

TESTIMONY HB387

From: The University of Maryland Environmental Law Clinic, Adam Balick (Student Attorney), Joan Chu (Student Attorney), William Jesse Grady, (Student Attorney), Seema Kakade (Director)

To: House Environment and Transportation Committee

Position: PROVIDING DATA ON STATE PESTICIDE REGULATION

Date: February 9, 2022

My name is Adam Balick and I represent the University of Maryland Environmental Law Clinic. Fellow student attorneys and I have taken on legal research regarding regulation of pesticides at the state level. Today I will be providing testimony regarding six states that house authority on regulations of pesticides within the relevant corresponding state environmental agency.

Specifically, this overview of six state agencies demonstrates that the successful regulation of pesticides can be achieved by state agencies with expertise in health and safety. Transferring regulatory authority of pesticide laws to Maryland Department of the Environment (MDE) would not be a novel concept given that other states regulate pesticides within a similar administrative body.

To that end, this testimony provides information on the regulation of pesticides for six states. The states discussed in this document have chosen not to administer their pesticide laws with their state Department of Agriculture. Included in this document is a description of pesticide laws in six federally compliant states and their respective state agencies.

All state pesticide laws must comply with the requirements set out in the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”). However, **the federal government does afford a degree of flexibility to states in their regulations of pesticides to go beyond the registration to further restrict or ban pesticides it deems necessary to protect the interests of the state.**

A central purpose of pesticide regulation is to ensure that pesticides may be used without unreasonable adverse effects on the environment and human health, so states have a wide latitude in determining what a state needs to achieve these purposes. States

like New York have explicitly stated that they transitioned pesticide regulation authority from their Department of Agriculture to the Department of the Environment “to improve and coordinate the environmental plans, functions, powers, and programs of the state.”¹ Whether for health and safety evaluation, or for consolidation and efficiency, states have elected to give state agencies, outside of Agriculture, regulatory power over pesticides in their state. **More detailed information on FIFRA and state regulatory schemes can be found in the below “Report on Pesticide Regulation by States” included with this testimony.**

State	Primary Pesticide Regulatory Agency
Alaska	Department of Environmental Conservation
Connecticut	Department of Energy and Environmental Protection (DEEP)
New Jersey	Department of Environmental Protection
New York	Department of Environmental Conservation
Rhode Island	Department of Environmental Management with input from its Pesticide Relief Advisory Board.
South Carolina	Clemson University Division of Regulatory and Public Service Programs Department of Pesticide Regulation (DPR) with input from its Pesticide Advisory Committee. Department of Health and Environmental Control (DHEC).

Respectfully submitted,



Adam Balick, Student Attorney;
 Joan Chu, Student Attorney; and
 W. Jesse Grady, Student Attorney
 Seema Kakade, Director
 University of Maryland Environmental Law Clinic
 500 W Baltimore St.
 Baltimore, MD 21201
 *Students practicing pursuant to Maryland Rule 19-220

¹ See endnote ‘vii’ in “Report on Pesticide Regulation by States”

Report on Pesticide Regulation by States

Federal Framework (FIFRA) From US EPA Website:

State regulation of pesticides occurs within a broader federal regulatory scheme. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the Federal statute that governs the registration, distribution, sale, and use of pesticides in the United States. Pursuant to FIFRA §24(a) addressing “Authority of States,” a State may regulate the sale or use of any registered pesticide within the State. However, the regulation on the sale and use of the pesticide must not permit any sale or use prohibited by FIFRA. In addition, the EPA and the states (typically that state’s agriculture office, but not in all cases) register or license pesticides for use in the United States.ⁱ

Further, FIFRA allows states to have a role in setting standards for pesticides. States may choose to regulate the use or sale of pesticides in a more conservative manner than the federal government, but it should be noted that states are not permitted regulate labeling or packaging of pesticides differently than the federal government. While FIFRA does not require states to create regulatory programs, many states choose to.ⁱⁱ

Finally, the federal government regulates pesticide registration under §3 of FIFRA. Pesticides must be registered or exempted by EPA’s Office of Pesticide Programs before they may be sold or distributed in the United States. After a pesticide is registered by EPA, states can register pesticides under specific state pesticide registration laws. **A state may have more stringent requirements than FIFRA for registering pesticides for use in that state.** The minimum standard for pesticide registration allowable by FIFRA §3(c)(5) is as follows: A) the product’s composition is such as to warrant the proposed claims for it (passes benefit/risk standard); B) labeling and other information submitted with application comply with FIFRA; C) it will perform its intended function without unreasonable adverse effects on the environment (product works as claimed); and (D) when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

The six states listed below have adopted laws where authority to regulate pesticides resides specifically within the Department of Environmental Conservation, Department of Energy and Environmental Protection, and the Department of Environmental Protection. Every state agency listed below has chosen to restrict certain pesticides, tailored to their own state’s local needs, further than what is

required by federal minimum standards. The following examples illustrate how states have delegated regulatory authority to agencies that are better suited to evaluate health and environmental risks.

The state laws covered below are **only a sampling of the many ways states may go beyond FIFRA requirements.**

Alaska

The Department of Environmental Conservation is responsible for regulating pesticides in Alaska. The regulations this department must enforce are stipulated in Alaska Administrative Code Title 18 (Environmental Conservation) Chapter 90 (Pesticide Control). The state code covers a range of pesticide regulatory areas from “Purpose, Applicability, Prohibitions, and Discharge Notification” (see § 18 AAC 90.010 to 18 AAC 90.040) to “Pesticide Handling Requirements” (see § 18 AAC 90.600 to 18 AAC 90.650) and “Forestry Vegetation Management” (see § 18 AAC 90.800). As described below Alaska will specifically look at the “threat to human health, safety, and welfare, animals, and the environment that might result from distribution, sale, or use of the pesticide” when it comes to action on application for registration.

When considering allowing registration of a pesticide, Alaska has established evaluation criterion. Alaska requires its Department of Environmental Conservation to evaluate the protection of the water of the state from pesticide contamination.

Code:

Alaska Admin. Code tit. 18, § 90.215 Department action on application for registration.

