

Regulations

Federal Pesticide Laws and Regulations

Chapter 14

Residues and Tolerance

Chapter 15

State Laws and Regulations

Chapter 16

- **Pythagorean theorem: 24 words.**
- **The Lord's prayer: 66 words.**
- **Archimedes' Principle: 67 words.**
- **The 10 Commandments: 179 words.**
- **The Gettysburg Address: 286 words.**
- **The Declaration of Independence: 1,300 words.**
- **The US Government regulations on the sale of cabbage: 26,911 words.**

GOVERNMENT REGULATIONS

FIFRA – Federal Insecticide, Fungicide and Rodenticide Act

- **Regulates production, transport, sale, use, and disposal of all pesticides**
- Administered by U.S. Environmental Protection Agency (EPA)
- Designates state lead agency to enforce FIFRA regulations – NYS Department of Environmental Conservation (NYSDEC)
- State agencies can enact laws more strict than FIFRA – you must comply with the more strict laws
- Labeling, packaging must be uniform nationwide

FIFRA – Pesticide Registration

- **Purpose:** FIFRA Requires EPA to register any uses of pesticide before it is sold, but only if data shows there will not be unreasonable risk to people and environment
- **Re-registration** every 15 years through EPA ensures older products will meet current health and safety standards and more modern testing methods.

Registration data reviewed...

- **Economic, social, and environmental risks and benefits**
- **Pesticide toxicity – animal testing by dose**
- **Pesticide efficacy (performance)**
- **Degradation – breakdown components**
- **Mobility into soil and groundwater or from plant to soil?**
- **Residue levels on crops**
- **Effects on environment – wildlife, nontargets**

Registration and pesticide label...

- Language on label must be **supported by data** submitted
- Requires certain **directions for use** to mitigate any risks identified
- **EPA only registers pesticide if it approves the final product label**

Environmental Protection Agency restricts pesticide use:

General-Use

- Bought and used by general public
- Sale and use regulated under FIFRA
- RUP can also be GUP for different formulation, application method

Restricted-Use

- If risk to people who mix, load, and apply pesticides
- If risk to nontargets
- If risk to consumers

- Restricted–use pesticides are classified because the only way to avoid unreasonable risk it to require the applicator be trained/certified.
- See the Front panel of Label

Restricted Use Pesticide

Due to toxicity to fish and aquatic organisms.

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.

Types of registrations:

- **Section 3** – standard EPA registration
- **Special Local Need** – SLN under Sec 24(c)
 - Adds crops or sites or limitation for specific areas
- **Emergency Exemption** – Section 18
 - No pesticide addresses pest currently, allows registration for limited time period
- **Exemption of minimum risk** –Section 25(b)
 - active and inerts must be on EPA minimal risk list
 - Check state regs on 25(b)
- **States allow Section 2(ee)** – add things not on label but consistent with use

Carry proof of registrations:

- **Sec 3** Always must carry copy of label
- **Sec 18 (SLN)** Always carry supplemental label & Always carry approval letter or state issued document with complete instruction for use of Sec 18, emergency use
- **2(ee)** – approval letter from DEC or Cornell Guidelines recommendation

Pesticide reregistration options, EPA can:

- Register all uses
- Deny registration for all uses
- Reregister some but not all uses
- Request more data
- Reregister uses but add more restrictions to uses
- Review every 15 years

Pesticide Applicator Certification:

Certified applicator must demonstrate knowledge of pesticide use and handling.

Certified applicator is recognized by DEC as competent to use or supervise use of Restricted-use pesticides.

Who needs to be certified?

- Anyone using “restricted-use” pesticides (RUPs) must be
 - Certified or
 - Under the direct supervision of someone who is certified
- **Private certified applicator** – uses “restricted use” pesticides to produce ag commodities on property owned or rented by self or employer.
- **Commercial certified applicator** – applications except for “private” for hire on another person's property.
10 possible categories – Ag Plant, Ag Animal, Structural, Right of Way, Seed treatment....

Worker Protection Standard (WPS)

- Enforced by EPA
- Reduces the risk of pesticide poisoning, injuries, and exposure among ag workers and pesticide handlers on farms, forests, nurseries, and greenhouses

Worker Protection Standard (WPS) – covers 2 kinds of employees

- **Pesticide handlers:** mix, load, or apply pesticides, clean or repair pesticide application equipment
- **Agricultural workers:** weeders, pruners, irrigators, harvesters of ag crops, work in the fields and potentially exposed to residues on crops.

Worker Protection Standard: What employers must provide?

- Provide and maintain PPE
- Notify workers regarding treated areas
- Decontamination supplies for handler and workers
- Emergency assistance, transport to medical facility
- Pesticide safety training and safety poster
- Access to labeling and central posting of recent applications

Worker Protection Standard— “Agricultural Use Box”

- **REI** – restricted entry interval = time following application when unprotected workers may not enter the treated area
- **PPE** required for early-entry workers to do tasks that involve minimal contact with treated surfaces
- **How to notify workers of pesticide applications** – oral and or field posting.

