



A Quick Overview of the Regulation of Pesticides in South Carolina

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Pesticides are Dangerous Tools, 1.

- Not “safe,” but “when used according to the label or labeling, does not pose a risk that most people would find unacceptable for the benefit provided.”
- The label is an instruction manual with the force of law. (Labeling is advertising, labels, and everything else.)
- EPA is routinely accused of ignoring the “benefits” side of the equation.

Pesticides are Dangerous Tools, 2.

- Toxicity.
 - Chronic.
 - Acute.
- Persistence.
- Accumulation.
- Environmental effects.
- Misuse.
- Accidents.
- Mobility.
 - Drift.
 - Leaching.
 - Translocation.

Pesticide Regulation

- Federal.
 - EPA.
 - Primarily registration.
 - Interstate commerce.
- State “lead agencies.”
 - Departments of Agriculture.
 - Land-grant Universities.
 - A few have no SLA and allow EPA to regulate use in the state.

Pesticides are Regulated at Two Levels

- Federal.
 - EPA is the federal agency responsible for regulating pesticide use.
 - FIFRA.
 - Federal Insecticide, Fungicide, and Rodenticide Act.
 - First enacted in 1947, enforced by USDA.
 - Major revision in 1972, creating the EPA.
 - Food Quality Protection Act of 1986 introduced the “risk cup” concept, dramatically changing how risk was calculated.
 - FIFRA requires registration of pesticides.
 - Registration is allowed only for products for which there is data showing that they do not pose an unreasonable risk to man or the environment.
 - Other statutes: WPS, container/containerment, endangered species, groundwater protection, IPM in schools...
- State

Federal Programs, 1.

- Worker Protection Standards (EPA mandated).
- Protects 3.5 million workers on farms, greenhouses, nurseries, and forests from pesticide exposure risks.
- Employers must:
 - (There are exemptions for size and “family farms).
 - Notify workers of applications, display application records, and provide training.
 - Provide decontamination sites, emergency assistance and transport, and personal protective equipment (PPE).

Federal Programs, 2.

- Groundwater Protection.
 - Monitors:
 - Pesticides of Interest.
 - Pesticides of Concern.
 - Nitrates.
 - DPR samples wells across SC.
 - Analyzes samples for pesticides and nitrates.
 - No enforcement component to this program – educational and advisory only.
- Chemigation Act.
 - Requires specific safety equipment on water supplies used for chemigation.
 - Wells and other water supplies.

Federal Programs, 3.

- IPM in Schools.
 - Aims to reduce the risks of pesticide exposure to children.
 - Encourages IPM practices in schools.
 - Inspections and education.
 - No enforcement component.
- Pesticide Container Recycling.
 - Encourages container recycling to reduce pesticide residues in the waste stream.
 - 1.8M pounds recycled over the last 15 years.
 - Coordinated with the Cooperative Extension Service.

Federal Programs, 4.

- Endangered Species Act.
 - Requires EPA to ensure that use of registered pesticides does not harm endangered plants or animals or their habitat.
 - EPA is supposed to produce county-level maps and endangered species protection bulletins to be distributed on-line or at the point of sale in affected areas.
 - Bulletins will be “labeling,” *i.e.* enforceable.
 - Has been “just around the corner” since the day I started with DPR...

Pesticides are Regulated at Two Levels

- Federal.
- State.
 - Most states have a “State Lead Agency.”
 - Supported by EPA grant money.
 - States have “primary use enforcement authority.”
 - States also register pesticides.
 - State law can be more stringent than Federal, but not less.

Pesticide Regulation in SC

- 1890 fertilizer purity and quality laws were originally enforced by Clemson University.
 - Supported by a 25¢ per ton fertilizer tax.
 - 120 years later we managed to raise the tax to \$1.50.
 - Pesticides were added to that responsibility, since they were also agricultural chemicals.
- 1975 Pesticide Control Act.
 - Established Clemson as the SLA.
 - Rules and Regulations for the Enforcement of the SC Pesticide Control Act.
 - Most recent revision was 2005; current revisions are under review by the SC Legislature.

A Few Areas in Which State and Federal Law Often Differ.

- Restricted Use Pesticides.
 - States must honor the federal list.
 - There are also state RUPs.
- Record keeping.
- Licensing.
 - Standards established.
 - Activities requiring licensing.
- Registration (13,000 products in SC).
 - States do not necessarily have to accept federal registrations, e.g. 1080.
 - States may require registration of products the feds do not, e.g. 25(b) products.

Pesticide Applicator Licensing

- Private applicators (7200).
 - Use RUPs.
 - Agriculture only.
 - Commercial applicators (3900).
 - RUP and "unclassified."
 - 12 License Categories.
 - Mandatory licensing in 5 categories.
 - Mandatory "business license" for structural pest control.
 - Non-Commercial (1200).
 - License for government employees.
 - Dealers.
- Process: exams (30% fail rate), application, fees, insurance, continuing education.

What We Do: "Regulation through Education"

- Generate voluntary compliance through educational efforts backed by enforcement.
- Certification, licensing, and re-certification.
- Enforcement.
 - Reasonable and commensurate with the offense.
 - Transparent and consistent.
 - Scientifically valid.

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How We Regulate.

- Twelve investigators.
 - Routine inspections and complaints (3215 in 2010).
 - Some are commissioned.
- Two compliance inspectors.
- Support staff.
 - Management.
 - Lab.
 - Admin.



How We Regulate. Forensics.

- Proper investigative protocol and procedures.
 - Sampling.
 - Interviews.
 - Evidence collection.
- Analysis.
 - Our analytical lab is in-house.
 - Lab functions:
 - Pesticide residue analysis.
 - Routine applications (compliance).
 - Misuse.
 - Quality-control and guarantee analysis.
 - Analyses and findings must be able to hold up in court.

Enforcement, 1.

- Enforcement is based on the severity of the offense.
- Follows a written “enforcement matrix.” Provides guidance, but not a mandate.
- Development included industry input.
 - Matrix.
 - Database.
 - Review committee.
- Progressive.
- Rewards improvement efforts.

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Enforcement, 2. Civil vs Criminal

- Civil
 - Responses are based on regulations and policy.
 - Warnings, fines, restitution, license modification or revocation.
 - Most cases are handled administratively, by consent agreements.
 - Some go to administrative hearings.
- Criminal
 - Responses are based on statutes and regulations.
 - Always involves a court hearing.
 - Penalties include fines, community service, jail time.

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Why We Regulate Pesticide Use.

- To minimize risk.
 - Ensuring that applicators meet a minimum competency standard.
 - Ensuring that products meet minimum requirements for purity, quality, and safety.
- To protect health and the environment.
- To protect consumers.

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“There is no man so useless that he cannot serve as a bad example.”
– Samuel Clemens, American author, 1835-1910

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