Example:

- (a) Within 60 days after an application for pesticide registration is submitted, the department will, in its discretion,
 - (1) register the pesticide, using the pesticide’s EPA registration number;
 - (2) refuse to register the pesticide; or
 - (3) notify the producer regarding restrictions on pesticide delivery, distribution, sale, or use by classifying that pesticide as a state restricted-use pesticide; examples of restrictions include
 - (A) sale to certified applicators only;
 - (B) prohibition of use in designated areas;
 - (C) permit required for use; or
 - (D) limitation on application rate or frequency.
- (b) In its decision under (a) of this section, the department will consider**

- (1) **the threat to human health, safety, and welfare, animals, and the environment that might result from distribution, sale, or use of the pesticide;**
- (2) **applicable findings and recommendations of a local, state, or federal agency;**
- (3) **protection of waters of the state from pesticide contamination.**

Connecticut

The Department of Energy and Environmental Protection (DEEP) is responsible for regulating pesticides in Connecticut. Connecticut Administrative Code Title 22a (Environmental Protection) stipulates the pesticide regulations for the state. Notably Connecticut code includes prohibition of neonicotinoid applications on linden or basswood trees shown in the Code provided below. Additionally, the commissioner of DEEP has the explicit statutory authority to restrict the use of a pesticide after finding that it causes unreasonable adverse effects on the environment.

Code:

Conn. Gen. Stat. § 22a-50 Classification of pesticides, notice of changes. Registration fees, supplemental statements, prima facie evidence

Example:

- (a) All pesticides which are registered shall be classified by the commissioner as acceptable for general use or for restricted use, provided if the commissioner determines that some of the uses for which the pesticide is registered should be for general use and that other uses for which it is registered should be for restricted use, he shall classify it for both general use and restricted use.
- (b) In the event that the commissioner determines that the pesticide, when applied in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly recognized practice, will not cause unreasonable adverse effects on the environment, he will classify the pesticide, or the particular use or uses of the pesticide to which the determination applies for general use.
- (c) **In the event that the commissioner determines that the pesticide, when applied in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly**

recognized practice, may generally cause, without additional regulatory restrictions, unreasonable adverse effects on the environment, including injury to the applicator, he shall classify the pesticide, or the particular use or uses to which the determination applies, for restricted use as follows:

(1) If the commissioner classified a pesticide, or one or more uses of such pesticide, for restricted use because of a determination that the acute dermal or inhalation toxicity of the pesticide presents a hazard to the applicator or other persons, the pesticide shall be applied for any use to which the restricted classification applies only by a certified applicator or under the direct supervision of a certified applicator;

(2) If the commissioner classified a pesticide, or one or more uses of such pesticide, for restricted use because of a determination that its use without additional regulatory restriction may cause unreasonable adverse effects on the environment, the pesticide shall be applied for any use to which the determination applies only by a certified applicator or under the direct supervision of a certified applicator or subject to such other restrictions as the commissioner may provide by regulation.

(d) In the event that the commissioner determines that a general use or restricted use pesticide, when applied in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly recognized practice, may usually cause, without additional regulatory restrictions, unreasonable adverse effects on the environment, including injury to the applicator, he shall classify, the general use or restricted use pesticide, or the particular restricted use or uses to which the determination applies, for permit use. If the commissioner classifies a pesticide, or one or more uses of such pesticide for permit use, the pesticide shall be applied for any use to which the permit use classification applies only by or under the direct supervision of a permit holder. The commissioner shall establish guidelines for issuing permits pursuant to this subsection. The commissioner may

restrict the permit to authorize that the pesticide be used only to control a particular pest or may restrict the location in which the pesticide may be used.

- (j) In no event shall registration of an article be construed as a defense for the commission of any offense under this part, subsection (a) of section 23-61a or section 23-61b, provided, if no cancellation proceedings are in effect, registration of a pesticide shall be prima facie evidence that the pesticide, its labeling and its packaging comply with the registration provisions of this part and said sections.
- (k) **In connection with the consideration of any registration under this part, the commissioner may consult with other state or federal agencies.**
- (l) Not later than January 1, 2018, the commissioner shall classify all neonicotinoids, as defined in section 22-61k, that are labeled for treating plants, as restricted use pursuant to subdivision (2) of subsection (c) of this section.

Code:

Conn. Gen. Stat. § 22a-61a Prohibition re neonicotinoid applications on linden or basswood trees.

Example:

- (a) No person shall apply, in any manner, any insecticide that is a neonicotinoid, as defined in section 22-61k, to any linden or basswood tree in this state.
- (b) The Commissioner of Energy and Environmental Protection may enforce the provisions of this section pursuant to section 22a-6 and establish a fine for the violation of the provisions of this section.

New Jersey

The Department of Environmental Protection is responsible for regulating pesticides in New Jersey. The regulations this department must enforce are stipulated in New Jersey Administrative Code Title 7 (Environmental Protection), Chapter 30 (Pesticide Control Code). These laws include regulations on Integrated Pest Management (IPM) in schools, extensive agricultural worker protections, and many unique restricted use pesticides beyond the minimum federal requirements. New Jersey's Pesticide Control Code allows the Department of Environmental Protection, through § 7:30-2.11, to use health evaluation criterion to tailor pesticide use restriction to the state's needs that go beyond the minimum restrictions of the federal government. **New Jersey has 381 'state' restricted pesticides on their 2022 restricted use pesticide registration list.**ⁱⁱⁱ

Code:

§ 7:30-2.11 Amending prohibited and restricted-use pesticide lists

Example:

- (a) **The department may revise the list of prohibited and restricted use pesticides designated by the State of New Jersey**; provided that, any change in the list shall be made in accordance with the provisions of the Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq.
- (b) Any person may petition the Department for modification of the listings in N.J.A.C. 7:30-2.9 or 2.10 provided that the petitioner shall supply adequate information (as determined by the Department) to demonstrate that the modification is necessary.
- (c) **The Department shall consider the following criteria when evaluating a pesticide for placement on the prohibited or restricted use pesticide list:**
 - 1. Acute toxicity;**
 - 2. Neurotoxicity;**
 - 3. Chronic health effects, including but not limited to:**
 - i. Carcinogenicity;**
 - ii. Mutagenicity;**
 - iii. Teratogenicity;**
 - iv. Embryotoxicity;**
 - v. Reproductive effects.**
 - 4. Environmental fate, including but not limited to:**
 - i. Persistence;**
 - ii. Bioaccumulation;**
 - iii. Frequency of detection in environmental media;**
 - iv. Potential for contamination of "waters of the State";**
 - 5. Pesticide use pattern(s); and**
 - 6. Pesticide regulatory history.**

New York

The Department of Environmental Conservation (NYSDEC) is responsible for regulating pesticides in New York. The regulations this department must enforce are stipulated in New York Environmental Conservation Law Article 33 (Pesticides). These laws include robust pesticide database recordkeeping and reporting, water quality monitoring, and specific requirements for residential lawn treatment. Through § 33-0714 of the Environmental Conservation Law, the Department of Environmental Conservation is required to conduct water quality monitoring to provide adequate understanding of the health and environmental impacts of pesticide use in the state. This information is used to help assess the status of certain pesticides during their registration in New York.