FIFRA – Federal Insecticide, Fungicide and Rodenticide Act

PENALTIES:

- **Civil** if not intended
 - Commercial – civil penalty of no more than \$5000
 - Private – warning first, then \$1000
- **Criminal** if willful (intentional) violation– fine and/or jail time
 - Commercial - \$25,000 and/or 1 year jail
 - Private - \$1000 and/or 30 days jail

Questions?

Pesticide Residue and Tolerance

Chapter 15

Definitions

Residue – pesticides break down but may still be present when crop is sold. Any pesticide and break down products left on crop is **residue**.

Tolerance – EPA determines the maximum residue legally remaining for domestic and imported food and feed.

**Residue cannot exceed tolerance.
Commodity will be condemned.**

Food Quality Protection ACT – (1996)

EPA must conclude with reasonable certainty of no harm to infants, children, and other sensitive individuals are exposed to pesticides

Aggregate exposures – total exposure by class of pesticide with similar mode of action on crops, drinking water and non-dietary sources.

“Risk cup”



Food Quality Protection ACT

How are Tolerances set?

- Toxicity of pesticide and breakdown products
- How much pesticide applied and how often
- How much residue is left on food at time of marketing and preparation for consumption
- How much of treated foods are eaten by different groups of people

Food Quality Protection ACT

How are Tolerances enforced?

Residue testing: Food and Drug Administration

- FDA tests domestic and imported food
- State can also test for residues on domestic food
- USDA tests for residues on meat and milk.
- USDA and FDA share residue testing results with EPA to use in risk assessments.

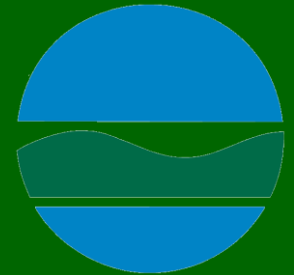
How do you find residue and tolerance information on the label?

- Crop, rates, spray intervals, and pre-harvest intervals
- Directions for use
- Use patterns included on label are tested to determine expected residue levels that will not exceed tolerance set

Questions?

State Law and Regulations

Chapter 16



Who administers/enforces?

State Lead Agency

New York State

Department of Environmental Conservation

Division of Solid & Hazardous Materials

Bureau of Pesticides

Pesticide Registration

- NYS DEC must register EPA registered products
- State pesticide laws can be more restrictive than Federal laws.
 - DEC might register fewer uses, or limit use in all or part of NY
 - DEC might determine that a registration of General Use (EPA) will be Restricted use in NY
- Every 2 years

DEC Restricted-Use Pesticides

NYS Code of Regulations Article 6

Part 326: Registration and Classification of Pesticides

- EPA restricted
- Specific Active Ingredient Restrictions
- Limit use for certain conditions even if product allows other uses
- Termiticide Restrictions
- Aquatic Restrictions
- Label statement restrictions:
i.e. limited to use by commercial applicators

Conditions for Classifying Products Restricted-Use

- Persists in the environment
- Accumulates in plant or animal tissue or product, and is not excreted or eliminated within a reasonable period of time, and may be transferred to other forms of life
- Commissioner finds pesticide is so hazardous to man or other forms of life that restrictions on its sale, purchase, use, or possession are in the public's interest.
- All aquatic pesticides

Prohibited Pesticides

Part 326: Registration and Classification of Pesticides

- Statewide
- Nassau or Suffolk Counties –
due to high water table and soils

Special registrations allowed under FIFRA

- 24(c) - SLN
- Section 18 – Emergency Exemption
- 2 (ee) – consistent with use, not labeled
Only if approved by DEC:
 - Additional pest on same labeled crop, etc.
 - Application method not listed on label
 - Lower dosage or concentration than specified on label for ag purposes
 - Mixing with fertilizer
 - Only if uses not already prohibited on the label

ACCEPTED
FOR REGISTRATION

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Jul 25, 2011

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product Registration

GROUP

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B

INSECTICIDE

Imidan[®] **70-W**
Agricultural Insecticide
(Water Soluble Bags)

Classified for
"RESTRICTED USE"
in New York State
under 6NYCRR Part 326

ACTIVE INGREDIENT: Phosmet N-(Mercaptomethyl) phthalimide, S-(O,O-dimethyl phosphorodithioate)	% By Wt. 70.0%
OTHER INGREDIENTS	30.0%
	TOTAL 100.0%

**KEEP OUT OF REACH OF CHILDREN
WARNING-AVISO**

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 ORGANOPHOSPHATE	
IF SWALLOWED:	<ul style="list-style-type: none">• 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 person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• 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.
IF IN EYES:	<ul style="list-style-type: none">• 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.	

