the various factors that can affect anti-fouling performance. In addition, applicators must be familiar with and understand the effect of anti-fouling paints on non-target organisms and the concept of spill management. Knowledge of special application practices and understanding of the effects of improper or unnecessary use of anti-fouling paints are required for the applicator and are essential for the applicator and the environment.

C. Sewer Root Control – Applicators shall demonstrate practical knowledge of pesticides used for the maintenance of sewer lines and wastewater plant systems.

2.10.6 Right-of-Way Pest Control

Applicators shall demonstrate practical knowledge of wide variety of environments, since rights-of-way can transverse many different terrains,

including waterways. They shall demonstrate practical knowledge of problems on runoff, drift, and excessive foliage destruction and ability to recognize target organisms. They shall also demonstrate practical knowledge of the nature of herbicides and the need for containment of these pesticides within the right-of-way area, and the impact of their application activities in the adjacent areas and communities.

2.10.7 Industrial, Institutional, Structural and Health Related Pest Control

A. General Pest – Applicators must demonstrate a practical knowledge of a wide variety of pests, rats and mice, 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. Since human exposure, including babies, children, pregnant women, and elderly people, is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category. Because health related pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions, particularly related to this activity.

B. Termite and Structural Pest – Applicators must demonstrate a practical knowledge of a wide variety of wood destroying organisms, including their life cycles, types of formulations appropriate for their control, and methods of application that avoid contamination of food, wells, damage and contamination of habitat, and exposure of people and pets. Since human exposure, including babies, children, pregnant women, and elderly people, is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category.

C. Fumigation – Applicators must demonstrate a practical knowledge of a wide variety of pests, including their life cycles, types of fumigation materials appropriate for their control, and methods of application that avoid contamination of habitat, and exposure of people and pets. Since human exposure is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category.

D. Vertebrate – Applicators must demonstrate a practical knowledge of rodents and birds including their life cycles, types of formulations appropriate for their control, and methods of application that avoid contamination of food, damage and contamination of habitat, and exposure of people and pets. Since human exposure, including babies, children, pregnant women, and elderly people is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category.

Because vertebrate pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions, particularly related to this activity.

E. Mosquitoes and Biting Flies – Applicators must demonstrate a practical knowledge of a variety of 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. Since human exposure is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category. Because a health related pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions, particularly related to this activity.

F. 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 to people. Since human exposure, including pregnant women and elderly people 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 in the various situations encountered in this subcategory.

2.10.8 Public Health Pest Control

Applicators shall demonstrate practical knowledge of vector-disease transmission as it relates to and influences application programs. A wide variety of pests are involved and it is essential that they be known and recognized, and appropriate life cycles and habitats be understood as a basis for control strategy. These applicators shall have practical knowledge of a great variety of environments ranging from streams to those conditions found in buildings. They should also have practical knowledge of the importance and employment of such non-chemical control methods as sanitation, waste disposal and drainage.

2.10.9 Regulatory Pest Control

Applicators shall demonstrate practical knowledge of regulated pests, applicable laws relating to quarantine and other regulation of pests, and the potential impact on the environment of “restricted use” or “state limited use” pesticides used in suppression and eradication programs. They shall demonstrate knowledge of factors influencing introduction, spread, and population dynamics of relevant pests. Their knowledge shall extend beyond that required by immediate duties, since their services are frequently required in other areas of the country where emergency measures are invoked to control regulated pests and where individual judgements must be made in new situations.

2.10.10 Demonstration and Research Pest Control

Persons demonstrating the safe and effective use of pesticides to other applicators and the public will be expected to meet comprehensive standards reflecting a broad spectrum of pesticide uses. Many different pest problem situations will be encountered in the course of activities associated with demonstration, and practical knowledge of problems, pests, and population levels occurring in each demonstration situation is required. Further, they should demonstrate an understanding of pesticide-organism interactions and the importance of integrating pesticide use with other control methods. In general, it would be expected that applicators doing demonstration pest control work possess a practical knowledge of all the standards detailed in the General Standards. In addition, they shall meet the specific standards required for categories §§ 2.10.7(A) through (F) of this Part as may be applicable to their particular activity. Persons conducting field research or method improvement work with “restricted use” or “state limited use” pesticides should be expected to know the General Standards. In addition, they shall be expected to know the specific standards required for §§ 2.10.7(A) through (F) of this Part, applicable to their particular activity, or alternatively, to meet the more inclusive requirements listed under “Demonstration”.

2.10.11 Wood Preservation

A. Applicators must demonstrate a practical knowledge of a wide variety of wood destroying organisms such as fungi and insects, including but not limited to their life cycles, types of formulations appropriate for their control, and methods of application that avoid contamination of wells or water bodies, damage and contamination of habitat, and exposure of people and pets. Because human exposure can be a potential problem, applicators must demonstrate practical knowledge of the specific factors which may lead to a hazardous condition, including continuous exposure in the various situations encountered in this sub-category:

1. Pole Treatment – Applicators who use or supervise the use of pesticides must demonstrate a practical knowledge of the control of fungi, and insects to utility poles and posts.

2. Pressure Treatment – Applicators who use or supervise the use of pesticides in this sub-category must demonstrate a practical knowledge of wood preservation by either utilizing pressure and non-pressure processes to control fungi and insects.

2.11 Private Applicator Certification Procedure

A. Each person engaged in the application of any “restricted use” or “state limited use” pesticide as a private applicator shall possess a valid private applicator certificate issued by the Director, except that a person who is applying a

restricted-use or limited use pesticide under the direct supervision of an appropriately certified applicator shall not be required to possess such a certificate.

B. Application for certification shall be filed with the Department on forms supplied by the Department, and shall contain such information as the Director shall require.

C. A fee of $20.00 shall be charged prior to the issuance of the initial certification document and at the time of each annual renewal or re-certification thereafter.

D. A certification document shall be valid for a period beginning with the actual date of issuance and ending on December 31st, unless it has been revoked or suspended prior thereto by the Director for cause.

E. Competence in the use and handling of pesticides by private applicators who wish to become certified shall be determined primarily on the basis of written examinations. Oral examinations and performance testing may be utilized in conjunction with, and not in lieu of, written examinations. Such examinations and testing shall be based upon standards set forth in § 2.13 of this Part.

F. A person shall not be determined certifiable as a private applicator until such person passes the required examinations as provided by § 2.11(E) of this Part.

G. Any person who has failed to renew their private certification within a year of their certification expiration date shall regain their certification solely by reexamination. Such re-examination shall include the required core exam and commodity exams for which certification was previously held. Persons who have failed to renew their private certification beyond one year of their certification expiration date shall regain their certification by both attending the private core training course and taking the exam for the private core and commodity exams for which certification was previously held.

H. No person under eighteen (18) years of age shall be eligible for certification as a private applicator.

I. Private applicators shall cooperate with the Department requests to observe spraying operations, to inspect equipment, to inspect pesticide related records, to inspect pesticide storage area and to conduct pesticide related sampling.

J. The Director may deny certification or may suspend, revoke, or otherwise modify a certification once issued for reasons including the following:

1. That the applicant made a false or misleading statement in the application for certification;

2. That the applicant or certificate holder has violated any provisions of the RIPCA or regulations promulgated thereunder;

3. That the applicant or certificate holder uses or applies a pesticide, excluding pesticides for which an EPA experimental use permit had been issued, which as not been duly registered under the provisions of R.I. Gen. Laws § 23-25-6.

2.12 Standards of Competency for Private Applicators

A. Private applicators must show that he or she possesses a practical knowledge of the pest problems and pest control practices associated with his or her agricultural operations; proper storage, use, handling and disposal of the pesticides and containers; and his or her related legal responsibility appropriate to 40 C.F.R. § 171.5(a) (2017). This practical knowledge includes the ability to:

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

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

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

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

5. Recognize poisoning symptoms and procedures to follow in case of a pesticide accident.

2.13 Pesticide Registration

A. No out-of-state manufacturer, producer, or distributor shall offer a pesticide for (Retail) sale in Rhode Island through mail order catalogues, direct mail, electronic or other media or advertising without first registering that pesticide according to the provisions of R.I. Gen. Laws § 23-25-6.

B. Pesticide products which have the same formula, the same EPA registration number, are manufactured and distributed by the same person, the labeling of which contains the same claims, and the labels of which bear a designation identifying the product as the same pesticide product may be registered as a single pesticide product; and additional names and labels shall be added by supplement statements during the current period of registration.

C. If during the current registration period, the manufacturer or producer changes or alters any part of the active ingredient statement of a pesticide product registered

with the Director, they must register the pesticide product as a new product whether or not it receives a new EPA registration number.

2.14 Experimental Use Permits

A. Any person who intends to use a pesticide, for which an experimental use permit had been issued by EPA pursuant to Section 5(a) of FIFRA, in Rhode Island, shall, prior to its shipment to and/or use in Rhode Island notify the Director of their intent and shall apply for permission to do so. The applicant shall supply the Director with the following information:

1. Type of product
2. Name of product
3. Name and address of permittee
4. Active ingredient name and percentage
5. Inert ingredient percentage
6. Experimental permit no.
7. Complete label and labeling
8. Amount to be used
9. Names and addresses of applicators involved
10. Application sites or locations
11. Efficacy, and/or toxicological studies or data
12. Such other information as the Director deems necessary to protect public and the environment

B. Any person who (after having received permission from the Director to do so) uses and/or applies a pesticide, for which EPA has issued an experimental use permit, shall submit to the Director within six months a report on the results of such use and/or application.

2.15 Certification Documents

A. Certified Commercial Applicators

1. Commercial applicators may be issued certification documents only after they have paid the required fee and successfully complied with the procedure set forth in § 2.9 of this Part.

2. The Director shall issue a wallet size certification document with the following information:

    a. Applicator's name,

    b. Address,

    c. Certification number,

    d. Expiration date,

    e. Categories of certification,

    f. Place for applicator's signature.

3. The wallet size document shall be on the applicator's person at all times when applying a general use, "restricted use" or "state limited use" pesticide. This document will also be utilized by the applicator as a means of identification for his purchase of "restricted use" or "state limited use" pesticides.

B. Certified Private Applicators

1. Private applicators may be issued certification documents only after they have paid the required fee and have successfully completed the procedure set forth in § 2.12 of this Part.

2. The Director shall issue a wallet size certification document with the following information:

    a. Applicator's name,

    b. Address,

    c. Certification number,

    d. Expiration date,

    e. Categories or certification,

    f. Limitations,

    g. Place for applicator's signature.

3. The wallet size document shall be on the applicator's person at all times they are using a general use, "restricted use" or "state limited use" pesticide. This document will also be utilized by the applicator as a means of identification for his purchase of "restricted use" or "state limited use" pesticides.

C. All sales of “restricted use” or “state limited use” pesticides are limited to those who are certified or those who have been authorized by a certified applicator to purchase the same. Authorization to purchase “restricted use pesticides” where purchase authority has been delegated by a certified applicator shall be in such form and contain such information as may be prescribed by the Director.

2.16 Maintenance of Pesticide Certification and Licensing

A. All licensed and certified pesticide applicators are required to maintain competency in the use and application of pesticides. Every five years from the date of their license or certification, licensed and certified applicators must demonstrate competency by either re-examination, or by accruing the required number of credit hours through continuing education as specified for each license and certification in § 2.16(B) of this Part in order to:

1. Ensure that they continue to meet the requirements of changing technology, covering uses for which they are certified or licensed;

2. Assure that they maintain a continuing level of competence and ability to use pesticides safely and properly covering uses for which they are certified or licensed; and

3. Acquaint them with changes in Federal and State regulations.

B. Credit Hours – A standard number of credit hours will be required within every five years beginning from the date the applicators receive their initial license or certification in order for an applicator to maintain their license or certification as an applicator of pesticides. Recertification credits must be obtained by attendance at a Department approved training program. The total number of recertification credits required for each license or certification category are as follows:

1. Private Certification – Six (6) Credit Hours every five years.

2. Commercial License – Eight (8) Credit Hours every five years.

3. Commercial Certification – Eight (8) Credit Hours Per Category every five years. One credit hour equals fifty (50) consecutive minutes of continuing education training.

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

1. Amount

    a. Fifty (50) consecutive clock minutes is equivalent to one credit hour.

    b. One continuing education credit unit (CEU) equals ten credit hours.

    c. One semester hour equals fifteen (15) credit hours.

2. Continuing Education Provider Standards

    a. Course Objectives: Objectives shall be written and be the basis for determining content, learning experience, teaching methodologies, and evaluation.

    b. Subject Matter: Appropriate subject matter for continuing education purposes shall include, but not be limited to, one or more of the following:

        (1) Applicable State and Federal Laws and Regulations;

        (2) Integrated Pest Management;

        (3) Non-chemical Alternatives;

        (4) Ground Water or Surface Water Protection;

        (5) Endangered Species;

        (6) Pesticide Impact on Human Health;

        (7) Pesticide Impact on beneficial insects, fish, birds and wildlife

        (8) Label and Labeling Comprehension;

        (9) Acute and Chronic Toxicity;

        (10) Biological Control;

        (11) Subject matter which improves competency and is not specified on the foregoing list.

    c. Employees orientation or in-service presentations concerning standard operating procedures specific to the employing agency shall not be accepted for continuing education purposes.

    d. Subject matter shall be described in outline form and shall include course objectives, content, time allotment, faculty and evaluation format.

e. Continuing Education providers must notify the Department a minimum of fourteen (14) days in advance of offering credit hours, location(s) and contact persons.

3. Method of Obtaining Credit Hours: workshops, lectures and seminars provided by trade associates, companies, and educational institutes are acceptable for obtaining continuing education credit hours. Continuing education credit hours may also be obtained from an academic institution, a self-study or correspondence course, and for teaching and/or publishing activities provided the following standards are adhered to:

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

   b. Self-Study or Correspondence Course: The course must:

      (1) Be developed by a professional group which is a pesticide related educational corporation or professional association;

      (2) Follow a logical sequence;

      (3) Involve the student by requiring active response to module materials and providing feedback;

      (4) Contain a test to indicate progress and verify completion of module; and

      (5) Supply a bibliography for continued study.

   c. Teaching or Publication: Continuing education hours may be earned by teaching a particular course, seminar series, or workshop for the first time, delivering a paper or lecture, or publishing an article or book in pesticide use. As provided above, a course, seminar, or book may be considered for up to nine (9) continuing education hours; a published article may be considered the equivalent of up to five (5) credit hours; and a lecture or paper may be considered the equivalent of up to three (3) credit hours.

4. Education Methods

   a. Learning experiences and teaching methods should be appropriate to achieve the objectives of the program.

b. Principles of adult education should be considered in the design of the program.

c. Time allotted for each activity should be sufficient for the student to meet the objectives of the program.

5. Faculty Qualifications – Faculty should be familiar with the principles of adult education and should provide documentation to the provider/student illustrating competency in the content of the planned learning experience.

6. Evaluation

a. Provision may be made for evaluating the participant's attainment of the stated student objectives/outcomes.

b. Participants may be given the opportunity to evaluate faculty, learning experiences, instructional methods, facilities and educational resources used for the offerings/programs.

7. Specific Conditions Regarding Continuing Education Requirements Certified or Licensed applicators taking courses for the purposes of obtaining a baccalaureate or higher degree in the biological sciences may meet the continuing education requirements specified in this section provided such courses equal at least the required number of hours and content of course(s) be related to pesticide or pest management topics. Other academic degree programs may qualify at the discretion of the Department. Individuals must submit copies of course transcripts to the Department to verify proof of attendance before continuing education credit is granted.