Code:

§ 33-0714. Water quality monitoring for pesticides.

Example:

The department, in coordination with the United States Geological Survey National Water Quality Assessment Program, the New York State

Water Resources Institute, and other parties, shall conduct a water quality monitoring program to provide an adequate understanding of the health and environmental impacts of pesticide use in the state. The department shall utilize this program, as it deems necessary, in: making pesticide registration decisions; reviewing suspensions and cancellations of pesticide registrations in the state; and assessing the status, trends, and health impacts of any pesticide contamination of ground and surface waters on Long Island and throughout the state.

Additionally, New York law allows the NYSDEC Commissioner to place any conditions on the registration of any product that are deemed necessary to prevent damage or injury to health, property, and wildlife. The Department may also restrict the use of a product if it is determined that the proper use of the product requires training. *See* 6 NY-CRR 326.23(e) Registration application reviews and determinations. NYSDEC keeps an active list of pesticides that have been restricted by New York state specific language pursuant to 6 NYCRR 326.23(e). **The list of New York restricted pesticides, in excess of federal requirements, is over 20 pages in length and contains dozens of pesticides listed by name and restriction.**^{iv}

Code:

**§ 6 CRR-NY 326.23 (Title 6, Chapter IV, Subchapter A, Part 326)
Registration application review and determinations.**

Example:

- (a) All applications and filings will be reviewed for completeness. A determination of completeness will be made within 60 days from the date of receipt by the department. The applicant will be notified in writing of the determination of completeness or incompleteness. If the application or filing is determined to be incomplete, the notice will include a statement of the reasons for the determination. An incomplete application may be returned to the applicant with the notice. The resubmission or submission of additional information shall commence a new review of the completeness.
- (b) If a determination of completeness is not made within 60 days of receipt, the application will be deemed complete as of the 61st day.
- (c) Upon determination that an application is complete, the department will initiate a technical review of the data submitted as part of the application, in order to evaluate the potential for adverse impacts to human health and the environment which may occur when the product is used in accordance with the label directions. The commissioner will weigh the potential for human health and ecological risks against the potential benefits that could accrue from the use of the product when making a decision whether or not to approve the registration.

- (d) Upon completion of the review, the department will issue or deny the registration, or approve or disapprove amended labeling within the following periods, calculated from the date of the completeness determination:
- (1) 150 days for applications for a new active ingredient or a major change in labeling;
 - (2) 90 days for applications not involving a new active ingredient or a major change in labeling;
 - (3) 60 days for applications for a special local need;
 - (4) 30 days for amended labeling not involving a major change in labeling; or
 - (5) 60 days for experimental use permit (EUP) product applications.
- (e) The commissioner may place any conditions on the registration of any product that are deemed necessary to prevent damage or injury to health, property and wildlife. Conditions may include, but are not limited to:
- (1) the submission of additional data;
 - (2) classification as restricted use;
 - (3) recordkeeping or reporting requirements; and
 - (4) any other use conditions deemed necessary.
- (f) Compliance with the conditions of registration is required for the continued registration of the pesticide.
- (g) If registration or approval of amended labeling is not granted or denied within the prescribed time period, the applicant may submit a request to grant or deny the registration, by means of certified mail, return receipt requested, addressed to the Commissioner of Environmental Conservation, Attention: Director, Division of Solid and Hazardous Materials, New York State Department of Environmental Conservation, 625 Broadway, Albany, NY 12233-7250. If the registration is not granted or denied within 30 days following the receipt of such request, the registration shall be deemed granted, except that for applications involving a special local need, the application will be deemed granted if a decision is not issued within 10 days. Any denial of registration or disapproval of amended labeling will specify the grounds for denial.
- (h) Any time period specified in this Part may be extended with the consent of the applicant.

Further, legislative intent of New York's Environmental Conservation Law (ECL), the source of the state's pesticide regulatory law, clearly indicates that **pesticide control is part of a broader environmental policy in the state**. A letter from then Governor Nelson Rockefeller's Office approving the ECL stated that "state programs begun in the 1960's to clean up air, water, and land pollution... the [ECL] reflects the need now to **consolidate and build upon these gains and to set up effective machinery**

to avert future problems.^v The letter goes on to explicitly list pesticide control as a significant environmental program under the new ECL.^{vi}

In addressing the proposed bill that became the ECL, the New York Department of Agriculture stated that they supported the bill because of “the desirability of having a consolidated statute in the area of environmental conservation.”^{vii} The Department of Agriculture listed “none” as their arguments in opposition to the ECL.^{viii} New York decided to regulate pesticide control under the Department of Environmental Conservation, and transfer authority away from the Department of Agriculture, **“to improve and coordinate the environmental plans, functions, powers and programs of the state.”**^{ix} New York is a clear example of a state recognizing that **regulating pesticide control, along with other environmental programs in the state, helps to reduce waste and improve governmental efficiency for achieving policy goals.** Maryland would not be the first state to transfer authority over pesticide regulation to a department better suited to carry out regulatory duties.

Rhode Island

The Department of Environmental Management is responsible for regulating pesticides in Rhode Island. The regulations this department must enforce are stipulated in Rhode Island General Laws Title 23 (Health and Safety), Chapter 25 (Pesticide Control). Rhode Island has established many requirements vested with the director of the Department of Environmental Management. The powers of the director include overseeing pesticide database recordkeeping and reporting, water quality monitoring, designating proper storage and protective equipment standards, and prescribing regulations tailored to local needs.

Code:

§ 23-25-9. Authority of director — Determinations — Rules and regulations — Restricted use and limited use of pesticides and uniformity.