List of Pesticides Currently Registered in NY

- County Cornell Cooperative Extension Office
- www.dec.gov/chemical/27354.html
- http://www.dec.ny.gov/docs/materials_minerals_pdf/pestprod.pdf
- DEC Portal
<http://www.dec.ny.gov/nyspad/products?0>
(replaced PIMS)

Types of applications?

- Residential Application
“general-use” pesticides applied to property personally owned or leased by applicator as dwelling – NOT establishment that sells or processes food!
- Private applications
on owned or rented property to produce ag commodity, without compensation
- Commercial applications
anything that is not residential or private.

3-Tiered Classification of Commercial Pesticide Application

- Specific to category certification
- Certified Commercial Applicator
buys, uses, supervises, trains, for commercial applications, sale of restricted-use pesticides
- Certified Commercial Pesticide Technician
restricted-use under direct supervision, cannot supervise others
- Apprentice
use most pesticides under direct supervision of certified applicator

Private Applicator Certification

- At least 17 years of age
- A notarized letter with # of years experience signed by person and supervisor. At least 1 year full-time experience within the last 3 years in the category you are seeking certification (1 growing season); **OR**
- Have completed a 30-hour training course; **OR**
- Have received an applicable associate's or higher degree from an accredited college; **OR**
- Have 1 year of verifiable experience as a certified commercial applicator in a corresponding commercial category; **AND**
- Pass the core and category exam.

Direct Supervision

- **Off-site direct supervision** – certified applicator has contact or can make contact within 30 minutes
- **On-site direct supervision** – supervisor must be physically present at application site and within voice contact to apply
 - Non-certified applicator applying federally restricted-use pesticides
- **Direct Observation** – supervisor must directly observe person making application

Pesticide Business vs. Agency

- Pesticide Business
person or business that offers commercial applications services, must pay registration fee, and carry liability insurance
- Pesticide Agency
state agency, municipal corp., public authority, college, railroad, telephone, transportation corporations that apply pesticides, no fee to register, no insurance

To sell or distribute RUPs

- **Commercial Permit from DEC**
 - Required for the distribution, sale, offer for sale, purchase for the purpose of re-sale or possession for the purpose of re-sale of a restricted use pesticide
 - Separate permit required for each location
 - Employ a commercial pesticide applicator
 - Sell only to certified applicators

Applicators must have in possession

- Valid certification ID
- Sec 3 - Always must carry copy of label
- Sec 18 (SLN) - Always carry supplemental label & Always carry approval letter or state issued document with complete instruction for use of Sec 18, emergency use
- 2(ee) - approval letter from DEC or Cornell Guidelines recommendation

Rinse and Disposal of Pesticide containers

- Must be triple rinsed
(see chapter 26)
- Then dispose of in sanitary landfill
- Dispose of paper or cardboard
containers in sanitary landfill
- Open burning not allowed in NY.

Applying pesticides at schools and day care

- Application to playgrounds, turf, athletic fields prohibited, must comply with Neighbor Notification law
- Application to indoor and structural not prohibited

Notification of Structural Applications

- **Provide copy of label to all occupants before application**
- **Or to owner of structure (if no occupants)**

Notification of Lawn Applications

Notification prior to application:

- Written contract between owner and applicator
 - Date, # applications, cost
- Pesticides that will be applied
- Company name, address phone, business registration number
- Pesticide applicator certification ID number

Must Supply:

- Pesticide label(s)
- Warnings on label related to protecting people, pets, and environment
- Place visual notification markers on perimeter of treated areas
- Neighbor notification – opt in law (specific counties, cities)

Daily Use Records

- Daily use records annually, kept for 3 years
- Private applicators record purchase and use of RUP's, annually, kept for 3 years
- Commercial applicators submit detailed daily application activities
- Commercial sales reported for private applicator purchases

Minimum Risk Pesticides

- FIFRA, 25(b)
minimum risk, not registered
- BUT Regulated as pesticides in NY by DEC
- Commercial applicators must include in daily use records, but not annual report.
- Exempt from Neighbor notification, and allowed on school grounds

Practice Questions:

A Restricted Use Pesticide

- a. May only be used by a certified pesticide applicator
- b. Must include a Restricted Use statement on the front of the pesticide label.
- c. Both a & b

Practice Questions:

How does WPS protect workers?

- a. Requires employers to notify employees of pesticide applications and associated REIs
- b. Employers must provide PPE and decontamination supplies for workers & handlers
- c. Both a & b

Practice Questions:

The EPA is responsible for all except the following

- a. Administering FIFRA, by overseeing registration of any uses of a pesticide before sold
- b. Determine re-registration of products (for all or some uses) on a 15 year basis
- c. Enforcing FIFRA
- d. Enforcing WPS