D. Licensed and certified applicators who successfully complete such a training program, as outlined in § 2.16(A) of this Part shall be issued a certificate of attendance, a copy of which will be filed with the applicators records.

E. Licensed and certified applicators who fail to satisfy the continuing education requirements as required in § 2.16(A) of this Part, shall be required to attend the appropriate core and/or category training sessions, and re-take another examination before their certification or license may be renewed.

2.17 Commercial Applicator Licenses

A. Each person engaged in the application of any pesticide, other than a "restricted use" or "state limited use" pesticide, as a commercial applicator shall possess a valid commercial applicator license, issued by the Director, except that a person who is applying such a pesticide on land owned or rented by the applicator or his employer shall not be required to possess such a license.

B. Each person who is the employee of a licensed or certified commercial applicator and who as a condition of employment applies pesticides, not in the physical presence of a licensed or certified applicator, shall possess a valid commercial applicator's license or certification, except that person shall not be required to provide separate financial responsibility as specified in § 2.22 of this Part.

C. Application for licensing shall be filed with the Department on forms supplied by the Department, and shall contain such information as the Director shall require, including but not limited to storage and disposal procedures for pesticides and pesticide containers.

D. A fee of $30.00 shall be charged prior to the issuance of the initial license document and at the time of each annual renewal or reissuance thereafter.

E. A license document shall be valid for a period beginning with the actual date of issuance and ending on February 28th, unless it has been revoked or suspended prior thereto by the Director for cause;

F. Competence in the use and handling of pesticides by commercial applicators, who wish to become licensed shall be determined on the basis of written examinations, and, as appropriate, performance testing, based upon the standards set forth in § 2.10 of this Part.

G. A person shall not be determined qualified for licensing until such person passes the required examinations as provided by § 2.17(E) of this Part.

H. No person under eighteen (18) years of age shall be eligible for licensing or eligible to apply pesticides under the direct supervision of a licensed or certified applicator.

I. Licensed Commercial applicators shall cooperate with the Department requests to observe spraying operations, to inspect equipment, to inspect pesticide related records, to inspect business premises and to conduct pesticide related sampling.

J. The Director may deny licensing or may suspend, revoke, or otherwise modify a license once issued for reasons including the following:

1. That the applicant made a false or misleading statement in the application for licensing;

2. That the applicant or license holder has violated any provisions of the RIPCA or regulations promulgated thereunder;

3. That the applicant or license holder does not have in effect or fails to maintain in effect financial responsibility in the amounts specified in § 2.22 of this Part.

4. That the applicant or license holder uses or applies a pesticide, excluding pesticides for which an EPA experimental use permit has been issued, which has not been duly registered under the provisions of R.I. Gen. Laws § 23-25-6.

K. Commercial applicators who, in any year, fail to file a renewal application, even though they did not receive a mailed renewal application, prior to their license expiration date, shall lose their commercial license as of sixty (60) days after the date of expiration, and prior to the sixty (60) day date shall be notified in writing of impending license loss. Applicators losing their licenses due to failure to renew shall regain licensing under these regulations by:

1. Re-examination within a year of their license expiration date. Such reexamination shall include the required core exam and if deemed necessary the practical exam for which their license was previously held, or

2. Attending the training course(s) and taking the exam for the commercial core and any practical exams for which their license was previously held, if they have failed to renew their license beyond one year of their license expiration date.

2.18 Dealer Licenses

A. Any person engaged in the distribution of any “restricted use” or “state limited use” pesticide as a pesticide dealer shall possess a valid pesticide dealer’s license issued by the Director. A licensee shall be required for each location or outlet, within the State, from which such pesticides are distributed, sold, held for sale, or offered for sale.

B. Application for licensing shall be filed with the Department, and shall contain such information as the Director may require.

C. A fee of $30.00 shall be charged to the issuance of the initial license and at the time of each annual renewal.

D. A license shall be valid for a period beginning with the actual date of issuance and ending on February 28th, unless it has been revoked or suspended prior thereto by the Director for cause.

E. The Director shall require a person, who has a fixed distribution center within the State and who wishes to become licensed, to pass a written examination. Such examination will be designed to enable the person to demonstrate his knowledge of the types of information to be found on a pesticide label and that he is familiar with the State and Federal laws governing his sale, storage and distribution of “state limited use” and “restricted use” pesticides.

F. The Director shall require out-of-state dealer representatives who physically operate and distribute within the State to pass the required examination as provided by § 2.18(E) of this Part.

G. A manufacturer, registrant, or distributor of “state limited use” or “restricted use” pesticides who has no fixed distribution center within the State but who wishes to distribute such pesticides directly to certified applicators within the State may obtain a dealer’s license by paying the required fee and signing a form attesting to his knowledge of state and Federal laws governing such distribution.

H. No person under eighteen (18) years of age shall be eligible for licensing as a dealer, nor shall they be engaged in the sale and distribution of “restricted use” or “state limited use” pesticides.

I. Licensed Dealers shall cooperate with the Department requests to inspect pesticide related records, to inspect business premises and to conduct pesticide related sampling.

J. The Director may deny licensing or may suspend, revoke or otherwise modify a license once issued for reasons including the following:

1. That the applicant made a false or misleading statement in the application for licensing.

2. That the applicant or license holder has violated any provision of the RIPCA, any applicable Federal Statues, or regulations promulgated thereunder.

2.19 General Rules

A. Pesticide Anti-Siphon. All pest control equipment using pesticides and drawing water from the surface waters of the State or from potable water supplies shall have an effective anti-siphon device approved by the Director to prevent back flow.

B. No pesticide shall be applied to public water supplies or their tributaries except by legally established water supply entities or their agents as authorized by the Director. Pesticide applications to lands near or adjacent to public water supplies shall be made in such a manner that no pesticides drift or flow into such water supplies.

C. No pesticide application may be made within 400 feet of gravel packed wells used for public water supply or within 250 feet of other wells so used, unless materials and methods to be employed have been approved by the Director.

D. No restricted use or “state limited use” pesticide shall be applied to woodland areas exceeding 25 acres without the prior approval of the Director.

E. Pesticide applications to areas adjacent to crops or pasturage shall be such that contamination of crops or pasturage does not occur.

F. Pesticide application for agricultural purposes shall be such that contamination to adjacent lands does not occur.

G. Pesticide applications to any surface waters of the State for the control of aquatic nuisances or for any other reason shall not be made unless such applications have been approved by the Director.

H. No application of pesticides by means of aircraft shall be made within the State without prior approval of the Director or his designated representative.

I. No application of pesticides shall be made by mechanically powered equipment at such times as the wind velocity will cause a hazardous chemical to drift beyond the target area.

J. Pesticide containers shall not be used for any purpose, other than the storage of pesticides, unless such purpose has been approved by the Director and the containers have been properly cleaned.

K. Pesticide dealers displaying “restricted use” or “state limited use” pesticides, shall display such pesticides in an area separate from general use pesticides.

L. Pesticide dealers displaying “restricted use” or “state limited use” pesticides, shall post a sign bearing the statement “for sale to certified applicators only”, at the display in a prominent position. The statement shall be imprinted letters at least one inch high.

M. No pesticide may be distributed if part or all of the label is missing, unreadable, or otherwise damaged beyond recognition.

N. No pesticide may be distributed in containers which are unsafe due to corrosion, leakage, spillage, or other damage.

O. No person(s) under the age of eighteen (18) years of age shall apply “restricted use” or “state limited use” pesticides as a private or commercial applicator. Except that; farms that can demonstrate and provide written documentation of a hardship situation acceptable to the Department will allow an immediate family member between the ages of sixteen (16) and eighteen (18) years to obtain a private certification as long as the member has attended the required pesticide applicator training; passes the required examinations and satisfies the private certification licensing requirements.

P. No person under the age of eighteen (18) shall apply general use pesticides as a commercial or private applicator except:

1. Farm employees sixteen (16) years of age or older may apply general use pesticides only under the direct supervision of a private applicator.

2. Immediate farm family members sixteen (16) years or older may apply general use pesticides only on their parents farm without the supervision of a private applicator.

Q. No person other than a licensed or certified commercial applicator shall apply pesticide within any building or on the grounds of any school, and no pesticide shall be applied in any building or on the grounds of any school during regular school hours or during planned activities at any school. This subsection shall not apply to the use of germicides, disinfectants, sanitizers, deodorizers, antimicrobial agents, insecticidal gels, non-volatile insect or rodent bait in a tamper resistant container, insect repellants, the application of a pesticide classified by the United States Environmental Protection Agency as an exempt material under 40 C.F.R. § 152.25 (2015), a pesticide application by public health officials during a state public health emergency or the emergency application of a pesticide to eliminate an immediate threat to human health, where it is impractical to obtain the services of a licensed or certified applicator; provided the application does not involve a restricted use or state limited use pesticide.

R. No person shall apply “restricted use” pesticides or “state limited use” pesticides in or around school property of grades preschool through twelve (12) at any time (without prior written approval from the school administration and Department of Environmental Management.) This subsection is not applicable to pesticide applications by public health officials during a state public health emergency. In addition this subsection shall not apply to emergency situations where children’s health and well being are at risk, such as stinging insects, poisonous plants or other known life or health threatening pests.

S. No person shall make an application of Tributyltin antifouling paint unless applied:

1. By a commercial applicator certified in § 2.10.5(B) of this Part.

2. Within a commercial boatyard; and

3. To vessels which exceed twenty-five meters (82.02 feet) in length or which have aluminum hulls.

T. No person shall use or otherwise possess any pesticide in any rodent control bait box unless:

1. The bait box is secured against tampering when placed in areas accessible to pets or persons under eighteen (18) years of age; and

2. The bait box has attached to it or contained therein a readable label with the following information about the pesticide contained therein:

a. Brand or trade name;

b. EPA registration number;

c. Name and percentage of active ingredients in the bait box; and

d. Appropriate signal word; that is, “Danger-Poison”, “Warning”, or “Caution”, as stated on the pesticide label.

e. Name, address, and phone number of the pest control company placing the bait box.

3. For the purposes of interpretation of § 2.19(T)(1) of this Part, a bait box shall be considered secured against tampering when:

a. It has met the standards for tamper proof/tamper resistant bait boxes as outlined by EPA; or

b. The bait box containing the pesticide is in a secure storage area; or

c. The bait box is at the actual physical location and under the direct observation of a pesticide applicator.

2.20 Reciprocity

A. Applicants for reciprocal certification must have successfully completed all necessary certification requirements in their resident state and must submit proof of such to the Director.

B. Applicants for reciprocal certification must complete all requirements of the Director relative to certification with the exception of taking the written examination.

C. All grantees of reciprocal certification shall be responsible for and bound by the provisions of the RIPCA, the Rules and Regulations adopted thereunder, and of any lawful order of the Director.

D. Whenever a person’s certification is denied, suspended, revoked or modified by his resident state, the reciprocal certification, granted by the Director, shall be at least similarly denied, suspended, revoked or modified.

E. Reciprocal certification shall only remain in effect as long as certification is maintained in the resident state.

F. Reciprocal certification documents shall bear a notation distinguishing them from other certification documents.

2.21 Financial Responsibility

A. Each applicant for commercial applicator licensing shall show proof of financial responsibility to consist of either:

1. A performance bond drawn payable to the State of Rhode Island in the amount of $20,000 per job, or

2. The following minimum insurance coverage: Comprehensive General Liability (ground application): Bodily Injury Liability - $20,000 each occurrence $40,000 Aggregate Property Damage Liability (Including completed operations and chemical or pollution liability) - $25,000

B. Each applicant for commercial applicator certification shall show proof of financial responsibility to consist of either:

1. A performance bond drawn payable to the State of Rhode Island in the amount of $50,000 per job, or

2. The following minimum insurance coverage: Comprehensive General Liability (ground application): Bodily Injury Liability - $50,000 each occurrence - $100,000 Aggregate Property Damage Liability (Including completed operations and chemical or pollution liability) - $50,000

C. Each applicant for commercial applicator certification in § 2.10.7(C) of this Part, Fumigation shall show proof of financial responsibility to consist of either:

1. A performance bond drawn payable to the State of Rhode Island in the amount of $100,000 or

2. The following minimum insurance coverage: Comprehensive General Liability: Bodily Injury Liability - $100,000 each occurrence -$300,000 Aggregate Property Damage Liability (Including completed operations and chemical or pollution liability) - $100,000

D. Each applicant for commercial applicator licensing or certification, who applies pesticides aerially, shall show proof of financial responsibility to consist of either:

1. A performance bond drawn payable to the State of Rhode Island in the amount of $100,000, or

2. The following minimum insurance coverage: General Liability: Bodily Injury Liability - $100,000 each occurrence - $200,000 Aggregate Property Damage Liability (Including completed operations and chemical or pollution liability) - $100,000

E. Financial responsibility required by §§ 2.21(A) through (D) of this Part, where appropriate, shall not be required of persons whose pesticide application activities are part of their duties as governmental employees.

2.22 Standards for Supervision of Non-Certified Applicators by Certified Private and Commercial Applicators

A. Certified applicators whose activities indicate a supervisory role must demonstrate a practical knowledge of Federal and State supervisory requirements, including labeling, regarding the application of “restricted use” pesticides by noncertified applicators.

B. The availability of certified applicators must be directly related to the hazard of the situation.

1. No general-use pesticide shall be applied by non-certified or un-licensed applicators for hire without the direct supervision of a certified or licensed commercial applicator. No restricted use pesticide shall be applied by an un-licensed or non-certified applicator without the direct supervision of a certified private or commercial applicator. Direct supervision means the on-site supervision of any pesticide application by an appropriately certified or licensed applicator who is responsible for such application and is capable of dealing with emergency situations which might occur, pursuant to the provisions of these regulations.

2. In situations where labeling requires, the actual physical presence of a certified applicator shall be required when application is made by a noncertified applicator.

3. In situations in which sub-surface application of the following classes of termiticides are made, the actual physical presence of an applicator certified in Category 7(B) (§ 2.10.7(B) of this Part) is required when application or any part thereof is made by any applicator not certified in Category 7(B) (§ 2.10.7(B) of this Part):

    a. Clyclodienes…including but not limited to chlordane, aldrin, dieldrin, and heptachlor.

    b. Organo-Phosphates…including but not limited to chlorpyrifos.

    c. Synthetic Pyrethoids

2.23 Turf Management and Lawn Care

A. Definitions – Unless defined in § 2.4 of this Part or the context clearly indicates otherwise, the following terms shall have the following meanings as they are applied to turf management and lawn care:

1. Homeowner shall mean the owner or occupant of a private single family residence or the manager of a multi-unit dwelling.

2. Applicator shall mean the individual or company providing lawn care services.

3. Immediate Service Call shall include: 1) customer complaints, 2) lawn threatening pests – but shall not include regularly scheduled treatments.

4. End Use Product shall mean the pesticide(s) as applied and shall not mean the concentrate.

5. Public Recreation Facilities shall include golf courses, playgrounds, athletic facilities, school grounds, and parks.

B. After entering into or renewing an agreement to apply pesticides to control lawn or turf pests and prior to the initial application of such pesticides, the applicator shall provide the homeowner with a written list of those pesticides which may be used. Such list shall include common and most likely trade name of each pesticide and any post-application safety, environment or health instructions specified on the label for the end use product. In addition to said list the applicator must inform the homeowner, in writing, that they may request a copy of the label, and/or the material safety data sheet, and/or the EPA Fact Sheet, if available, on any pesticide which may be used. The Director may require the inclusion of any additional health, safety or environmental instructions generated by the EPA, Department of Environmental Management or Department of Health.