Example:

- (a) The **director is authorized** after due notice and an opportunity for a hearing:
- (1) To declare as a pest any form of plant or animal life (other than humans and other than bacteria, viruses, and other microorganisms on or in living humans or other living animals) which is injurious to health or the environment;
 - (2) To **determine whether pesticides registered** under the authority of § 24(c) of FIFRA, 7 U.S.C. § 136v(c), **are highly toxic to humans.** The definition of highly toxic, as defined in title 40, Code of Federal Regulations 162.8, as issued or amended, shall govern the director's determination; and

- (3) To determine pesticides and quantities of substances contained in pesticides which are injurious to the environment. The director shall be guided by EPA regulations in this determination.
- (b) The director is authorized after due notice and a public hearing as provided for in the Administrative Procedures Act, chapter 35 of title 42, to make appropriate regulations where those regulations are necessary for the enforcement and administration of this chapter, including but not limited to regulations providing for:
 - (1) The **collection, examination, and reporting of samples of pesticides** or devices pursuant to § 23-25-19;
 - (2) The safe handling, transportation, storage, display, distribution, and disposal of pesticides and their containers;
 - (3) Labeling requirements of all pesticides required to be registered under provisions of this chapter; provided, that the regulations shall not impose any requirements for federally registered labels in addition to or different from those required pursuant to FIFRA;
 - (4) Specifying classes of devices which shall be subject to the provisions of § 23-25-5(1);
 - (5) Prescribing methods to be used in the application of pesticides where the director finds that these regulations are necessary to carry out the purpose and intent of this chapter. The **regulations may relate to the time, place, manner, methods, materials, and amounts and concentrations in connection with the application of the pesticide, may restrict or prohibit use of pesticides in designated areas during specified periods of time, and shall encompass all reasonable factors which the director deems necessary to prevent damage or injury by drift or misapplication to: plants, including forage plants, on adjacent or nearby lands; wildlife in the adjoining or nearby areas; fish and other aquatic life in waters in reasonable proximity to the area to be treated; and humans, animals, or beneficial insects.**
 - (6) In issuing the regulations referred to in subdivision (5) of this subsection, the **director shall give consideration to pertinent research findings and recommendations of other agencies of the state, the federal government, or other reliable sources. The director may by regulation require that notice of a proposed application of a pesticide be given to the public, if he or she finds that the notice is necessary to carry out the purpose of this chapter.**
 - (7) Prescribing regulations requiring any pesticide registered for **special local needs** to be colored or discolored if he or she

determines that the requirement is feasible and is necessary **for the protection of health and the environment.** The regulations promulgated by EPA pursuant to § 25(c)(5) of FIFRA, 7 U.S.C. § 136w(c)(5), shall govern this determination.

- (8) Prescribing **regulations establishing standards for the packages, containers, and wrappings of pesticides registered for local needs.** The regulations shall be consistent with the regulations promulgated by EPA pursuant to § 25(c)(3) of FIFRA, 7 U.S.C. § 136w(c)(3).

Code:

§ 23-25-16. Monitoring of environment.

Example:

- (a) As part of his or her responsibility in administering this chapter, the director will carry out a program of **monitoring the amounts of pesticides throughout the environment in the state. Portions of the environment to be monitored will include but will not be limited to: fresh and salt waters of the state; soils; crops intended for human or animal consumption; places where food is served commercially or in institutions and where food for human or animal consumption is handled, stored, transported, prepared, or processed; and wildlife.**
- (b) **Results of the monitoring program will be reviewed at least annually by the pesticide relief advisory board.**
- (c) In carrying out the provisions of this section, the director may enter into agreements with public or private agencies to secure any technical assistance it deems necessary.

Additionally, Rhode Island's Pesticide Relief Advisory Board, recognized in its current form by the state's legislature is given explicit authority to evaluate and recommend restrictions on pesticides that require greater control than federally mandated. The Board is tasked with advising the director of the Department of Environmental Management on restricting the use of pesticides the state finds unsuitable for use. The Board is also responsible for reviewing pesticide's impact on contamination in the water supply.

Code:

§ 23-25.2-4. Pesticide relief advisory board — Powers and duties — No compensation — Legal and clerical assistance.

Example:

The **board shall make recommendations to the director concerning emergency responses to pesticide contamination and grants for IPM projects as provided in this chapter.** In making these recommendations, the board shall seek the most efficient measure to remedy or ameliorate

the effects of **pesticide contamination of wells or private water supplies**. The board shall also advise the director concerning the policies, plans, and goals to be attained in the administration of this chapter and chapter 25 of this title and shall make annual recommendations to the director; shall make comments and recommendations (prior to a public hearing or before these rules and regulations go into effect) on any rules and regulations relative to chapter 25 of this title and those promulgated by the director; shall review, comment on, and provide additional data to any monitoring program carried out under the provisions of § 23-25-16; **shall advise the director on pesticides currently in use which might pose health hazards; shall advise the director regarding the least hazardous means of controlling pests; shall review new pesticide applications and advise the director on possible health hazards posed by the pesticides; shall review any compilations of pesticides currently in use in this state to determine which chemicals and pesticides, if any, should be tested for in the periodic sampling of public water supplies, and to make recommendations to the director to that effect; shall evaluate and make recommendations to the director regarding chemicals and pesticides which require greater control than required by the federal label;** shall evaluate and make recommendations to the director regarding chemicals and pesticides which require application setbacks from domestic water wells; and shall perform any other advisory functions as may be assigned to it by the director. The board shall meet at least four (4) times per year. The members shall receive no compensation for their services. The board may request, through the department of environmental management, any clerical, technical, and legal assistance as it may deem necessary to accomplish its purpose.

South Carolina

The Clemson University Division of Regulatory and Public Service Programs Department of Pesticide Regulation (DPR) is responsible for regulating pesticides in South Carolina. The regulations this department must enforce are stipulated in South Carolina Code of Laws Title 46 (Agriculture), Chapter 13 (Pesticide Control Act). DPR is South Carolina's lead agency charged with regulating the distribution, sale and use of pesticides. This agency has an investigation and inspection program that consists of 14 field investigators and 2 program managers who "complete routine and for cause inspections on pesticide use (and alleged misuse) throughout the state of South Carolina."^x DPR partners with the South Carolina Department of Agriculture on education initiatives rather than using that administrative body to regulate their pesticide laws.^{xi} Further, pesticide disposal is managed by South Carolina Department of Health and Environmental Control (DHEC).^{xii}

South Carolina also has a legislatively enacted Pesticide Advisory Committee made up of a wide range of experts with the authority to give input and advice on pesticide regulation. This Pesticide Advisory Committee illustrates a state program

designed to have cross-department, collaborative input on pesticide use so the state can effectively address health and environmental consequences of pesticide use practices.

