

UF/IFAS Extension Hendry County

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Federal Pesticide Laws

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The first regulation of pesticides by the US government occurred in 1910 with passage of the Insecticide Act. The basis of this law was to protect agricultural producers from adulterated or misbranded products. A more encompassing law, the original Federal Insecticide, Fungicide and Rodenticide Act, known as FIFRA, was passed in 1947. Its intent was for the United States Department of Agriculture to register all pesticides prior to their interstate commerce. This law remained in place until 1964, when it was amended to allow refusal of products that were determined to be unsafe or ineffective and their removal from the market.

Since pesticides have become an integral part of controlling pests, a succession of federal and state laws has addressed their changing role and regulation. In 1970, the Environmental Protection Agency (EPA) was formed and was charged with enforcing FIFRA, which was amended in 1972. Pesticide laws and regulations were refocused with the basic goals of:

- Requiring EPA registration of all pesticides, each use of the pesticide, and product label approval.
- Classifying all registered pesticides as either “general use,” which can be used by anyone, or “restricted use,” which requires licensing.
- Establishing certification and licensing programs carried out by individual states that must meet at least minimal FIFRA requirements, although they are allowed to be more stringent. Licensed applicators are considered to be either “private” or “commercial” applicators.
- Establishing tolerances for pesticide residues which may legally remain on raw agricultural products or in processed food.
- Penalizing pesticide users for “use inconsistent with the labeling” of a pesticide.
- Making it illegal to store or dispose of pesticides or containers other than as directed by regulations and penalizing for illegal handling of containers.
- Providing civil penalties when there is an unintentional violation of a regulation. Fines can be \$1,000 for private applicators and others and as much as \$5,000 for each offense by commercial applicators.

- Providing criminal penalties when the law is knowingly violated. The maximum penalty for private applicators and others is \$1,000 and/or 30 days in prison. Commercial applicators may be fined up to \$25,000 or one year in prison, or both.

The United States government mainly through the Environmental Protection Agency (EPA) has set standards for pesticide handling and use. Some practices which were suggested for proper use in the past are now required by law. These include such areas as record keeping, transportation, storage and disposal procedures, reentry intervals, filling and mixing methods, etc. For many applicators these practices are already part of a regular routine. For other applicators some adjustment must be made to meet these new requirements. All the new standards are designed to reduce the risks, to both people and the environment.

Goals

- Become familiar with the names and acronyms of the laws and government agencies involved with pesticides.
- Understand the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- Become familiar with, as well as understand the various laws and regulations (in addition to FIFRA) which apply to pesticide use and pesticide applicators.
- Have a working knowledge of the Worker Protection Standard
- Be aware that new laws and regulations will occur in the future.

Federal laws and regulations set the standards for pesticide use. States have the right to be stricter than the federal law. The applicator is responsible for knowing and complying with the federal laws and regulations and the specific requirements in each state they may be working in.

The United States Congress established the Environmental Protection Agency (EPA) in 1970 and has mandated that the agency regulate pesticides. The U.S. Department of Agriculture (USDA) regulated pesticides before EPA was created. Through its Office of Pesticide Programs

(OPP), EPA uses the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to manage its mandate.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

FIFRA was enacted in 1947 replacing the Federal Insecticide Act of 1910 and has been changed (amended) several times since then. The most important amendment to FIFRA was the Federal Environmental Pesticide Control Act (FEPCA) of 1972 which shifted the emphasis of FIFRA from safeguarding the consumer against fraudulent pesticide products, to a role of protecting both public health and the environment.

FIFRA governs the licensing or registration of pesticide products. No pesticide may be marketed in the U.S. until EPA reviews an application for registration, approves each use pattern, and assigns a product registration number. Registration decisions are based upon data demonstrating that the use of a specific pesticide will not result in “unreasonable human health or environmental effects “. In other words, FIFRA balances the risks a pesticide may pose with its benefits to society.

FIFRA

- requires that EPA register all pesticides as well as each use of that pesticide and approves the product label.
- requires the classification of all registered pesticides as either “general use” pesticides which can be used by anyone or “restricted use” pesticides if the environment or user could be harmed even if the pesticide is used as directed (state requirements are often stricter).
- requires that the users of “restricted use” pesticides must be certified as, or under the direct supervision of either “private” or “commercial” applicators. Certification is to be carried out by the states (except in Colorado and Nebraska which have federal programs).
- establishes tolerances for residues that may remain on raw agricultural products or in processed food.
- provides penalties for “use inconsistent with the labeling” of a pesticide.
- makes it illegal to store or dispose of pesticides or containers other than as directed by regulations and provides penalties for illegal handling of containers.
- provides civil penalties when the violation of a regulation is unintentional. Fines can be \$1,000 for private applicators and others or as much as \$5,000 for each offense by commercial applicators. Before EPA can fine you, you have the right to ask for a hearing in your own city or county.
- provides criminal penalties when the law is knowingly violated. The maximum penalty for private applicators and others is \$1,000 and/or 30 days in prison.