C. Any contiguous neighbor to a property under an agreement in § 2.23(B) of this Part may request the applicator to provide notice 48 hours in advance of each application. If notice by telephone, or mail or in person, cannot be given 48 hours before the application of pesticides the applicator shall leave written notice at that house following the application. Such advance notice shall not be required for immediate service calls. In those cases, written notification following the application shall be left at the requesting neighbor’s house.

D. Upon completion of each application, the applicator shall leave written notice at the property treated containing the following information:

1. The product name of the pesticide(s) that were applied to the property and EPA registration Number.

2. A telephone number of the applicator or applicators company.

3. The telephone number of the Department of Environmental Management.

4. The name of the person(s) certified or licensed by the Department as well as person(s) applying the pesticide if under the direct supervision of a

certified or licensed commercial applicator who participated in the planning and execution of the application.

5. The applicators certification and/or license number.

E. At the time of each application, the applicator shall post signs, as prescribed in § 2.23(F) of this Part, in conspicuous points of access to the property and shall instruct the customer as to their appropriate removal. Conspicuous points of access shall include but not be limited to, unobstructed abutting yard, walkways, paths, etc.

F. Prior to commencing each application of a pesticide, the manager of a public recreation facility shall post a notice in the place most likely to inform those who make use of the facility. Such notice shall remain in place for 48 hours after completion of the application. The notice shall list “that pesticides were applied,” the date of chemical application, contact person and phone number and the areas treated.

G. Signs posted by Commercial Companies shall be no less than 20 square inches (4” X 5”) and shall be printed with the following information on waterproof stock in dark letters on a white field:

1. Lawn Chemicals Applied (in letters at least ½" high)

2. Applicator or Company Name

3. Phone Number of Applicator or Company

4. Date of Chemical Application

5. Keep Posted for 48 Hours, or as specified by the label, if more than 48 hours (no smaller than ¼” letters)

H. Each applicator shall make any written material required in this rule readily available to the Department upon request.

2.24 Pesticide and Pesticide Residue Storage and Display Requirements

The following rules apply to the storage and the display for retail sale and use by private and commercial applicators of “general use” and “restricted use” pesticides.

2.24.1 Storage

A. When not on display for sale, or in use, all pesticides must be securely stored with access limited to authorized personnel/individuals only.

B. Pesticide storage areas must be identified with appropriate pesticide storage warning signs.

C. Pesticides shall be stored in cool, dry, well ventilated and well-lit rooms or building insulated to prevent freezing or overheating as well as protection from direct rainfall and flooding. The area shall be locked to prevent entry by children or unauthorized persons. The storage area shall have lighting so that labels can be easily read and any leaks quickly detected.

D. Pesticide storage areas shall be constructed of rigid materials, shall have no bottom drains or openings, be impervious to seepage through or leakage to the surrounding environment so as to prevent contamination to groundwater or surface water or to the surrounding environment and capable of containing a pesticide spill 100% of the largest liquid pesticide container volume.

E. Pesticides for sale or distribution, or for use by private or commercial applicators, as defined in these Rules and Regulations, in their respective operations shall not be stored in buildings wholly or partially occupied as private residences, unless that actual storage area, such as a garage, is structurally separate from that portion of the building in use as a living area or the location of the storage area does not present a potential risk of harm, injury, or damage to occupants or the residence(s) in the building; and the ventilation in the storage area is sufficient to keep fumes and/or any potential fumes from intruding into the living areas. In the case of multi-family residences, the location of the storage area must not present a potential risk of harm, injury, or damage to occupants or the residence(s) in the building; and the ventilation in the storage area must be sufficient to keep fumes and/or any potential fumes from intruding into living areas.

F. Pesticides may not be stored in buildings used for commercial or industrial businesses, unless:

1. The building meets the requirements for storage of pesticides by the Director; and

2. The storage area is a structurally separate room from those occupied as routine office work areas, and the ventilation in the storage area is sufficient to keep fumes and/or any potential fumes from intruding into occupied areas of the building; or

3. In multi-unit commercial establishment or institutions, the location of the storage area must be structurally separate from other business and must not present a significant risk of harm, injury, or damage to occupants, employees, or facilities in the building. The ventilation in the storage area must also be sufficient to keep fumes and/or any potential fumes from intruding into occupied areas.

G. Pesticides shall not be stored and/or displayed over or adjacent to meat or vegetable case, other human foods, animal feed or drugs, or in any manner that may result in contamination of food, feed or clothing. Pesticides intended for sale or distribution shall only be stored and displayed within a building or fence and shall not be displayed on sidewalks.

H. Pesticides when stored must be separated by type insecticide, herbicide, fungicide, etc., and in such a manner, which prevents cross contamination. It is prohibited to offer for sale or distribution pesticide packages and containers that are torn, punctured, rusted or leaking.

I. “Restricted Use” pesticides must be stored separately from other general use pesticides or fertilizers to prevent distribution to a non-certified applicator.

J. Pesticides must be clearly labeled at all times during storage.

K. Pesticides may not be stored with other combustible materials such as gasoline, kerosene, petroleum products, solvents, or other fuels.

L. Pesticides must be stored away from sources of ignition or fire hazard such as heating equipment, burning, welding, etc.

M. Containers of pesticide which have been opened must be properly sealed when stored.

N. Storage of discontinued, banned, or unregistered pesticides:

1. Unregistered or banned pesticides, unless subject to federal recall notice issued by the United States Environmental Protection Agency, must be returned to the manufacturer, if said manufacturer will accept them, or disposed of in accordance with the Department’s Rules and Regulations for Hazardous Waste Management upon cancellation of the state and/or federal registration or imposition of the ban.

2. However, in the event that a manufacturer fails to annually re-register or voluntarily discontinues the manufacture, distribution and sale of a pesticide for any reason other than § 2.24.1(N)(1) of this Part; and the Director has determined that the pesticide poses no threat to public health or the environment if used according to label instructions, then said pesticide may be stored, distributed, or used up within two years from the date of expiration of its state registration. After two years, any remaining stocks and residues of said pesticide must be disposed of in accordance with § 2.24.1(N)(1) of this Part.

3. Receipt and storage of unregistered or banned pesticides is prohibited.

O. Pesticides may not be stored outdoors except if they are:

1. Covered by a roof or tarpaulin, which will keep precipitation off the pesticides, and placed on pallets or a raised concrete platform above an impervious surface (e.g. concrete) so as to prevent direct contact with the soil and stormwater runoff.

2. Stored in a manner to prevent freezing and overheating.

3. Stored in well-lit areas to provide for easy reading of labels and detection of leaks or other accidental releases.

4. Secured against entry by an unauthorized person, livestock or wildlife.

5. Stored in a manner that prevents damage to packaging or containment structures from vehicles, and in a manner that prevents access by unauthorized vehicles. Pesticides shall be moved indoors in the event of conditions that may result in freezing, overheating, or incidental exposure to precipitation.

P. Spill Response

1. Spill containment and clean-up materials shall be furnished at all pesticide storage areas.

2. Spills shall be cleaned upon discovery.

3. Spilled materials and migrating materials shall be immediately and properly contained and disposed of in accordance with pesticide label and federal and State hazardous waste disposal regulations.

2.24.2 Display for Sale

A. Pesticides held for retail sale shall comply with § 2.24.1 of this Part and the following requirements:

1. Pesticides shall not be displayed or stored with, or in such a manner which could result, in the event of a spill or leak, in the contamination of food, beverages, medical supplies or containers, other pesticides, tobacco and its products, fertilizers, or eating utensils.

2. Pesticides must be clearly labeled at all times during display. Unlabeled pesticides, pesticides without the original label, or pesticides whose labels are illegible or whose contents have been damaged may not be displayed or offered for sale.

3. General use pesticides on display for retail sale to the general public are exempt from § 2.24.2(A)(1) of this Part entitled “Storage” when on retail sales display shelves or held for sale in a storage area.

2.25 Transportation of Pesticides

A. General Requirements: Accidental spills of pesticides may occur during their transportation because damage to containers most often occurs during times of loading and transport. In order to reduce the risk of such incidents, the following minimum safety precautions must be used at all times:

1. Vehicles transporting pesticides shall comply with United States Department of Transportation (DOT) regulations for the transportation of hazardous materials and hazardous wastes, 49 C.F.R. § 171 (2017), at all times.

2. Transport from storage and/or mixing areas only the quantity and amounts of pesticides or tank mixes which may be commonly used during the day's operations. Left over or unused pesticides shall be kept secured and locked at all times or returned to storage facilities at the end of each day.

3. Pesticides shall be transported in truck beds, trailers, or vehicle compartments, which are isolated from drivers and passengers.

4. Pesticides shall be transported in their original containers, with the EPA registered label intact, except that service containers or application equipment are exempt from this provision. Service containers must be transported as outlined in § 2.25(A)(7) of this Part.

5. During transportation, pesticides and their mixes, shall be stored in tightly closed containers, secured to prevent tipping over or shifting. Pesticides shall not be transported in open containers.

6. Pesticides must not be transported in the same cargo area as food, animal feeds and food, clothing, or potable water.

7. No person shall transport or otherwise possess any pesticide in any service container, except when in application equipment, unless the service container has attached to it a readable label with the following information:

    a. Brand or Trade Name;

    b. EPA Registration Number;

    c. Name and Percentage of Active Ingredient(s) in the service container; if a concentrate, or if the service container contains a dilution, a statement identifying it as a diluted pesticide and the percentage of the Active Ingredient.

    d. Appropriate signal word as stated on the EPA registered label; that is, Danger-Poison, Warning, or Caution; and

e. Name, address, and phone number of the pest control company and/or its owner.

8. No person shall place or keep any pesticide in any container commonly used for food, drink, or household products.

B. Spill Containment During Transportation:

1. Pesticide Applicators shall secure pesticides during transportation to prevent spillage.

2. Each vehicle used to transport pesticides and tank mixes shall have spill containment materials such as absorptive clay, sand, sawdust or other similar materials and tools to absorb, remove and clean up spills and leaks. If not required or stated on the label, any person cleaning up spills shall wear appropriate personal protective clothing to prevent direct exposure.

3. Spilled materials and/or contamination mitigation materials must be properly contained and secured during transport and must be disposed of in accordance with the pesticide label and/or Federal and State hazardous wastes disposal regulations.

2.26 Severability

If any provision of these Rules and Regulations, or the application thereof to any person or circumstances, is held invalid by a court of competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.

250-RICR-40-15-3

TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 40 - AGRICULTURE AND RESOURCE MARKETING

SUBCHAPTER 15 - PESTICIDES

PART 3 - Rules and Regulations Relating to Marine Antifoulant Paints Containing Tributyltin

3.1 Authority

These regulations are promulgated pursuant to R.I. Gen. Laws Chapter 23-25, and in accordance with the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws § 42-35.

3.2 Definitions

A. As used in these regulations, the following terms, shall, where the context permits, be construed as follows:

1. "Acceptable release rate" means a measured release rate not to exceed 4.0 micrograms per square centimeter per day for weeks 3 to 5, and a cumulative release rate of 168 micrograms per square centimeter for the first 14 days as determined in accordance with a U.S. Environmental Protection Agency (EPA) testing procedure as outlined in the EPA data call-in notice of July 29, 1986, on tributyltin in antifoulant paints under the federal insecticide, fungicide, and rodenticide act, 7 U.S.C. §136. If a lower release rate is determined by the department to be necessary to protect health or the environment, then such rate, if duly adopted by regulatory action of the Department, shall be the acceptable release rate as herein defined.

2. "Commercial boat yard" means any facility, which engages for hire in the construction, storage, maintenance, repair, of refurbishing of vessels (other than sea-planes) or any licensed independent marine maintenance contractor who engages in such activities.

3. "Department" means the Department of Environmental Management.

4. "Marine antifoulant paint" means any compound, coating paint, or treatment applied or used for the purpose of controlling freshwater or marine fouling organisms on vessels.

5. "Tributyltin compounds" means any compound having three normal butyl groups attached to a tin atom and with or without an anion such as chloride, fluoride, or oxide.

6. "Vessel" means every description of watercraft, other than a seaplane, used or capable of being used as means of transportation on the water, whether self-propelled or otherwise, and includes barges and tugs.

3.3 Rule A - Restricted Use and State Limited Use Restricted

3.3.1 State Limited Use Pesticide

A. The registration of marine antifoulant paints containing tributyltin shall be classified for State Limited Use effective July 1, 1988. The following conditions of sale and use shall be included in this State Limited Use Registration:

1. Except as otherwise provided in this chapter, a person may not distribute, possess, sell, or offer for sale, or apply, or offer for use of application any marine antifoulant paint containing tributyltin compounds. Authorized personnel of the Department of Environmental Management, Department of the Attorney General, and the Division of State Police may seize any antifoulant paint held in violation of this chapter and any seized substances shall be considered forfeited.

2. A person may distribute or sell a marine antifoulant paint containing tributyltin with an acceptable release rate to the owner or agent of a commercial boat yard. The owner or agent of a commercial boat yard may possess and apply, or purchase for application, an antifoulant paint containing tributyltin with an acceptable release rate; however such paint may be applied only within a commercial boat yard and only to vessels which exceed sixty-five feet in length or which have aluminum hulls, or to vessels less than sixty-five feet in length if it is applied only to the outboard or lower drive unit of such vessels.

B. A person may distribute, sell, or apply a marine antifoulant paint containing tributyltin having an acceptable release rate if the paint is distributed or sold in a spray can in a quantity of sixteen ounces avoirdupois or less and is commonly referred to as outboard or lower unit paint.

C. During and after paint removal and/or application of new antifouling paint containing tributyltin methods must by employed designed to prevent introduction of tributyltin paints into the aquatic environment; and following removal of tributyltin paint and/or application of new tributyltin paint, all paint chips and spent abrasives, paint containers, unused paint, and any other waste products from paint removal or application must be disposed of in a sanitary landfill.

LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

NOTICE OF MEETING

DATE: Tuesday, April 10, 2018
TIME: 2:30 P.M.
PLACE: Room 313 - State House

AGENDA:

I. Call Meeting to Order

II. Remarks from the Chairperson, Senator V. Susan Sosnowski

III. Testimony:

1. Steve Alm, Ph.D., University of Rhode Island
    - Brief overview of the URI Pesticide Training Program
2. The Pesticide Control Regulations Study Commission members, RI Farm Bureau and the RI Beekeepers Association
    - Address the Study Commission regarding pesticides as they relate to the business/organization they represent

IV. Next Meeting Date and adjournment

***No public testimony will be received during this meeting**

Please contact Patricia Breslin, Senate Legal Counsel at (401) 276-5536 or at pbreslin@rilegislature.gov

POSTED: FRIDAY, APRIL 06, 2018, 11:13 AM

THE UNIVERSITY OF RHODE ISLAND
COOPERATIVE EXTENSION

Pesticide Safety Education Program

2018 Winter/Spring/Summer Training Schedule

PROGRAM CONTACTS:
Margaret Siligato, URI Cooperative Extension | 401-874-5997
Robin Mooney, RI Dept. of Environmental Management | 401-222-2781 x4513

Hurricane Bob

1991


75
Plant Sciences Center
Pesticide Training
Mosquito Coordinator
CAUTION
SPEED BUMPS AHEAD


EXIT


GMC

FALL 2017 CORE TRAINING SESSIONS

Core I	Day 1: Wednesday, Sept 6	Day 2: Wednesday, Sept 20	8:00 – 4:00 p.m.
Core II	Day 1: Wednesday, Nov. 4	Day 2: Wednesdy, Nov 15	8:00 – 4:00 p.m.
Core III	Day 1: Wednesday, Dec 8	Day 2: Wednesday, Dec. 20	8:00 – 4:00 p.m.