Code:

§ 46-13-150. Pesticide advisory committee.

Example:

There is created a pesticide advisory committee consisting of five licensed commercial applicators residing in the State, one of whom must be licensed to operate horticultural ground equipment, one must be licensed to operate agricultural ground equipment, one must be licensed to operate aerial equipment, and two must be licensed for structural pest control; one entomologist in public service; one toxicologist in public service; one herbicide specialist in public service; two members from the agricultural industry, one of whom must be a pesticide dealer; two producers of agricultural crops or products on which pesticides are applied or which may be affected by the application of pesticides; **one representative of the South Carolina Department of Natural Resources**; one plant pathologist in public service; one representative of the **South Carolina State Forestry Commission**; one representative of the **South Carolina Department of Agriculture**; one representative of the **South Carolina Department of Health and Environmental Control**; and two citizens from the State at large.

The committee shall advise the Director on any or all problems relating to the use and application of pesticides. This may include pest control problems, environmental or health problems related to pesticide use, and review of needed legislation, regulations and agency programs.

Closing Summary

These states were highlighted not because they are especially unique, rather, they illustrate how the regulation of pesticides can be successfully implemented by numerous state agencies, including a state environmental agency. Maryland would *not* be the first state to transition regulatory authority to a different state agency. Although state pesticide regulatory authority is usually instituted by the state's Department of Agriculture^{xiii}, these examples have shown that this decision is far from a universal standard. Giving pesticide regulatory authority to an agency in the environmental space allows state agencies to evaluate threats to human and environmental health more effectively, evaluate pesticide's health impacts on groundwater and surface drinking water more effectively, efficiently collaborate on state-wide environmental policy goals, tailor policy needs locally to that state (rather than needing to rely on federal standards that may be too broad to be applicable or effective in that state), and reduces duplicative government work that results in economic waste.

State environmental departments are already tasked with evaluating health impacts associated with air, land, and water. Adding pesticides to this existing mandate is a logical extension of their existing authority. As stated by New York when they transferred authority to regulate pesticides from the Department of Agriculture to their Department of Environmental Conservation, transfer of authority to the Maryland Department of the Environment would help improve and coordinate the environmental plans, functions, powers, and programs of the state.

Respectfully submitted,

A handwritten signature in black ink that reads "Seema Kakade". The signature is written in a cursive, flowing style.

Adam Balick, Student Attorney;
Joan Chu, Student Attorney; and
W. Jesse Grady, Student Attorney
Seema Kakade, Director
University of Maryland Environmental Law Clinic
500 W Baltimore St.
Baltimore, MD 21201
*Students practicing pursuant to Maryland Rule 19-
220

APPENDIX – State Laws Regulating Pesticides

Alaska Department of Environmental Conservation

Alaska Administrative Code Title 18 - Environmental Conservation Chapter 90 - Pesticide Control

Article 1 - Purpose, Applicability, Prohibitions, and Discharge Notification (§ 18 AAC 90.010 to 18 AAC 90.040)

Article 2 - Pesticide Registration (§ 18 AAC 90.200 to 18 AAC 90.235)

Article 3 - Certification Requirements (§ 18 AAC 90.300 to 18 AAC 90.315)

Article 4 - Recordkeeping Requirements (§ 18 AAC 90.400 to 18 AAC 90.420)

Article 5 - Permit Requirements (§ 18 AAC 90.500 to 18 AAC 90.540)

Article 6 - Pesticide Handling Requirements (§ 18 AAC 90.600 to 18 AAC 90.650)

Article 7 - Inspection and Enforcement (§ 18 AAC 90.700 to 18 AAC 90.705)

Article 8 - Forestry Vegetation Management (§ 18 AAC 90.800)

Article 9 - General Provisions (§ 18 AAC 90.850 to 18 AAC 90.990)

Connecticut Department of Energy and Environmental Protection (DEEP)

Connecticut Administrative Code Title 22a - Environmental Protection

49 - Use of Pesticides

§ 22a-49-1 - Use of Pesticides

50 - Pesticide Registration and Classification

§ 22a-50-1 - Definitions

§ 22a-50-2 - General use classification

§ 22a-50-3 - Restricted use classification

§ 22a-50-4 - Classification criteria

§ 22a-50-5 - Classification criteria

§ 22a-50-7 - Registration

§ 22a-50-8 – Variances

54 - Application of Pesticides from the Air

§ 22a-54-1 - Application of pesticides from the air

§ 22a-54-2 - Fees for certification of pesticide applicators

§ 22a-54-3 - Financial responsibility of commercial aircraft applicators

56 - Fees for Examination and Registration of Pesticide Distributors

§ 22a-56-1 - Fees for registration of pesticide distributors

66 - Use of Pesticides

§ 22a-66-1 - Definitions

§ 22a-66-2 - Control of registrations and uses

§ 22a-66-2b - The use of microencapsulated methyl parathion

§ 22a-66-3 - Application of pesticides

§ 22a-66-4 - Registration of pesticide distributors

§ 22a-66-5 - Certification of applicators

§ 22a-66-6 - Permits

§ 22a-66-7 - Aircraft application

66a - Posting and Notification of Outdoor Pesticide Applications

§ 22a-66a-1 - Public notification of outdoor pesticide applications
§ 22a-66a-2 - Requests for notification of pesticide application to abutting property

66l - Application of Pesticides by State Agencies

§ 22a-66l-1 - Application of pesticides by state agencies
Appendix A
Appendix B

Pesticide - Regulatory Additions Public Act 18-84: AN ACT PROHIBITING THE USE OF RESIDENTIAL AUTOMATIC PESTICIDE MISTING SYSTEMS.

Sec. 22a-50. Reclassification of neonicotinoids

Sec. 22a-61a. Prohibition re neonicotinoid applications on linden or basswood trees.

Sec. 22a-61b. Prohibition re application of neonicotinoids when plant bears blossoms. Exceptions.

New Jersey Department of Environmental Protection

N.J.A.C. 7:30 Pesticide Control Code (Title 7, Chapter 30 – Environmental Protection)

Statutory Authority: N.J.S.A. 13:1D-1 et seq. and 13:1F-1 et seq.