2018 CORE TRAINING SESSIONS

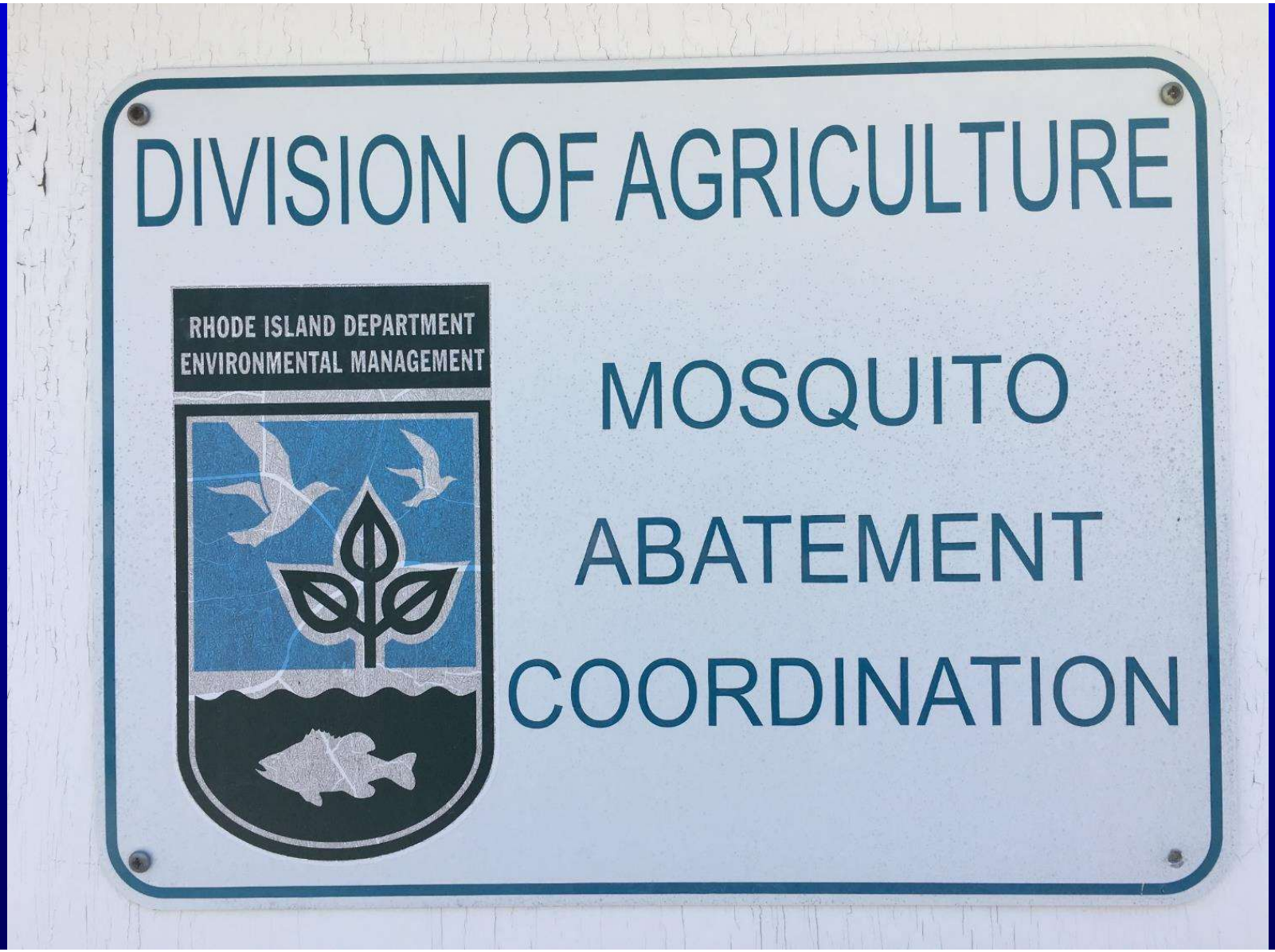
Core I	Day 1: Thursday, January 25	Day 2: Friday, February 2	8:00 – 4:00 p.m.
Core II	Day 1: Wednesday, February 28	Day 2: Friday, March 14	8:00 – 4:00 p.m.
Core III	Day 1: Wednesday, March 28	Day 2: Friday, April 6	8:00 – 4:00 p.m.
Core IV	Day 1: Wednesday, May 16	Day 2: Wednesday, May 23	8:00 – 4:00 p.m.
Core V	Day 1: Wednesday, July 18	Day 2: Wednesday, July 25	8:00 – 4:00 p.m.

FALL 2017 COMMERICIAL CATEGORY TRAINING SESSIONS*

Category 2 (Forestry)	Thursday, Nov. 2	8:00 – 4:00 p.m.
Category 3A (Shade Tree)	Thursday, Nov. 2	8:00 – 4:00 p.m.
Category 3B (Turf & Ornamentals)	Thursday, Nov. 2	8:00 – 4:00 p.m.
Category 7B (Termite)	Friday, Nov. 17	8:00 – 4:00 p.m.
Category 7A (Household)	Friday, Dec. 1	8:00 – 4:00 p.m.
Category 7D (Vertebrate)	Friday, Dec. 1	8:00 – 4:00 p.m.

2018 COMMERICIAL CATEGORY TRAINING SESSIONS*

Category 7A (Household)	Friday, March 30	8:00 – 4:00 p.m.
Category 7D (Vertebrate)	Friday, March 30	8:00 – 4:00 p.m.
Category 7B (Termite)	Thursday, April 5	8:00 – 4:00 p.m.
Category 2 (Forestry)	Friday, April 27	8:00 – 4:00 p.m.
Category 3A (Shade Tree)	Friday, April 27	8:00 – 4:00 p.m.
Category 3B (Turf & Ornamentals)	Friday, April 27	8:00 – 4:00 p.m.
Category 7E (Mosquito)	Thursday, May 17	8:00 – 4:00 p.m.
Category 8 (Public Health)	Thursday, May 17	8:00 – 4:00 p.m.


DIVISION OF AGRICULTURE
RHODE ISLAND DEPARTMENT
ENVIRONMENTAL MANAGEMENT
MOSQUITO
ABATEMENT
COORDINATION

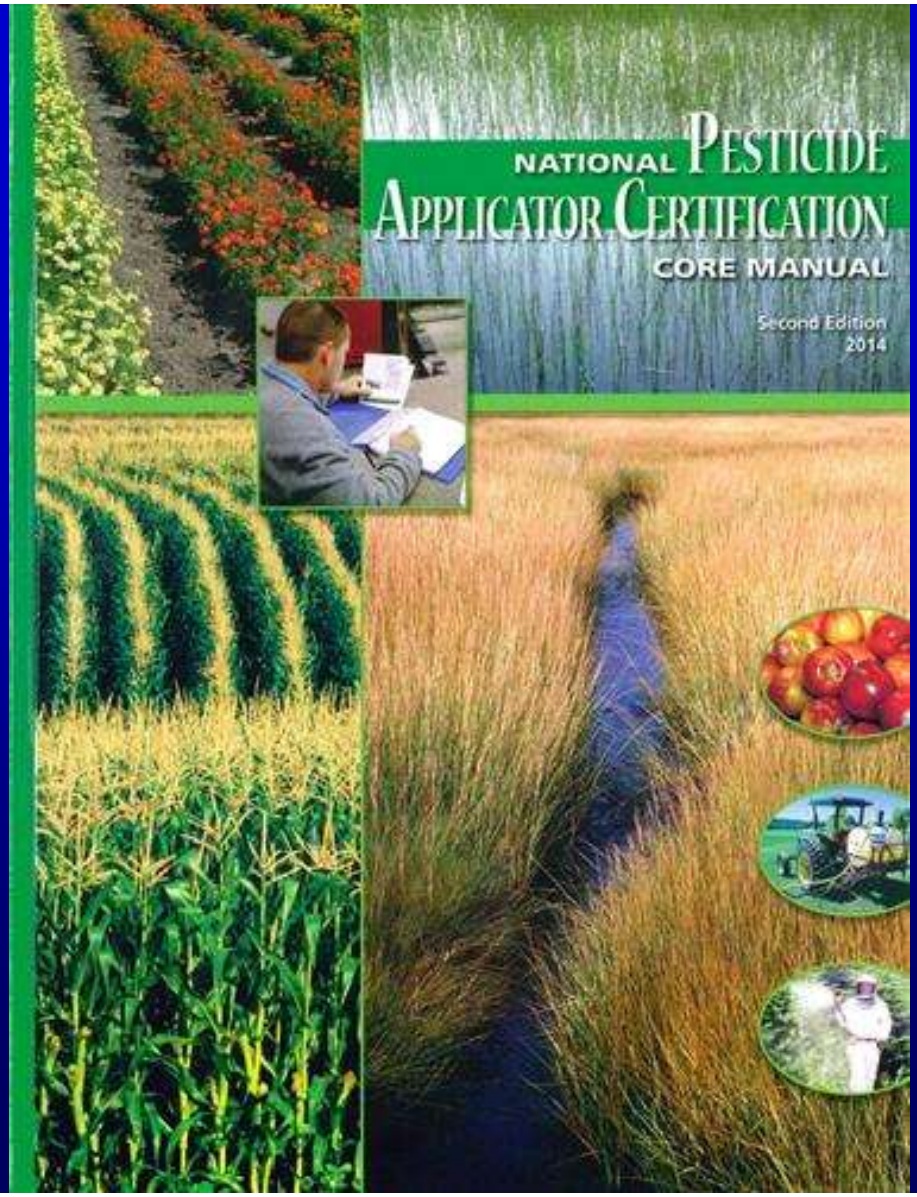
Recertification Credits

- Typically 4 additional training sessions per year in combination with other training (Risk Management training, etc.) where recertification credits are offered.

- Speakers from UMass, Cornell, UConn, etc. on new herbicides, fungicides, insecticides, IPM, etc.


STINK BUGS
AERIAL APPLICATOR'S MANUAL
Film


Globe Weis
Office Products
He's Back
HAMMERMILL
He's Back
99.99% JAM-FREE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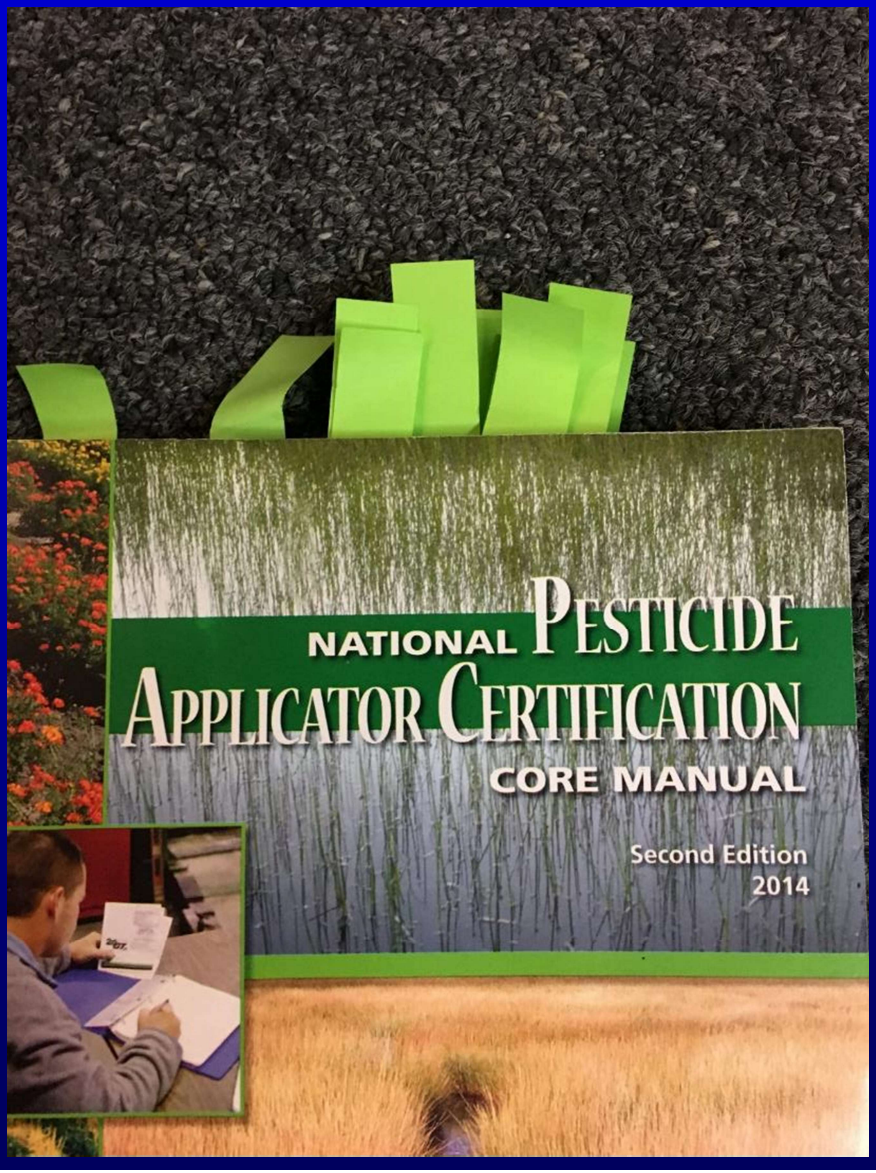
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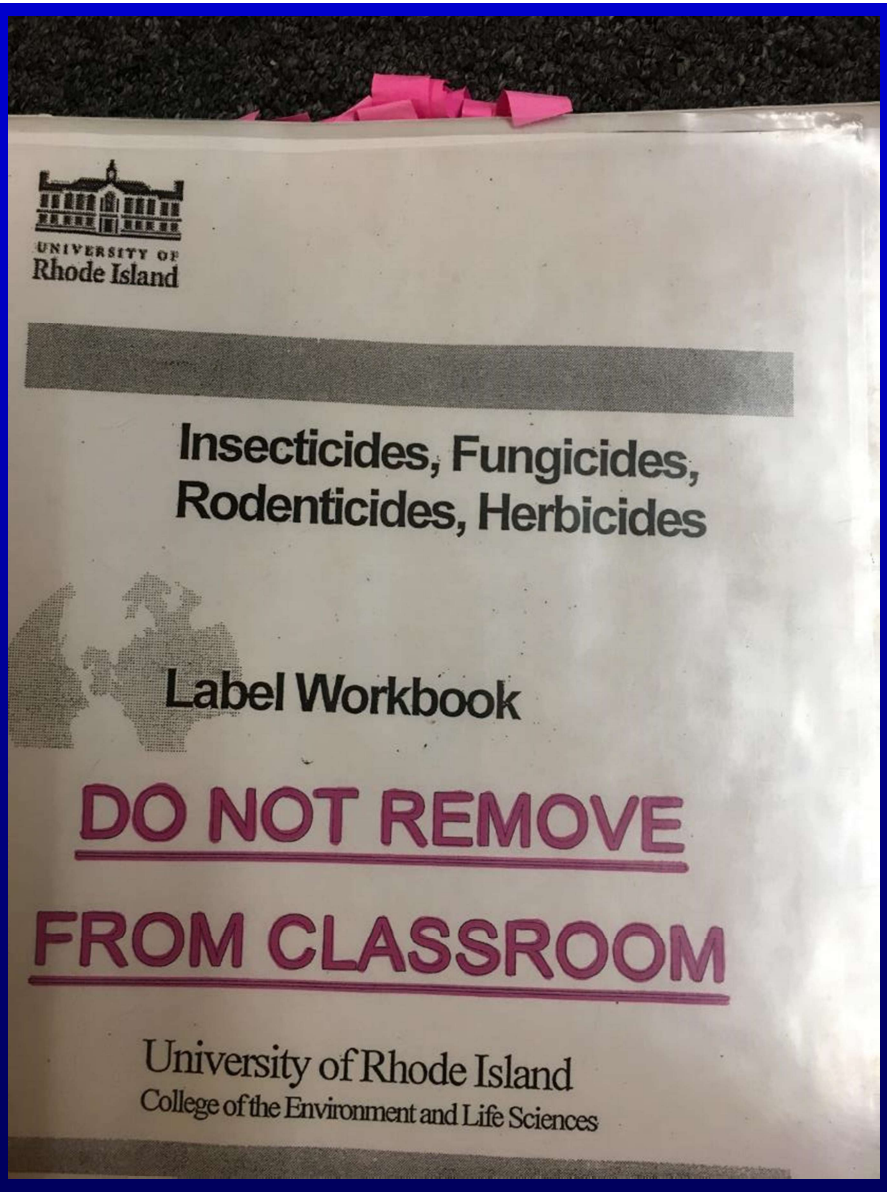
UNIVERSITY OF
Rhode Island
Insecticides, Fungicides,
Rodenticides, Herbicides
Label Workbook
DO NOT REMOVE
FROM CLASSROOM
University of Rhode Island
College of the Environment and Life Sciences

Cooperative Extension
University of Rhode Island
College of Environment and Life Sciences
Department of Plant Sciences

THINK BIG WE DO℠

THE UNIVERSITY OF RHODE ISLAND

Commercial and Private Pesticide Applicator
Training Manual

Core Supplement
January 2018

Compiled by Steven R. Alm, Margaret Siligato
and Edwin Requintina Jr

Health, Environmental & Pesticide Safety Education Training

Dr. Steven R. Alm, *URI Pesticide Coordinator*
Margaret Siligato, *URI Educator*
Robin Mooney, *DEM Agriculture*

Agenda Day I

8:00 am – 12:00 pm

Introduction
Training materials distributed and explained
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"General Use" vs. "Restricted Use"
"Under Direct Supervision", state vs. federal
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DEM regulates pesticides in RI
URI's role in pesticide training

The Need for Pest Management
Integrated Pest Management
Video: National Park Service IPM
Techniques for monitoring pest populations
Monitoring devices

Personal Protective Equipment
Tyvex and rubberized suits
Gloves, hats, boots
Sources of safety equipment
Removing residues from clothing

Rhode Island Laws
Rhode Island Pesticide Control Act
Federal Insecticide Fungicide Rodenticide Act

Label
Video: National Pest Control Assoc.: The Label
Parts of a pesticide label

12:00-1:00 pm Lunch on your own, several restaurants nearby

1:00-4:00 pm

Pesticide Laws
Pesticide Missue
Pesticide telephone directory
Basic data requirements for registering pesticides
Pesticide laws (FIFRA, FQPA, Worker Protection Standard)

Major Pesticide Groups
Merit labels (formulations)
Risk = toxicity X exposure
Toxicity, Signal words, LD_{50}
Cholinesterase testing, First Aid
Pesticide Degradation

Pesticide Resistance
Principles of pest management
Days-to-Harvest, Tolerance
FIFRA, FQPA, WPS
Drift control

Calibration for Pesticide Application
Video: Liquid calibration/application
Mixing and application problems
Video: Chronic OP Exposure & Treatment

Agenda Day II

8:00 am – 12:00 pm

Hazardous Materials Handling
Hazardous Materials Storage
Transportation
Emergency containment
Spill kit for pesticide applicators
Video: National Park Service Pesticide Applicator Safety

Right-to-Know Laws
RI State Right-to-Know, OSHA, SARA III
Labels and MSDS

Ground Water Protection
Video: Temik Contamination on Long Island
Water resources in RI

RI Laws
Inspection of operations
Recordkeeping
Renewal of applications
Recertification

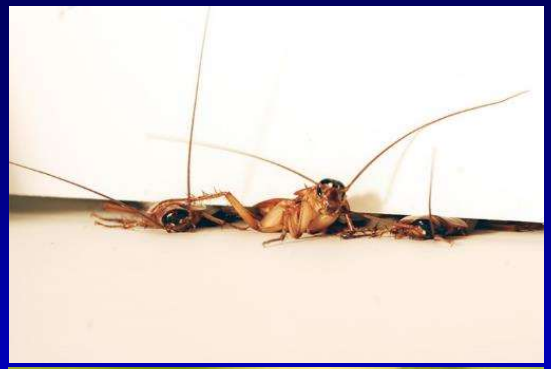
Question and Answer Period

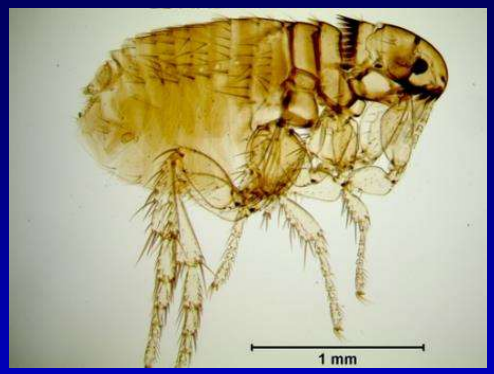
Noon: Lunch on your own

1:00-4:00 pm
DEM administered closed book exam

Funding	FY 2018	Range
Training Fees	$100,000	
EPA	$17,917	0 - $17,917/year
Total	$117,917	

Personnel	% Time Assigned to PSEP	
Margaret Siligato	25	
Matt Requintina	50	
Olivia Barsoian	70	










Joey Williamson, ©2015 HGIC, Clemson Extension

1 death

Methyl parathion and permethrin used inside homes in 7 states (Tennessee, Arkansas, Louisiana, Mississippi, Alabama, Ohio and Michigan) in 1990's

Second Girl Dies in Apparent Pesticide Poisoning in Utah Feb 11, 2010

As reported here an elsewhere in the national media two days ago, a 4-year-old girl died of apparent pesticide poisoning after her parents hired a company to rid their lawn of voles. On Tuesday, the girl's 15-month-old sister also passed away.

http://www.sltrib.com/sltrib/home/50971545-76/nocks-case-evidence-pesticide.html.csp

http://www.deseretnews.com/article/705395485/Toone-family-settles-lawsuit-in-pesticide-related-deaths.html?pg=all

http://www.safelawns.org/blog/index.php/2010/02/second-girl-dies-in-apparent-pesticide-poisoning-in-utah/

3 deaths

CDC Health Advisory

Nov. 27, 2012

From 2006-2010, National Pesticide Information Center reported 169 calls to their hotline where residents, homeowners, or pesticide applicators sprayed pesticides indoors to treat bedbugs. These cases involved pesticides that were misapplied, not intended for indoor use, or banned from use.

Of those, 129 resulted in mild or serious health effects (including one death) for persons living in affected residences.

4 deaths

June 12, 2014 Wadley, GA

A 58-year-old woman is dead and three children are in the hospital after exposure to a toxic gas.

After investigating the incident, it was discovered that a relative of the woman distributed an agricultural insecticide in her home earlier Wednesday morning to kill roaches and other insects.

5 deaths

February 23, 2015

An eight month-old baby is dead and four other children are in hospital after their mother used a fumigant to get rid of bed bugs in their Fort McMurray, Alberta apartment.

6 deaths

Sept. 18, 2015. Esmond Family Update

(CNN and EPA Bulletin) March 29, 2016 **Terminix has agreed to pay $10 million for illegally using a pesticide containing a toxic chemical in the U.S. Virgin Islands.**

"Terminix companies knowingly failed to properly manage their pest control operations in the U.S. Virgin Islands, allowing pesticides containing methyl bromide to be applied illegally and exposing a family of four to profoundly debilitating injuries," U.S. Assistant Attorney General John C. Cruden said in a statement Tuesday.

Yakima, WA Orchardist Sept. 4, 2015

A Yakima orchardist is facing $105,000 in fines from the Department of Labor & Industries for multiple serious health violations related to pesticides. Labor & Industries recently cited Gilbert Orchards Inc., for 12 serious and repeat-serious health violations.

10-year old hospitalized after termite fumigation with sulfuryl fluoride Sept. 5, 2015

6 deaths
? serious illnesses

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

August 2016

High Number of Complaints Related to Alleged Misuse of Dicamba Raises Concerns

To date, the Missouri Department of Agriculture has received approximately 117 complaints alleging misuse of pesticide products containing dicamba. Missouri growers estimate that more than 42,000 acres of crops have been adversely affected. These growers have reported damage on a number of crops including peaches, tomatoes, cantaloupes, watermelons, rice, cotton, peas, peanuts, alfalfa, and soybeans. Similar complaints alleging misuse of dicamba products have been received by Alabama, Arkansas, Illinois, Kentucky, Minnesota, Mississippi, North Carolina, Tennessee and Texas.

January 3, 2017 Amarillo, TX
4 children dead

10 deaths
? serious illnesses

March 16, 2017 Federal cyanide trap injures Eastern Idaho boy, kills dog

POCATELLO, Idaho — Federal authorities have confirmed that a cyanide trap intended to kill coyotes in eastern Idaho instead killed a 3-year-old-lab named Casey in an incident that local law enforcement officials say also injured a 14-year-old boy.

Silent Spring by Rachel Carson – Chapter 2

“It is not my contention that chemical insecticides must never be used. I do contend that we have put poisonous and biologically potent chemicals indiscriminately into the hands of persons largely or wholly ignorant of their potentials for harm.”

Protecting Groundwater

Common Pesticides in Groundwater (EPA, 1984)

ALACHLOR
ALDICARB
ATRAZINE
BROMACIL
CARBOFURAN
CYANAZINE
DBCP
DCPA
1,2-DICHLOROPROPANE
DINOSEB
DYFONATE
EDB
METOLACHLOR
METRIBUZON
OXAMYL
SIMAZINE
1,2,3-TRICHLOROPROPANE

FOR IMMEDIATE RELEASE: June 21, 2013
Wilsonville, OR

Pesticide Causes Largest Mass Bumble Bee Death on Record
Oregon Department of Agriculture confirms deaths due to application of insecticide known as Safari (dinotefuran)

Rich Hatfield, a biologist with the Xerces Society, estimates that over 50,000 bumble bees were killed, likely representing more than 300 wild colonies.

Summerville, SC Sept 1, 2016 Naled for mosquito control

Classification	Honey Bee contact or oral toxicity (µg/bee)
Virtually non-toxic	>100
Moderately toxic	1-100
Highly toxic	<1

Insecticide	Honey Bee acute toxicity (µg/bee)
cyantraniliprole (Ference)	>0.1055
chlorantraniliprole (Acelepryn)	>104
imidacloprid (Merit)	0.0037
indoxacarb (Provaunt)	0.26
spinosad (Conserve)	0.057
chlorpyrifos (Dursban, Lorsban)	0.059
lambda-cyhalothrin (Scimitar)	0.91

Chronic Toxicity – Endocrine Disruptor

- **Atrazine considered to be an endocrine disruptor**
- **Particularly evident in frogs**
- **Causes demasculinization and hypergonadism at 0.1 ppb**

U. of California

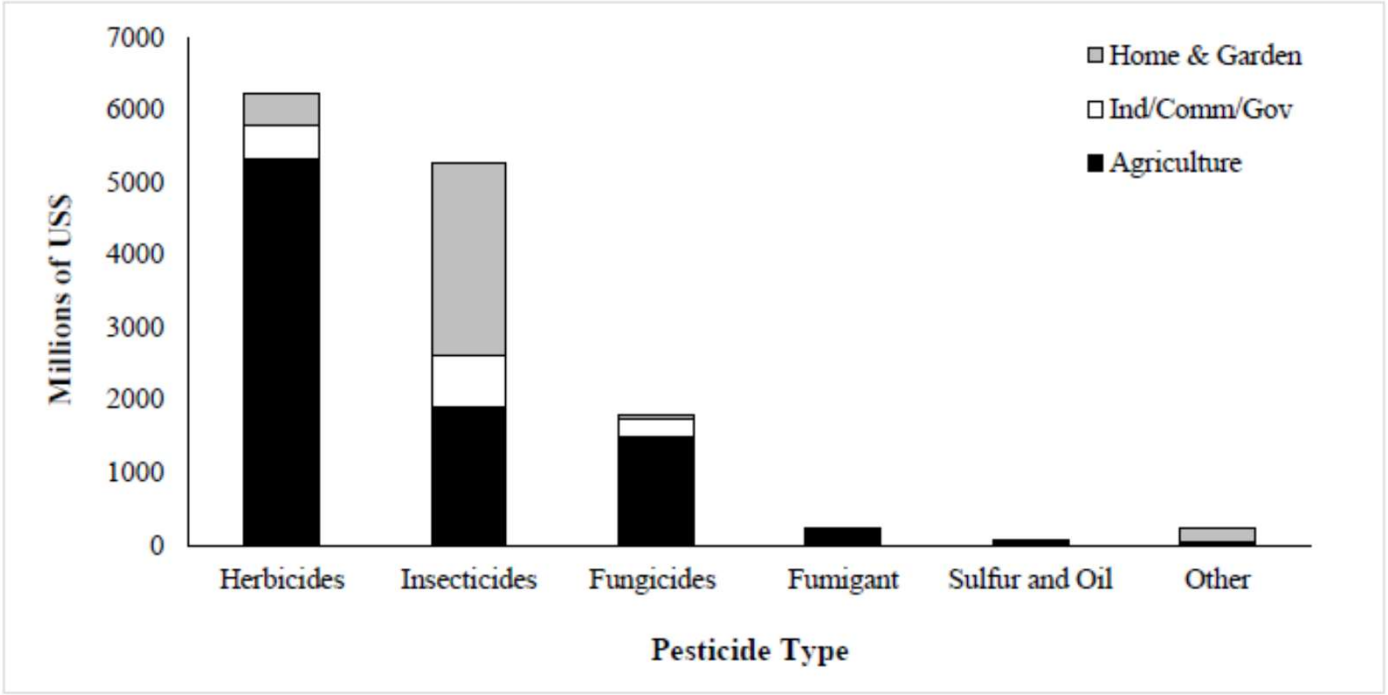


Figure 2.2. User Expenditures on Pesticides in the United States by Pesticide Type and Market Sector, 2012 Estimates