SUBCHAPTER 1. SCOPE AND DEFINITIONS

7:30-1.1 Scope

7:30-1.2 Definitions

7:30-1.3 through 7:30-1.10 (Reserved)

SUBCHAPTER 2. PESTICIDE PRODUCT REGISTRATION, GENERAL REQUIREMENTS,

PROHIBITED AND RESTRICTED USE PESTICIDES

7:30-2.1 Registration

7:30-2.2 Registrations pursuant to the provisions of Sections 18 and 24(c) of FIFRA

7:30-2.3 Experimental use permits

7:30-2.4 Refusal, cancellation, or suspension of a pesticide registration

7:30-2.5 Right of entry or collection of samples

7:30-2.6 Records

7:30-2.7 General requirements

7:30-2.8 Order to secure or impound; disposition of pesticides

7:30-2.9 Prohibited pesticides

7:30-2.10 Restricted use pesticides

7:30-2.11 Amending prohibited and restricted-use pesticide lists

7:30-2.12 Advertising

SUBCHAPTER 3. PESTICIDE DEALERS

7:30-3.1 General requirements

7:30-3.2 Certification

7:30-3.3 Licensing

7:30-3.4 License renewal

7:30-3.5 Continuing certification

- 7:30-3.6 Right of entry or collection of samples
- 7:30-3.7 Records
- 7:30-3.8 Sale of restricted use pesticides
- 7:30-3.9 Sale of general use pesticides
- 7:30-3.10 Assignment of work
- 7:30-3.11 Denial, suspension, or revocation of pesticide dealer license
- 7:30-3.12 Reciprocity
- 7:30-3.13 Container and containment rule

SUBCHAPTER 4. PESTICIDE DEALER BUSINESSES

- 7:30-4.1 Licensing
- 7:30-4.2 Records
- 7:30-4.3 Sale of restricted use pesticides
- 7:30-4.4 Sale of general use pesticides
- 7:30-4.5 Right of entry or collection of samples
- 7:30-4.6 Assignment of work
- 7:30-4.7 Denial, suspension, or revocation of a pesticide dealer business license
- 7:30-4.8 Container and containment rule

SUBCHAPTER 5. COMMERCIAL PESTICIDE OPERATORS

- 7:30-5.1 General requirements
- 7:30-5.2 Training
- 7:30-5.3 Licensing
- 7:30-5.4 License renewal
- 7:30-5.5 Records
- 7:30-5.6 Right of entry of collection of samples
- 7:30-5.7 Denial, suspension, or revocation of commercial pesticide operator license
- 7:30-5.8 Requirement for commercial pesticide operator certification and licensing as pesticide applicators
- 7:30-5.9 (Reserved)

SUBCHAPTER 6. COMMERCIAL PESTICIDE APPLICATORS

- 7:30-6.1 General requirement and exemptions
- 7:30-6.2 Certification and training
- 7:30-6.3 Categories
- 7:30-6.4 Licensing
- 7:30-6.5 License renewal
- 7:30-6.6 Recertification
- 7:30-6.7 Right of entry or collection of samples
- 7:30-6.8 Records
- 7:30-6.9 Denial, suspension, or revocation of commercial pesticide applicator license
- 7:30-6.10 Purchase of restricted use pesticides
- 7:30-6.11 Responsibility for commercial pesticide operators and handlers
- 7:30-6.12 Assignment of work
- 7:30-6.13 Reciprocity

7:30-6.14 Container and containment rule

SUBCHAPTER 7. PESTICIDE APPLICATOR BUSINESSES

7:30-7.1 Licensing

7:30-7.2 Right of entry or collection of samples

7:30-7.3 Records

7:30-7.4 Financial responsibility

7:30-7.5 Assignment of work

7:30-7.6 Denial, suspension, or revocation of pesticide applicator business license

7:30-7.7 Responsibility of a pesticide applicator business for the actions of employees

7:30-7.8 Advertising

7:30-7.9 Container and containment rule

SUBCHAPTER 8. PRIVATE PESTICIDE APPLICATORS

7:30-8.1 General requirements

7:30-8.2 Certification

7:30-8.3 Licensing

7:30-8.4 License renewal

7:30-8.5 Continuing certification

7:30-8.6 Special licenses

7:30-8.7 Right of entry or collection of samples

7:30-8.8 Records

7:30-8.9 Purchase of restricted use pesticides

7:30-8.10 Assignment of work

7:30-8.11 Denial, suspension, or revocation of private pesticide applicator license

7:30-8.12 Reciprocity

7:30-8.13 Responsibility for the action of employees

7:30-8.14 Container and containment rule

SUBCHAPTER 9. PESTICIDE EXPOSURE MANAGEMENT

7:30-9.1 (Reserved)

7:30-9.2 Mosquito/fly control permits

7:30-9.3 Aquatic pesticide permits

7:30-9.4 Aquatic notification

7:30-9.5 Storage of pesticides

7:30-9.6 Containers and container labeling

7:30-9.7 Disposal

7:30-9.8 Emergency containment and disposal of pesticides

7:30-9.9 Pesticide application and safety equipment

7:30-9.10 Notification: community or area wide applications

7:30-9.11 Notification to beekeepers

7:30-9.12 Notification: household or structural pest control

7:30-9.13 Notification: turf or ornamental applications

7:30-9.14 School notification

7:30-9.15 General notification

7:30-9.16 General agricultural notification

7:30-9.17 Reporting of pesticide spills

7:30-9.18 Accidental pesticide misapplications and spills

SUBCHAPTER 10. PESTICIDE USE

7:30-10.1 Restriction of pesticide use

7:30-10.2 Pesticide use and/or application

7:30-10.3 Rodent baiting

7:30-10.4 Restrictions on use of termiticides

7:30-10.5 Additional restrictions on the use of organochlorine termiticides

7:30-10.6 Aerial application of pesticides

7:30-10.7 Pesticide contamination clean-up

7:30-10.8 Assessment of fees for sample analysis

7:30-10.9 Submission of data on pesticide distribution or use

SUBCHAPTER 11. ENFORCEMENT AND REQUESTS FOR ADJUDICATORY HEARINGS

SUBCHAPTER 12. AGRICULTURAL WORKER PROTECTION

7:30-12.1 General duties, prohibited actions

7:30-12.2 Standard for workers

7:30-12.3 Entry restrictions associated with pesticide applications

7:30-12.4 Worker entry restrictions

7:30-12.5 Notice of applications to workers

7:30-12.6 Providing specific information about applications

7:30-12.7 Notice of application to handler employers

7:30-12.8 Worker pesticide safety training

7:30-12.9 Posted pesticide safety information

7:30-12.10 Decontamination

7:30-12.11 Emergency assistance by agricultural establishments

7:30-12.12 Standard for pesticide handlers

7:30-12.13 Restrictions during applications

7:30-12.14 Providing specific information about applications

7:30-12.15 Notice of applications to agricultural employers

7:30-12.16 Pesticide safety training for handlers

7:30-12.17 Knowledge of labeling and other site-specific information

7:30-12.18 Safe operation of equipment

7:30-12.19 Posted pesticide safety information

7:30-12.20 Handler personal protective equipment

7:30-12.21 Handler decontamination

7:30-12.22 Emergency assistance by commercial pesticide handling establishments

7:30-12.23 (Reserved)