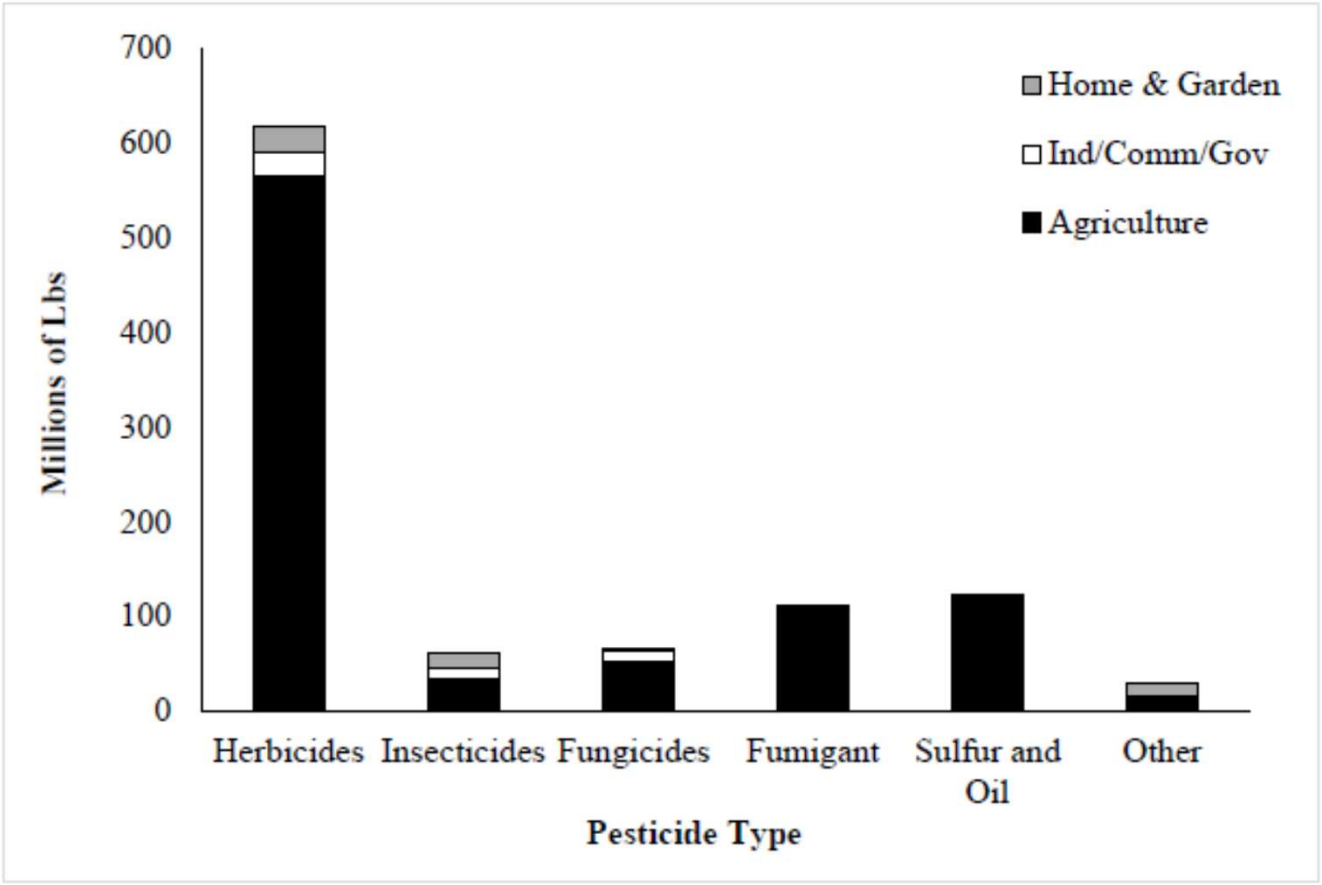


Figure 3.2. Conventional Pesticide Active Ingredient Usage in the United States by Pesticide Type and Market Sector, 2012 Estimates.

Cooperative Extension
University of Rhode Island
College of Environment and Life Sciences
Department of Plant Sciences

THINK BIG WE DO℠

THE UNIVERSITY OF RHODE ISLAND

Commercial and Private Pesticide Applicator
Training Manual

Core Supplement
January 2018

Compiled by Steven R. Alm, Margaret Siligato
and Edwin Requintina Jr

Pesticide Applicator Commercial Core Training Supplement

Pesticide Safety Education Training

Dr. Steven R. Alm, *URI Pesticide Coordinator*
Margaret Siligato, *URI Educator*
Robin Mooney, *DEM Agriculture*

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Pesticide Safety Telephone Directory

Animal Poison Control Center (ASPCA/University of Illinois) **1-888-426-4435**
24 hour hotline for anyone with animal poisoning questions
http://www.aspca.org/site/PageServer?pagename=pro_apcc&JServSessionIdr011=0kriwf2ly1.app20b

Chemtrec **1-800-262-8200**
24 hour emergency number for hazardous chemical spills, leaks or fires. www.chemtrec.org

EPA Agricultural Assistance Center **1-888-663-2155**
Compliance information on environmental regulations. www.epa.gov/agriculture

National Pesticide Information Center **1-800-858-7378**
Providing information on poisoning, safety and disposal. (M-F 6:30-4:30 pacific time) http://npic.orst.edu/

RI DEM Emergency Response **1-401-222-3070**
24 hour emergency number for major pesticide spills or emergency issues.
http://www.dem.ri.gov/programs/director/emerresp/index.htm

RI DEM Compliance & Inspection, John Leo (Dial 1, Ext. 7127) **1-401-222-1360**
Hazardous waste disposal. www.dem.ri.gov/programs/benviron/compinsp/index.htm

RI DEM Pesticide Disposal / Resource Recovery **1-401-942-1430**
For disposal of household toxic substances http://www.rirrc.org

RI DEM Division of Agriculture & Resource Marketing **1-401-222-2781**
Pesticide Section information about pesticide laws, certification, recertification & renewals. Robin Mooney (ext. 4513). www.dem.ri.gov/topics/agricult.htm

RI Department of Labor and Training **1-401-462-8000**
For compliance information on the State Right-to-Know. www.dlt.ri.gov

RI Poison Control **1-800-222-1222**
24 hour poison emergency helpline, located at RI Hospital. www.1-800-222-1222.info/poisonhelp.asp

RI Department of Health **1-401-222-2231**
Microbiology Lab. Examination of animals for possible rabies contamination. www.health.state.ri.us

Safe Drinking Water Hotline **1-800-426-4791**
Hotline provides information on EPA Drinking water programs, 10am-4pm. www.epa.gov/safewater

Soil Testing: University of Massachusetts **1-413- 545-2311**
Soil Testing Lab, West Experiment Station, North Pleasant St., UMASS, Amherst, MA 01003
Instructions and soil test order form available at: http://www.umass.edu/plsoils/soiltest

USDA Natural Resource Conservation Service **1-401-828-1300**
Soils information for growers. www.ri.nrcs.usda.gov

URI Cooperative Extension Hotline **1-800-448-1011**
Plant Clinic, diagnosis of disease and insect problems. www.uri.edu/ce/index1.html

URI Pesticide Coordinator, Dr. Steven Alm **1-401-874-5998**
Pesticide toxicity issues. Stevealm@uri.edu

URI Pesticide Applicator Training, Margaret Siligato **1-401-874-5997**
Information regarding pesticide applicator training schedules.
http://www.dem.ri.gov/programs/bnatres/agricult/pdf/uritrain.pdf Siligato@uri.edu

THE UNIVERSITY OF RHODE ISLAND
COOPERATIVE EXTENSION

Pesticide Safety Education Program
2018 Winter/Spring/Summer Training Schedule

REGISTRATION FORM

Pre-registration is required by mail: 3 East Alumni Avenue, Kingston RI 02881
NOTE: Training location is 75 East Farm Road, Kingston RI

PLEASE PRINT CLEARLY:

Name _____ Phone _____

Street Address _____ City _____

State _____ Zip Code _____ Email Address _____

CORE TRAINING - *Check which two day session you will attend:*

___ Core I: 1/25, 2/2 ___ Core II: 2/28, 3/14 ___ Core III: 3/28, 4/6 ___ Core IV: 5/16, 5/23 ___ Core V: 7/18, 7/25

CERTIFICATIONS & LICENSES - *Check which of the following you seek:*

___ **Commercial Applicator License or Certification ($275.00)** - *Registration includes Core and Core Supplement manuals (distributed on Day 1 of training).*

___ **Private Applicator Certification ($175.00)** - *Registration includes Core and Core Supplement manuals (distributed on Day 1 of training). Circle one commodity below for testing:*

Christmas Trees Fruit Greenhouse Livestock Nursery Turf Vegetables

___ **Pesticide Dealer License ($300.00)** - *Fee includes manuals*

___ **Commercial License Recertification ($225.00)** - *Attend Day 1 Core only [8 credit hrs]*

___ **Private Applicator Certification Recertification ($150.00)** - *Attend Day 1 Core only [8 credit hrs]*

COMMERCIAL CATEGORY TRAINING SESSIONS - *Check which sessions you'll attend:*

___ **Category 7A & 7D: 3/30 ($150.00)** - 4 credits ___ **Category 7A & 7D Manual ($40.00)**

___ **Category 7B Termite: 4/5 ($150.00)** - 4 credits ___ **Category 7B Manual ($40.00)**

___ **Category 3A, 3B & 2: 4/27 ($150.00)** - 4 credits ___ **Category 3A & 3B Manual ($40.00)** ___ **Category 2 Manual ($40.00)**

___ **Category 7E & 8: 5/17 ($150.00)** - 4 credits ___ **Category 7E & 8 Manual ($40.00)**

_____ Total Amount Enclosed (please add all training / license fees together)

PAYMENT: Please make check or money order (no cash or credit) payable to "URI – PSEP". **No refunds will be given**; payment can be applied to registration for a different session with advance notice. **MANUALS:** Training manuals for Commercial Category Training Sessions must be ordered in advance so that they can be mailed prior to the training sessions. **Manuals are not required for recertification**. Please note that if your registration form is not received a month in advance of the training session, you must pick up your manual(s) in Kingston, RI. Have questions? Call (401) 874-5997.

Rhode Island Farm Bureau 16B Nooseneck Hill Rd West Greenwich, RI 02817
www.rifb.org Phone: 401-385-3339 Fax 401-385-3394

RI Farm Bureau Testimony before Pesticide Control Regulations Study Commission
April 10, 2018

RI Farm Bureau is always in support of lessening regulation rather than increasing regulation.

There are a number of good non-restricted pesticides currently available. If these become restricted, farmers without a pesticide license may switch to other pesticides that are not restricted, but are not as kind to the user or the environment. In addition, if only restricted pesticides are available for a specific target, farmers may choose the cheapest option which may not be the most environmentally friendly choice.

RI Farm Bureau believes it would be beneficial to have a pesticide workshop for those applying non-restricted pesticides. The best type of training would be one which provided non-licensed applicators training in reading of labels and in application. It should not require a test as this would be training for non-restricted pesticides, and would not be for the purpose of getting licensed, but a best practices training. Ideally, a sponsor could allow this to be free to attendees, increasing the likelihood of participation.

Henry Wright
President

Pat Hogan

DEM GREEN CERTIFICATION REDUCTION NUMBERS				
Facility	Haz. Reduced pesticides	Non Haz. Reduced fertilizer	water reduced	Lbs. CO2 from fert. Reduction
Course1	n/a	3,351 lbs	8,380,898	3,038
Course 2	n/a	9,540 lbs.	70,383,870	21,091
Course 3	24lbs.	28,749 lbs.	46,865,552	4,620
Course 4	n/a	20,599 lbs	8,145,725	23,249
Course 5	n/a	1,176 lbs.	104,314,674	8,471
Course 6	n/a	28,741 lbs	4,874,730	8,471
Course 7	130 oz.	6,534 lbs.	838,098	2,476
Totals	32.12 lbs.	98,690 lbs	243,803,547	71,416
SODCO	61 gals.	103,455	129,243,520	69,521

Hogan

I wanted to make a comment at our last meeting, when Ken Ayars from DEM was here, but I did not have the numbers with me at that time.

I wanted to commend the RI DEM for their forward thinking. I am wondering how many members of the commission are aware of DEM's green certification programs.

I will talk specifically about the Green Golf Certification Program and the sod farm certification. In 2010 RIGSCA partnered with DEM, RI Turfgrass Foundation and RI CRMC to come up with the Best Management Practices for golf courses in RI. The Green Golf Certification Program is a BMP guideline for the superintendents. In 2017 at the Golf Industry Show, the Golf Course Superintendents Assoc. of America challenged all their association members to have a BMP program in place by 2020 for all 50 states. The RI superintendent's had the pleasure to be sitting there with superintendents from around the country looking at the combined logos of RIGCSA, RI DEM, RI Turfgrass Foundation and RI CRMC up on the projection screen with RI being 1 of 9 states that already had a BMP program in place.

A golf course can become certified for a 2 year period. They then have to re-certify. Part of the recertification requires that you show a reduction in water, chemical or fertilizer use or that your club has implemented changes elsewhere. Maybe they didn't recycle before or have changed from gas golf carts to electric or solar powered carts, growing more of a buffer zone for wildlife, planting pollinator friendly plants,etc.

I have numbers combined from 7 courses on reduction in water, chemicals and fertilizer.

They reduced 32 lbs. of hazardous chemicals. These were pesticides.

98,690 lbs. of non- hazardous chemicals were reduced. This is fertilizer.

There was a reduction in water use of 243,803,507 gallons

There was a reduction of 71,416 lbs. of greenhouse gasses from fertilizer reduction.

That takes care of the golf side of things. Now I will tell you about the sod farm certification program.

Full disclosure, I am the sales manager for Sodco. I have been employed there for 36 years. In that time I have seen a number of changes. For 28 years we were primarily a bluegrass sod farm. With the downturn in the economy in 2008 we had to reinvent ourselves. With the price of oil at about $4 a gallon in 2009. We got into the energy business selling corn for pellet stoves. It burns clean and you can grow it every year.

This led us into doing a heavier crop rotation to change the soil health of the farm. Now after a field has been stripped of sod it has 2 or 3 other crops such as peas & oats, hairy vetch, sorgham, winter rye, or corn planted on it and then that is turned back into the soil for organic material.

In 2010 we planted 5 acres of Black Beauty tall fescue. This requires 30-50% less water and fertilizer than bluegrass. That same year on Nantucket a nitrate issue arose. One of the commissions on the island wanted to ban bluegrass sod to the island. The commission wondered how to enforce such a ban. Our distributor on the island was in a quandary of what to do. We told him to go to the commission and tell them he had an alternative grass. In 2010 about 10% of his orders were for the Black Beauty. Last year 98% was for Black Beauty.

In 2013 we took our environmentally friendly grasses a step further. We were contacted by a seed company and NY architect to grow a no inputs needed grass for the NYC Parks Dept.

We planted 2 acres of Microclover Black Beauty. The Microclover is a legume which provides the nitrogen fixation the grass needs. In 2015 we shipped 2 truckloads of this sod to Lindower Park in Brooklyn NY. In Feb. 2016 we got word from the architect that it had passed the compliance and regulatory initiatives.

We now have over 30 acres of this grass planted.

We also have a NOFA (Northeast Organic Farming Assoc.) certified employee on staff. We will be growing a variety of organic crops this coming year.

Sodco reduced by 61 gallons of hazard material, pesticides.

Use of 103,455 lbs. fertilizer reduced non- hazardous material

129,243,520 gallons of water reduction

69,521 lbs. of CO2 were reduced from fertilizer reduction

DEM is already stretched thin on staffing and budget, making enforcement of more rules and regulations tough on them. In some cases instead of more legislation it's more education that is needed.

NATIONAL ASSOCIATION OF LANDSCAPE PROFESSIONALS

Top Priorities for the Rhode Island Pesticide Study Commission

The National Association of Landscape Professionals is committed to the thoughtful and effective regulation of pesticides by state governments that both allows for the control of damaging pests in the landscape and for the protection of non-target species such as our pollinators. In Rhode Island, we see the opportunity to strengthen and modernize existing regulations including:

Fully fund to the greatest extent possible RIDEM programs and positions.

- Consider funding via revenues from license and registration fees.
- Special consideration to ensure that State Apiary Inspector position funded and filled.

Require by regulation that applicants for both core and certification licenses attend a two-day training session.

Require specific portion of classroom instruction be given over to pollinator training including insect biology, habits, food sources, environmental threats to pollinator health, strategies, and tactics to limit pollinator/pesticide interaction.

Require that recertification credits must include a certain proportion attained via pollinator-related training sessions.

Incorporation into Rhode Island law and regulations the new EPA Revised Certification Standards for Pesticide Applicators:

- Enhances applicator competency standards ensuring Restricted Use Products are used safely.
- Establishes a maximum recertification interval of 5 years for commercial and private applicators.
- Establishes protection for noncertified applicators by requiring training before they can use RUPs
- Clarifies and streamlines requirements for states to administer their own certification programs, while granting flexibility to tailor programs to the needs of each state.

https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators

12500 Fair Lakes Circle, Suite 200, Fairfax, VA 22033
T: 703.736.9666 F: 703.322.2066
www.landscapeprofessionals.org

Contemplate classifying neonicotinoid insecticides as state limited use products:

- Recognition of importance of this group of insecticides to agriculture and horticulture;
- Recognition of political pressure to "do something" without regard to cause and effect;
- Importance of maintaining integrity of pesticide regulatory framework;
- Enhanced training of certified applicators with focus on pollinator protection;
- Result in reduction in total amount of neonicotinoids used.

Require label-specific training be given to license holders for any restricted use/state limited use pesticides:

- Require detailed training that reviews each portion of the label individually
- Annual review required for each RUP/SLU with documentation
- Special emphasis on Environmental Hazards portion of label

Recognition that pollinators should have special prominence in regulation text:

Example: Subchapter 15, Section 3 could be amended as follows:

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. Relative toxicity of pesticide to pollinators;
d. Presence of pollinators, or presence of flowering plants;
e. Presence of fish, wildlife and other non-target organisms; and
f. Groundwater and surface water drainage patterns.

Contact:

Bob Mann, Director of State and Local Government Relations

bob@landscapeprofessionals.org

Connecting People with Nature

Audubon Society of Rhode Island

April 10, 2018

Audubon provides staff support for the Pollinator Working Group (PWG). The PWG was created in 2016 by the Rhode Island House of Representatives (2016 -- H 8265) to support the RI Department of Environmental Management (DEM) and study pollinator health and habitats in Rhode Island. The PWG's initial findings were reported to the Director of DEM, the House of Representatives and the Governor in February 2017. The House of Representatives requested that the DEM continue working with the PWG (2017 -- H 6256) and report to the Director and House of Representatives on or before February 15, 2018.

The PWG is charged with:
(a) making findings with regard to:
(1) Developments in the scientific and technical understanding of conditions and practices affecting pollinator population;
(2) Conditions and practices affecting the maintenance, protection, and enhancement of pollinator habitat and health in Rhode Island;
(3) Opportunities for expanding pollinator habitat on state owned property;
(4) Rhode Island's pesticide and apiary laws and regulations and training;
(5) Strategies to publicize and coordinate public education programs directed at pollinator health and habitat;
(6) Strategies to fund pollinator monitoring and habitat enhancement;
(b) make recommendations based on its findings, to maintain, protect and enhance pollinator health and habitat in Rhode Island.

In 2018, following two years of research, the PWG's report included:

The Pollinator Working Group respectfully requests the Legislative Commission to consider the following questions and concerns:

1. Evaluate and strengthen the pesticide applicator training program offered at URI and the state licensure program.
    a. Consider requiring the training for all applicants taking the licensing test by regulation. Although this is done as a matter of practice by RIDEM, it is not required by law or regulation.
    b. Review and update the training program at URI.
    c. Include a robust module on pollinators in the licensing training to increase awareness of pollinator health and the impacts of pesticides on the state's pollinators.
    d. Ensure that licensed applicators have the ability to read and follow pesticide labels. Ensure that the test verifies this ability.

12 Sanderson Road ~ Smithfield, RI 02917-2600 ~ Phone: (401) 949-5454 ~ Fax: (401) 949-5788
www.asri.org email: Audubon@asri.org

2. Evaluate state oversight of mosquito sprayers and consider regulations to limit impacts on pollinators.

3. Evaluate the sub-lethal effects of pesticides and fungicides and the synergistic effects of pesticides through stacking or application for different reasons in the same area (mosquito control followed by chemical applications on lawn and garden). Consider strategies to address through law and regulation.

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Bayer Environmental Science

Brian Giblin
Bayer US
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March 18, 2018

Special Legislative Commission to Study Pesticide Control Regulations

Committee Members,

I apologize for being unable to attend the April 10th meeting due to a scheduling conflict and thank you for the opportunity to present my 2 top priorities.

1. The State has a created exemplary Pesticide Control Regulations that exceed Federal requirements and reach further than most other states. The issue I see is not the regulations but the ability to uphold, enforce and educate the public on these regulations.
   In my opinion, The RI Division of Agriculture at its current level is understaffed and overburdened to do anything beyond maintain and put out fires. You are asking a lot out of a small group with limited resources and adding any new regulations or responsibilities would hamper their abilities even further.

2. I see the need for more public education with the homeowner who wants to use pesticides. There is a serious misunderstanding of many products that are available to an untrained homeowner. A licensed professional has been trained and must continue his training in order to use many of the same products that are available in any local home improvement store to the untrained homeowner.

Sincerely,
Brian Giblin

Shannon Brawley, Executive Director
RI Nursery and Landscape Association
Pesticide Commission Testimony

Thank you Senator Sosnowski, Senator Coynes, Senator Euer and commission members for inviting me here to speak today on behalf of the Rhode Island Nursery and Landscape Association.

- RINLA represents a $2.5 billion industry in Rhode Island. We are one of the oldest New England agriculture and plant based industry associations – and next year we will celebrate our 100th year anniversary.

- We serve as an umbrella trade association for nearly 600 members, which include nurseries and sod farms, landscape contractors, arborists, masons, garden centers, landscape designers, growers of fruits/vegetables/flowers, suppliers and allied businesses. And more!

- RINLA members are professionals who are licensed, insured, and implement Integrated Pest Management best practices, following regulations and labels.

- RINLA offers training thoughout the year through our Certified Horticulturalist program, twilight meetings, winter conference and many other workshops. Our members also offer pesticide training for their employees and suppliers offer training for their customers.

- It is also worthwhile to note that RINLA and partners are Real Jobs RI grant recipients and we are taking an in-depth approach to training young people, in our Registered Apprenticeship program, who coming into the industry. This includes pesticide training.

Regarding pesticide related issues, RINLA has several concerns:

- Within green industry there is a general feeling that licensed professionals come under scrutiny, while more could be done to encourage unlicensed and uninsured companies to become licensed and insured commercial pesticide applicators.

- Many of the pesticides used carefully by RINLA professionals are available to homeowners. RINLA encourages site of purchase marketing and educational information for retail customers.

- At present there is no mandatory training prior to testing to receive a pesticide license. RINLA would like to see mandatory training put in place, with more involvement from industry in strengthening current training programs.

- We believe there needs to be more research done concerning Integrated Pest Management, which includes issues relating to pollinators – RINLA is encouraging the committee to revisit the legislation concerning funding for research.

Thank you. And I would like to like to introduce Dr. James Wilkinson owner of SeaScape.

LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

NOTICE OF MEETING

DATE: Tuesday, May 1, 2018
TIME: 2:30 P.M.
PLACE: Senate Lounge - State House

AGENDA:

I. Call Meeting to Order

II. Remarks from the Chairperson, Senator V. Susan Sosnowski

III. The Pesticide Control Regulations Study Commission members discussion of previous testimony, findings and recommendations

IV. Public comment

V. Next Meeting Date and adjournment

Please contact Patricia Breslin, Senate Legal Counsel at (401) 276-5536
pbreslin@rilegislature.gov

POSTED: THURSDAY, APRIL 26, 2018, 1:50 PM

NATIONAL ASSOCIATION OF LANDSCAPE PROFESSIONALS

Top Priorities for the Rhode Island Pesticide Study Commission

The National Association of Landscape Professionals is committed to the thoughtful and effective regulation of pesticides by state governments that both allows for the control of damaging pests in the landscape and for the protection of non-target species such as our pollinators. In Rhode Island, we see the opportunity to strengthen and modernize existing regulations including:

Fully fund to the greatest extent possible RIDEM programs and positions.

- Consider funding via revenues from license and registration fees.
- Special consideration to ensure that State Apiary Inspector position funded and filled.

Require by regulation that applicants for both core and certification licenses attend a two-day training session.

Require specific portion of classroom instruction be given over to pollinator training including insect biology, habits, food sources, environmental threats to pollinator health, strategies, and tactics to limit pollinator/pesticide interaction.

Require that recertification credits must include a certain proportion attained via pollinator-related training sessions.

Incorporation into Rhode Island law and regulations the new EPA Revised Certification Standards for Pesticide Applicators:

- Enhances applicator competency standards ensuring Restricted Use Products are used safely.
- Establishes a maximum recertification interval of 5 years for commercial and private applicators.
- Establishes protection for noncertified applicators by requiring training before they can use RUPs
- Clarifies and streamlines requirements for states to administer their own certification programs, while granting flexibility to tailor programs to the needs of each state.

https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators

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www.landscapeprofessionals.org

Contemplate classifying neonicotinoid insecticides as state limited use products:

- Recognition of importance of this group of insecticides to agriculture and horticulture;
- Recognition of political pressure to "do something" without regard to cause and effect;
- Importance of maintaining integrity of pesticide regulatory framework;
- Enhanced training of certified applicators with focus on pollinator protection;
- Result in reduction in total amount of neonicotinoids used.

Require label-specific training be given to license holders for any restricted use/state limited use pesticides:

- Require detailed training that reviews each portion of the label individually
- Annual review required for each RUP/SLU with documentation
- Special emphasis on Environmental Hazards portion of label

Recognition that pollinators should have special prominence in regulation text:

Example: Subchapter 15, Section 3 could be amended as follows:

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. Relative toxicity of pesticide to pollinators;
d. Presence of pollinators, or presence of flowering plants;
e. Presence of fish, wildlife and other non-target organisms; and
f. Groundwater and surface water drainage patterns.

Contact:

Bob Mann, Director of State and Local Government Relations

bob@landscapeprofessionals.org

LARGESS FORESTRY

May 1, 2018

Largess Forestry Inc., founded in 1986, by Matthew "Twig" Largess, is dedicated to the preservation, restoration, and education of the Earth's forests while enhancing awareness and knowledge of the natural world—we are proud to be selected for the Legislative Commission to Study Pesticide Control Regulations.

Previous Testimony

Previous testimony has been very informative, as a long time commercial and licensed applicator, I feel the certification school is sufficient, and would like to commend the commission thus far, and especially Patricia Breslin, Esq. for her outstanding professional organizational skills and work. The state of Rhode Island has a tremendous talent in a lot of areas, and sometimes they should get more credit.

Findings

An ISA certified arborist working in the state of Rhode Island for over 30 years, I have seen the good, the bad, and the ugly. Most arborists in this state are highly trained, but like in any profession, a few bad apples can spoil the whole bunch-- that's why this commission is extremely important.

A few historic recent tree pest events:

- Gypsy Moth- Last year the population crashed, a fungus that was released years ago has dropped the population to acceptable levels and it should be a long time before these insects are on the front page of the news again.
- Winter Moth- Also starting to be controlled by natural fungi.
- Hemlock - woolly adelgid is easily controlled with non-toxic soaps and oils.
- American Chestnut Blight – Big news in forestry circles where trees are being cloned for resistance to this blight.
- Asian Longhorn Beetle- Huge outbreak in Worcester, MA, only 20 miles from the Rhode Island border. Is the eradication program working? Thousands of trees have been lost. Is it coming to Rhode Island?
- Emerald Ash Borer- Our native ash trees are under great threat and could be extinct in our lifetime from a small insect imported from Asia—is there a solution?

Recommendations

1. A study of the bee population by The Natural History Survey
I was shocked to hear that no one knows for sure the exact bee population in the state of Rhode Island. I recommend The Natural History Survey, an outstanding organization headed by Dr. David Gregg, conduct a yearly bee study-- the insect is too important for our health for us not to know it's exact population.

2. A Scientific Study on Round Up
It's in the world news and is banned in a lot of other nations because of it's effect on insect and human health.

3. Education
A pilot school program to start training students on pesticides and herbicide training, since there is a lack of trained workers in this field, it could also be an economic and employment boost to the state.

4. Urban Reforestation
Trees are our great pollinators, especially tulip poplars, crab apples and cherries. Our tree canopy and population is in great decline. Let's start a program to reforest our urban area.
Note: did you know that Rhode Island and Connecticut are the two leading states in loss of tree habitat?

Remember-- preservation, restoration, and education.

Trees, bees, and all of you, are cool!

Matthew "Twig" Largess
ISA Certified Arborist NE No. 0802
RI Licensed Arborist No. 200
RI Commercial Applicator's Certificate No. 3663
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Voice of the Forest
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Connecting People with Nature
Audubon Society of Rhode Island

May 1, 2018

Audubon and the RI Nursery and Landscape Association provides staff support for the Pollinator Working Group (PWG). The PWG was created in 2016 by the Rhode Island House of Representatives (2016 -- H 8265) to support the RI Department of Environmental Management (DEM) and study pollinator health and habitats in Rhode Island. The PWG's initial findings were reported to the Director of DEM, the House of Representatives and the Governor in February 2017. The House of Representatives requested that the DEM continue working with the PWG (2017 -- H 6256). The second year PWG report was sent to the Director and House of Representatives on February 15, 2018.

The PWG is charged with:
(a) making findings with regard to:
(1) Developments in the scientific and technical understanding of conditions and practices affecting pollinator population;
(2) Conditions and practices affecting the maintenance, protection, and enhancement of pollinator habitat and health in Rhode Island;
(3) Opportunities for expanding pollinator habitat on state owned property;
(4) Rhode Island's pesticide and apiary laws and regulations and training;
(5) Strategies to publicize and coordinate public education programs directed at pollinator health and habitat;
(6) Strategies to fund pollinator monitoring and habitat enhancement;
(b) make recommendations based on its findings, to maintain, protect and enhance pollinator health and habitat in Rhode Island.

The PWG has made the following recommendations to the Senate, House and Governor in the 2017 and 2018 reports. These recommendations are directed at improving the status of pollinator health and habitats in Rhode Island:

Regulatory

1. **Rhode Island should use pesticide registration funds to strengthen regulation of pesticides, oversight of beekeepers and fill research needs.**
    a. Use the funds that come from pesticide registration for key DEM programs related to pesticides and pollinators. We recognize there is an FTE cap, but funds could be applied to these issues via contractual arrangements. For example, URI already is a key partner with the pesticide training.
        - Beekeeper registration and training. Beekeepers are required by law to register § 4-12-12 but we know many beekeepers do not register. Registration allows the state to provide training and to notify beekeepers of disease outbreaks and application of pesticides in their area.
        - Pesticide training: Training should include pollinator information/education.
        - Hive inspections.
        - Inspections of pesticide applications.

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www.asri.org email: Audubon@asri.org

- Fund research to fill knowledge gaps.

b. Connect vector control management to pollinator protection. Mist blowers for mosquito control have impacts on local insects.

c. Modernize the state's pesticide program. The program – laws and regulations – are 30 years old. A full review is in order with recommendations for strengthening.

d. Consider convening the Beekeeping advisory board, required by existing statute (§ 4-12-16). The purpose of the board is as follows:

§ 4-12-16 (e) The advisory board shall serve in an advisory capacity to the director of environmental management in all aspects of beekeeping as it relates to the control and elimination of honey bee diseases and pests, inspection of apiaries and establishment of internal and external quarantines as outlined in this chapter.