SUBCHAPTER 13. INTEGRATED PEST MANAGEMENT IN SCHOOLS

7:30-13.1 Scope and purpose: Integrated Pest Management Policy

7:30-13.2 Integrated Pest Management Plan

7:30-13.3 Integrated pest management coordinator

7:30-13.4 Records

7:30-13.5 Annual notification

7:30-13.6 Notification: other than low impact pesticide use

7:30-13.7 Notification: emergency application of a pesticide other than a low impact pesticide

7:30-13.8 Other than low impact pesticide applications: prohibitions

7:30-13.9 Enforcement action

New York Department of Environmental Conservation

New York Environmental Conservation Law Article 33 Pesticides (Titles 1 — 15)

Title 1 Definitions (§§ 33-0101 — 33-0103)

§ 33-0101. Definitions

§ 33-0103. Exemptions

Title 3 General Provisions (§§ 33-0301 — 33-0305)

§ 33-0301. Declaration of policy and purposes

§ 33-0303. Powers and duties of the commissioner and the department

§ 33-0303. Powers and duties of the commissioner and the department

§ 33-0304. Fees

§ 33-0305. Severability

Title 5 Testing of Pesticide Samples (§ 33-0501)

§ 33-0501. Testing of pesticide samples

Title 7 Registration of Pesticides (§§ 33-0701 — 33-0725)

§ 33-0701. Scope of registration

§ 33-0703. Application for registration

§ 33-0704. Review of applications to register pesticides. [Expires and repealed July 1, 2023]

§ 33-0705. Fee for registration.

§ 33-0707. Disclosure of pesticide formulas

§ 33-0709. Requirements for registration

§ 33-0711. Procedure when registration is denied

§ 33-0713. Cancellation of registration

§ 33-0714. Water quality monitoring for pesticides

§ 33-0715. Advisory committees

§ 33-0717. Public hearing regarding registration

§ 33-0719. Suspension of pesticide registration

§ 33-0721. Judicial review

§ 33-0723. Experimental use permits

§ 33-0725. Approved agricultural uses

Title 9 Permits and Certification (§§ 33-0901 — 33-0911)

§ 33-0901. Commercial permits

§ 33-0903. Purchase permits

§ 33-0905. Pesticide applicator certification

§ 33-0907. Pesticide business and agency registration

§ 33-0909. Denial or revocation of certification or registration

§ 33-0911. Certification and registration fees

Title 9-A Special Permits and Certification for Commercial Application of Aquatic Antifouling Paints (§§ 33-0920 — 33-0925)

§ 33-0920. Definitions

- § 33-0921. Aquatic antifouling paint applicator certification
- § 33-0922. Aquatic antifouling paint business registration
- § 33-0923. Denial or revocation of certification or registration
- § 33-0924. Certification and registration fees
- § 33-0925. Sanctions

Title 10 Special Requirements for Commercial and Residential Lawn Applications (§§ 33-1001 — 33-1005)

- § 33-1001. Requirements and restrictions
- § 33-1003. Visual notification
- § 33-1004. Lawn applications; certain municipalities
- § 33-1005. [There are two sections 33–1005] Rules and regulations
- § 33-1005. [There are two sections 33–1005] Commissioner’s regulations

Title 11 Protection of Grape Growing Areas (§§ 33-1101 — 33-1105)

Title 12 Pesticide Sales and Use Data Base and Recordkeeping and Reporting (§§ 33-1201 — 33-1207)

- § 33-1201. Pesticide sales and use computer data base
- § 33-1201. Pesticide sales and use computer data base
- § 33-1203. Access to pesticide information
- § 33-1203. Access to pesticide information
- § 33-1205. Recordkeeping and reporting
- § 33-1205. Recordkeeping and reporting
- § 33-1207. Recordkeeping and reporting by importers and manufacturers
- § 33-1207. Recordkeeping and reporting by importers and manufacturers

Title 13 Unlawful Acts (§§ 33-1301 — 33-1303)

Title 15 Seizure (§§ 33-1501 — 33-1503)

New York Codes, Rules, and Regulations; Title 6 Chapter IV Subchapter A Parts 320-329