(f) The board will advise the director on policies, procedures, and regulations designed to strengthen the beekeeping industry within the state so as to make the state self-sufficient in the area of pollination required to support the state's agricultural industry.

Programmatic

2. Members of the PWG can work with RI DEM and RI DOT to enhance pollinator habitats and promote best management practices.

a. Consider requiring state projects to devote some portion of their landscaping to pollinator habitat. This is consistent with amendments to the RI Green Buildings Act passed in 2017 (RIGL 37-24-4).
b. Rhode Island should actively work with the private sector in order to build a "seed industry" for rehabilitation and restoration.
c. Promote best management practices for pollinator plantings/management for different crops and roadsides, etc. The Farm Bureau has national recommendations for enhancing pollinator habitats in road side management - The New England DOT's also have recommendations.
d. Promote best management practices for pesticide application - Encourage Integrated Pest Management.

Knowledge Gaps

3. RI scientists and managers should look for ways to fill knowledge gaps in our understanding of pollinator health and habitats

Conduct research to better understand:

a. The sub-lethal effects of pesticides and the synergistic effects of pesticides through stacking or application for different reasons in the same area (mosquito control followed by chemical applications on lawn and garden).
b. Status and trends in RI pollinator species and habitats.
c. Beekeeping data including location of managed hives, the number of hives, number and types of bees being imported into the state, treatments of hives.
d. Funding sources for research and management.
e. Native bees, habitats.
f. Pesticides in hives (wax, bee bread and pollen).

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Public Education

4. Expand public education on pollinator health and habitats:
    a. Bring farming back into the K-12 curriculum. In RI, the FFA programs have disappeared, but other states are bringing them back. RI should follow suit. Classes can cover agriculture best practices, information on how to best manage pesticides (could help with residential application), and information on pollinators and beekeeping. Encourage schools to have hives.
    b. Support and expand development of suburban/urban pollinator habitats. Explore strategies for expanding the excellent training and network developed by the Master Gardeners.
    c. Invest in advertising to get the word out. People are becoming aware of the challenges facing pollinators through TV programs, news, etc. RI should build from this to reach a larger audience.
    d. Support the development of citizen science programs like programs under developed at RI DEM Division of Fish & Wildlife.

In 2018, following two years of research, the PWG's report included the following recommendations for consideration by the **Legislative Commission to Study Pesticide Control Regulations**:

1. Evaluate and strengthen the pesticide applicator training program offered at URI and the state licensure program.
    a. Consider requiring the training for all applicants taking the licensing test by regulation. Although this is done as a matter of practice by RIDEM, it is not required by law or regulation.
    b. Review and update the training program at URI.
    c. Include a robust module on pollinators in the licensing training to increase awareness of pollinator health and the impacts of pesticides on the state's pollinators.
    d. Ensure that licensed applicators have the ability to read and follow pesticide labels. Ensure that the test verifies this ability.

2. Evaluate state oversight of mosquito sprayers and consider regulations to limit impacts on pollinators.

3. Evaluate the sub-lethal effects of pesticides and fungicides and the synergistic effects of pesticides through stacking or application for different reasons in the same area (mosquito control followed by chemical applications on lawn and garden). Consider strategies to address through law and regulation.

Members of the Pollinator Working Group, 2017

Ken	Ayars	R.I. Dept. of Environmental Management, Div. of Ag.
Meg	Kerr	Audubon Society of Rhode Island (committee/admin. support)
Joel	Tirrell	R.I. Nursery and Landscape Association
Shannon	Brawley	R.I. Nursery and Landscape Association (admin. support)
David	Brunetti	Environment Council of R.I.
Henry	Wright	R.I. Farm Bureau
Heidi	Quinn	R.I. Farm Bureau
Ken	Payne	
David	Gregg	R.I. Natural History Survey
Lisa	Tewksbury	University of R.I., Plant Sciences - Bio-Control Lab
Rafael	Nightengale	URI Lands and Grounds
Keith	Salisbury	R.I. Beekeepers Association
Robert	Mann	National Assn of Landscape Professionals
Sarah	Churgin	Eastern RI Conservation District

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Audubon Society of Rhode Island

Let's get Rhode Island Buzzing About Pollinators!

Bee Rally at the State House: Tuesday, June 19, 2018; 2:00 – 4:00 pm
State House lit in Bumblebee Black and Yellow: June 18 – 24, 2018

Somewhere between 75% and 95% of all flowering plants on the earth need pollinators. Over 180,000 different plant species and more than 1200 crops depend on their services. That means that one out of every three bites of food you eat is on your plate because of pollinators! Many pollinator populations are in decline due to the loss of feeding and nesting habitats, pollution, misuse of chemicals, disease, and changes in climatic patterns.

Audubon Society of Rhode Island will celebrate National Pollinator Week by lighting the State House in bumblebee yellow and black and hosting a Bee Rally on June 19, 2018.

Join us to:

- Raise public awareness of the need to protect pollinators and their habitats.
- Encourage State legislators and decision makers to make pollinators a priority.
- Celebrate the steps that Rhode Island has taken to enhance pollinator habitat.
- Promote media coverage of Pollinator Week.

Who should join the Bee Rally?

- Farmers and food vendors who depend on pollinators – sampling is welcome
- Musicians and Artists
- Children / Schools
- Pollinator garden and habitat experts

We are inviting Governor Raimondo to join the Bee Rally and share what she and her administration are doing to keep pollinators healthy in Rhode Island. There may even be a release of butterflies!

Join the Rally and Help get Rhode Island Buzzing!

Consider hosting a table, presenting information or providing entertainment. It's FREE!

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THE ENVIRONMENT
AND LIFE SCIENCES

THINK BIG WE DO

DEPARTMENT OF PLANT SCIENCES AND ENTOMOLOGY
Woodward Hall, 9 East Alumni Avenue, Kingston, RI 02881 USA p: 401.874.2454 f: 401.874.2494 web.uri.edu/pse

May 1, 2018

Recommendations to The Special Legislative Commission to Study Pesticide Control Regulations:

1. Eliminate the "loophole" in the current regulations that allows initial applicators to take the exam and become licensed without attending the URI core training program. The information that the trainers present regarding real life examples of pesticide accidents and misuse in Rhode Island and elsewhere (lawn care truck overturns and tank mix is headed for a storm drain, a fire in a pesticide storage over a well which resulted in capping the well, pesticide misuse cases that have resulted in loss of motor skills to death, bee kills, etc.) do not have the same impact if mentioned in a manual (which none of them currently do) as video clips and slides assembled and presented by the trainers. The assemblage of four or more speakers at each training session also shows the commitment to proper pesticide applications.

2. Create a Supervisory License which would require an applicant to take a written and oral exam (similar to Connecticut, Massachusetts and New Hampshire) in order to operate a pest control business. Provide financial support from pesticide registration receipts and fees for DEM to hire one person to administer additional exams.

3. Reinstate the $20,000 (1988 dollars) ($40,000 in 2018 dollars) from pesticide registration receipts which was supposed to be provided yearly to URI to support the training program but was only provided up until 2001. Ideally, fully fund salary and benefits ($100,000) to allow hiring a M. S. level trainer.

4. With additional support, URI will be able to continue to incorporate information in the training regarding toxicity of pesticides to bees and strategies to minimize bee mortality.

5. With additional support, URI will be able to provide more training to growers on general and restricted use pesticides.

6. With additional support, URI will be able to provide more training in all categories.

7. With additional support, URI will work with the URI Master Gardener program to disseminate more information on how to protect bees and other wildlife from pesticides.

8. Reinstate the Pesticide Relief Fund from pesticide registration receipts and board to award small grants with the goals of pesticide reduction and integrated pest management.

Thank you for your consideration.

Sincerely,

Steven R. Alm
Professor of Entomology and Pesticide Coordinator
stevealm@uri.edu
401-874-5998

LEGISLATIVE COMMISSION TO STUDY PESTICIDE CONTROL REGULATIONS

NOTICE OF MEETING

DATE: Tuesday, May 29, 2018
TIME: 2:30 P.M.
PLACE: Room 313 - State House

AGENDA:

I. Call Meeting to Order

II. Remarks from the Chairperson, Senator V. Susan Sosnowski

III. Study Commission members discussion of draft findings, recommendations and report

IV. Adjournment

***No public testimony will be received during this meeting**

Please contact Patricia Breslin, Senate Legal Counsel at (401) 276-5536
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POSTED: FRIDAY, MAY 25, 2018, 10:58 AM

Unknown Organophosphate Exposure Event – April 24, 2018

Exeter Fire District – Division of Emergency Medical Services members affected:

- Joseph Reppucci, EMT-Cardiac
- James Teevan, EMT- Cardiac

Exeter Fire District – Division of Emergency Medical Services members that assisted:

- Chief Thomas Lawrence EMT-P (Remote)
- Cyndie Horan – EMT- Cardiac
- Thomas Mulcahey – EMT- Cardiac

Event Details:

On 4/27/18 my partner and I responded to the side of 95 South for a person with difficulty breathing. While enroute to the scene the rescue/ambulance was requested by RI State Police to expedite and we were notified that there was a language barrier. Once on scene found 44y/o male patient with severe difficulty breathing standing with the four other occupants of the vehicle. and three members of the Rhode Island State Police. The other occupants of the vehicle had very limited English and denied knowing the patient, only that he came from fall river. They reported they did not know his name, age, or language spoken, but they did hand us an inhaler, which they had used without success. The other occupants of the vehicle told us they were masons, and they had left Fall River MA, and were heading to CT to do job, but no other details. Of note, the town we work in has no police department, a volunteer fire department that typically does not support rescue/ambulances, depending on the severity of the call. Therefore, we are a team of two for all calls, unless mutual aid is called from the town next door.

When we arrived, the patient was out of the vehicle, tripoded over the back of the car, with audible wheezes, without auscultation. The patient was in respiratory distress, boarding on respiratory failure. My partner and I handled the patient with limited PPE, while outside the rescue/ambulance, which could have led to our exposure. At no time did myself or my partner go into the vehicle, as we focused on rapid patient assessment on the side of the road, and quickly moved him into the back of our rescue/ambulance. While on the scene my partner and I did not notice any visible substances around the vehicle or on any of the vehicle's occupants. None of the other vehicle occupants, were showing any signs or symptoms, and they were left with the Rhode Island State Police.

Once inside the rescue/ambulance the patient was treated accordingly to the RI State Protocols for Respiratory Distress. At no time did we remove the patients outer clothing, work boots, or long underwear. While trying to obtain information from the patient, we contacted a Spanish translator to ask only yes and no questions, but the patient was too confused to answer. It seemed like all the treatments conducted for Respiratory Distress were not working, and we decided to put the patient on CPAP, with high flow O2, and an inline nebulizer. I drove the rescue/ambulance to the hospital and my partner teched the call. During transport my partner reassessed Pt. and found he had a calmer appearance and gave thumbs up to treatment process. During transport he became anxious/tachypnic. Upon auscultation noted rales in both upper/lower bilateral lobes with hypertension noted, with JVD. Administered 0.4mg NITRO SL. Notified the hospital on the change in patient's condition. When we arrived at the hospital, I took the patient out of the truck and lowered the wheels of the stretch to the ground. I remember thinking he had a heavy chemical smell on his boots. Once at the ER, the patient's condition was

worsening, and we stayed with hospital staff to help provide what little information we had. Hospital ED staff immediately cut of the patient's clothes and each staff members was given an N95 mask. The hospital initiated strict contact precautions, and access to the patient was limited.

Once patient care was transferred a lite decon was done in the back of the rescue/ambulance, to get us back in service. Of note, before we left the hospital, I noticed my partner acting a "little weird," and I asked him if he was ok., which he stated he was fine. While enroute back to Headquarters my partner was continuing to act "odd" and talking to me but not making any sense. On multiple occasions, I had to ask him what he was talking about. A few minutes later my partner started reaching for the windshield and was staring into space. He then turned to me and asked if I felt ok. My partner stated that he felt "high" and that something was not right.

Since, we were almost back in town, I pulled the rescue/ambulance to the side of the road and requested Fire Alarm to send assistance to our location. I reported that I believed my partner had been exposed to an unknow chemical (narcotic) and that I would be starting care in the back of the vehicle. In the back of the truck I started a rapid assessment. While I was decontamiating my partner's hands and arms, we called the hospital emergency room and asked if anything was found on the patient, due to the signs and symptoms being displayed. The hospital reported that they had not found anything and requested we return for evaluation.
Ambulance/rescue staff arrived on scene, and we continued care while enroute to the hospital. The symptoms that my partner was experiencing was, burning/tingling of the hands, tachycardia, sweating, pinpoint pupils, confusion, and anxiety. The working assumption was that my partner had been exposed to an unknown narcotic.

While enroute to the hospital, I started to get a "tingling" and "burning" sensation in my hands, and felt very warm and anxious. I assumed these were because I was nervous for my partner, but to be safe, I washed my hands with sterile water and continued care, with no relief. Once at the hospital, I handed care of my partner to the ED triage nurse, and they put him in a negative pressure room. Once care was transferred I immediately washed my hands and arms again, with no relief from the symptoms. I noticed I was not feeling well and was extremely hot and sweating. I went outside for air, and a fellow EMT suggested, "I did not look good" and that he wanted to take my blood pressure. I was experiencing, excessive sweating, confusion, internal body tremors, headache, and a chemical taste in the back of my mouth. I was then taken back inside the Hospital, where I was first sent to rapid triage, then sent to an isolation room with suspected exposure.

The hospital contacted poison control, and the Rhode Island Department of Environmental Management (RIDEM) Hazmat. Poison Control and RIDEM-HAZMAT requested the truck be taken out of service until it could be decontaminated. Since this was expected narcotic exposure, staff were told to wear PPE (gown, gloves, and mask) and return the rescue/ambulance to the station for decon, which they did.

We were in this hospital for about 6 hours, then released. When we were released, they returned our uniforms, to get dressed in again and discharged us.

Unknown Organophosphate Exposure Event – April 24, 2018

Upon discharge, the acting chief, decided we needed to eat something and took us to a late lunch at a local establishment. (this restaurant was later deconned by the Local EMA director)

We arrived back to headquarters where RIDEM was waiting for us. Since no decontamination was conducted on my partner or I, RIDEM ordered us to remove all clothing and talk a cold shower, at headquarters, which we did.

The symptoms we had lasted 24 hours for me and 36 hours for my partner. The symptoms included burning and tingling in our hands, confusion, slight disorientation, profuse sweating, high blood pressure (sinus tachycardia), internal body tremors, headache, chemical taste, constricted pupils, and large muscle cramps.

Later effects were nausea, diarrhea, inability to sleep, continued confusion, loss of appetite and memory loss of some of the events, which lasted into the next day/two days.

What we were exposed to is still unknown, but later information was provided by RIDEM and the hospital expect that we were exposed to an organophosphate. The original patient, was an illegal alien, who was doing odd jobs for the three days prior, and never changed his clothing. The back story is that he had been working for a landscaping company mixing chemicals from different colored bags, to create one mixture for application. This gentleman was not licensed and had no experience mixing these chemicals, nor did he know what he was mixing. He was just following instructions from the owner of the company, which is still unknown.

The positive is everyone got better and the original patient was discharged from the hospital three days later, with some severe long-term effects. It is unknown if the long-term effects were preexisting or caused by large exposure to the organophosphates.

-----END----------