Part 320 Pesticides--General

Part 321 Pesticides in Grape Vineyards, Chautauqua County, Northern Townships

Part 322 Pesticides in Grape Vineyards, Niagara County

Part 323 Pesticides in Grape Vineyards, Chautauqua County, Southern Townships

Part 324 Pesticides in Grape Vineyards, Erie County

Part 325 Application of Pesticides

Part 326 Registration and Classifications of Pesticides

Part 327 Use of Chemicals for the Control or Elimination of Aquatic Vegetation

Part 328 Use of Chemicals for the Control or Extermination of Undesirable Fish

Part 329 Use of Chemicals for the Control or Elimination of Aquatic Insects

- 23-25-1. Short title.**
- 23-25-2. Enforcing official.**
- 23-25-3. Declaration of purpose.**
- 23-25-4. Definitions.**
- 23-25-5. Misbranded.**
- 23-25-6. Registration.**
- 23-25-6.1. Registration fee — Surcharge.**
- 23-25-7. Experimental use permits.**
- 23-25-8. Refusal to register — Cancellation — Suspension — Legal recourse.**
- 23-25-9. Authority of director — Determinations — Rules and regulations — Restricted use and limited use of pesticides and uniformity.**
- 23-25-10. Applicator categories for certification — Standards.**
- 23-25-11. Prohibitions for applicators.**
- 23-25-12. Licenses for commercial applicators — Rules and regulations.**
- 23-25-13. Certification of commercial applicators — Renewal — Regulations.**
- 23-25-14. Certification of private applicators — Renewal — Regulations.**
- 23-25-15. Licenses for dealers of restricted and limited use pesticides — Renewal — Regulations authorized — Responsibility for acts of employees**
- 23-25-16. Monitoring of environment**
- 23-25-17. Repealed.**
- 23-25-18. Unlawful acts and/or grounds for denial, suspension, or revocation of a license, permit, or certification.**
- 23-25-19. Storing and disposal of pesticides and pesticide containers.**
- 23-25-20. Enforcement.**
- 23-25-21. “Stop sale, use, or removal” order.**
- 23-25-22. Judicial action after “stop sale, use, or removal” order.**
- 23-25-23. Records.**
- 23-25-24. Cooperation with other agencies.**
- 23-25-25. Publication of information.**
- 23-25-26. Reports of pesticide accidents or incidents.**
- 23-25-27. Subpoenas.**
- 23-25-28. Penalties.**
- 23-25-29. Protection of trade secrets and other information.**
- 23-25-30. Delegation of director’s duties.**
- 23-25-31. Reciprocal agreements.**
- 23-25-32. Budget — Receipt and disposition of funds.**
- 23-25-33. Severability.**
- 23-25-34. Prior liability.**
- 23-25-35. Repeal of inconsistent acts.**
- 23-25-36. Protective clothing and equipment.**
- 23-25-37. Pesticide applications and notification of pesticide applications at schools.**
- 23-25-38. Pesticide applications and notification of pesticide applications at pre-schools and child care centers.**
- 23-25-39. Report on lawn care pesticide use.**

Chapter 25.2 Pesticide Relief Fund (§§ 23-25.2-1 — 23-25.2-9)

23-25.2-1. Legislative findings — Purpose of chapter.

23-25.2-2. Definitions.

23-25.2-3. Pesticide relief advisory board established — Appointment of members.

23-25.2-4. Pesticide relief advisory board — Powers and duties — No compensation — Legal and clerical assistance.

23-25.2-5. Pesticide relief.

23-25.2-6. Rules and regulations.

23-25.2-7. No waiver or enlargement of rights — Subrogation.

23-25.2-8. Annual report.

23-25.2-9. Severability.

South Carolina's Department of Pesticide Regulation

South Carolina Title 46, Chapter 13 Pesticide Control Act §§ 46-13-10 — 46-13-240)

§ 46-13-10. Short title; administration.

§ 46-13-20. Definitions.

§ 46-13-30. Duties delegated to Director.

§ 46-13-40. Registration of pesticides and devices.

§ 46-13-45. Pesticide registration fees; classes of fees.

§ 46-13-50. Licensing of pesticide dealers.

§ 46-13-55. Regulation of structural pest control activity.

§ 46-13-60. Standards for certification of pesticide applicators; applicators' licenses.

§ 46-13-70. Classification of certified applicators' licenses.

§ 46-13-80. Expiration and renewal of licenses.

§ 46-13-90. Denial, suspension, revocation, or modification of licenses and certificates.

§ 46-13-100. Financial responsibility required for commercial applicator's license.

§ 46-13-110. Reporting of accidents and incidents.

§ 46-13-120. Records as to use of restricted use pesticides.

§ 46-13-130. Reciprocity.

§ 46-13-140. Exemptions from licensing requirements.

§ 46-13-150. Pesticide advisory committee.

§ 46-13-160. Information and courses of instruction.

§ 46-13-170. Inspection of premises; legal actions; "stop sale, use, or removal" orders.

§ 46-13-175. Discretion to make pesticides available for minor uses.

§ 46-13-180. Penalties.

§ 46-13-185. Prosecution of criminal violators; use of counsel.

§ 46-13-190. Subpoenas.

§ 46-13-200. Adjudication of alleged violations; disposal of condemned pesticides or devices.

§ 46-13-210. Judicial review.

- § 46-13-220. Delegation of authority to employees of Clemson University.
§ 46-13-230. Disposition of fees.
§ 46-13-240. Federal, interstate, and intrastate cooperation.

-
- ⁱ U.S. EPA, *About Pesticide Registration*, <https://www.epa.gov/pesticide-registration/about-pesticide-registration>. See also U.S. EPA, *Regulatory and Guidance Information by Topic: Pesticides*, <https://www.epa.gov/regulatory-information-topic/regulatory-and-guidance-information-topic-pesticides> ii
- Sea Grant Law Center, *STATE AND LOCAL REGULATION OF PESTICIDES: WHAT DOES FIFRA ALLOW?*, p. 7, <https://nsglc.olemiss.edu/projects/ag-food-law/files/regulation-of-pesticides.pdf>
- ⁱⁱⁱ New Jersey Department of Environmental Protection, *Pesticide Products Classified as Restricted-Use Pesticides (RUPs)*, <https://www13.state.nj.us/DataMiner/Search/SearchByCategory?isExternal=y&getCategory=y&catName=Pesticide+Control+Program>
- ^{iv} New York Department of Environmental Conservation, *New York State Specific Language or Restricted Use Status*, September 10th, 2021, https://www.dec.ny.gov/docs/materials_minerals_pdf/nysactiveingredrev.pdf
- ^v State of New York Executive Chamber, *Memorandum filed with Assembly Bill Number 5984-A on behalf of Governor Nelson Rockefeller*, April 22nd, 1970, https://nysl.ptfs.com/data/Library1/pdf/NY200060392_L-1970-CH-0140.pdf
- ^{vi} *Id.*
- ^{vii} State of New York Department of Agriculture and Markets, *Memorandum on Behalf of Assistant Commissioner John H. Stone et al.*, May 31st, 1972, https://nysl.ptfs.com/data/Library1/pdf/NY200060392_L-1972-CH-0664.pdf
- ^{viii} *Id.* at p. 6.
- ^{ix} *Id.*
- ^x Clemson Department of Pesticide Regulation, *South Carolina's Department of Pesticide Regulation*, <https://www.clemson.edu/public/regulatory/pesticide-regulation/index.html>
- ^{xi} *Id.*
- ^{xii} South Carolina Department of Health and Environmental Control, *Pesticide Disposal Fact Sheet*, <https://scdhec.gov/environment/land-management/hazardous-waste/pesticide-handling>
- ^{xiii} Sea Grant Law Center, *STATE AND LOCAL REGULATION OF PESTICIDES: WHAT DOES FIFRA ALLOW?*, p. 7, <https://nsglc.olemiss.edu/projects/ag-food-law/files/regulation-of-pesticides.pdf>