Commercial applicators may be fined up to \$25,000 or one year in prison, or both.

- permits states to establish stricter standards, but not more permissive standards.

The Pesticide Label

EPA reviews pesticide product labels as part of the licensing/registration process and must approve all label language before a pesticide can be sold or distributed in the United States. The overall intent of the label is to provide clear directions for effective product performance while minimizing risks to human health and the environment.

It is a violation of federal law to use a pesticide in a manner inconsistent with its labeling. The courts consider a label to be a legal document. In addition, following labeling instructions carefully and precisely is necessary to ensure safe and effective use.

Certification of Applicators

FIFRA distinguishes between commercial and private applicators. Private applicators use or supervise the use of pesticides on property owned or leased by them or their employee for the purpose of producing an agricultural commodity. Commercial applicators include all other certified applicators. The EPA has established rules and procedures to be followed by individual states for certifying both groups.

Private applicators may be required by states to demonstrate their competency to apply pesticides through a written or oral examination. This generally involves testing their ability to read and understand directions on pesticide labels and their general comprehension of safety and environmental problems potentially arising from pesticide use.

Restrictions on commercial applicators are more stringent, requiring people seeking certification to demonstrate competency by taking a written examination and, if required by law, to attend certification programs and take performance tests. Topics covered by the examinations may include a person’s ability to read and understand a pesticide label, knowledge of application equipment and techniques, knowledge of potential pesticide harmful effects on human health and the environment, and basic knowledge of pesticide laws.

The EPA regulations also divide commercial applicators into categories based on types and sites of pesticide use. For example some categories are: aquatic pest control, ornamental and turf, rights-of-way, row crop pest control, soil and greenhouse fumigation, and tree crop pest control. Persons seeking certification as commercial applicators must demonstrate knowledge of the use and handling of pesticides generally, and knowledge of the particular

standards applicable to their respective area or areas. Individual states determine when certification must be renewed.

FIFRA gives EPA the authority to develop regulations. Regulations are interpretations of the law (in this case FIFRA) and have the force of a law. The following are items from EPA's regulations published in the Code of Federal Regulations (CFR) Title 40.

- provides standards for worker protection
- provides reentry standards for treated areas

The Worker Protection Standard

In August 1992, EPA issued revised regulations (Title 40 CFR Part 170) governing the protection of employees on farms, forests, nurseries, and greenhouses from occupational exposures to agricultural pesticides. The new Worker Protection Standard (WPS) covers both workers in areas treated with pesticides and employees who handle pesticides for use in these areas.

Agricultural workers - those who perform tasks related to the cultivation and harvesting of plants on farms or in greenhouses, nurseries, or forests.

- Pesticide handlers - those who handle agricultural pesticides (mix, load, apply, clean or repair equipment, act as flaggers, etc.)
- The revised regulations are intended to reduce the risk of pesticide poisonings and injuries among agricultural workers and pesticide handlers through appropriate exposure reduction measures. Reducing overall exposure to pesticides will be accomplished by:
 - prohibiting handlers from exposing workers during application.
 - excluding workers from areas being treated and areas under a Restricted Entry Interval (REI).

EPA defines "Restricted Entry Intervals" as the time immediately following application of a pesticide when unprotected workers may not enter the treated area. The regulations state that:

- no unprotected person may be in the treated area during pesticide application.
- no pesticide application is to be permitted that will expose any person to pesticides, either directly or through drift, excepting those involved in the application.
- if labeling for worker reentry is more restrictive than the general standards specify, the label restrictions must be followed instead of the general regulations.
- when no reentry time is specified, treated areas can be reentered without protective clothing after the spray has dried or the dust has settled, unless the pesticide is exempt from reentry requirements.

- warnings of pesticide applications appropriate and timely to the situation are to be given to workers either through oral communication, by posting, or both. Warnings should be given in the language that can be understood by the workers involved.

The standard also mandates notifying workers about treated areas. Mitigating exposures will be accomplished by requiring decontamination supplies and emergency assistance. Workers will be informed about pesticide hazards through required safety training (workers and handlers), safety posters, access to labeling information, and access to specific information about the treated areas.

All of the requirements are described in the "WPS How To Comply" manual. Copies of this manual are available from your local Cooperative Extension office.

The Environmental Protection Agency revised the 1992 Agricultural Worker Protection Standard regulation in 2015 to increase protection from pesticide exposure for the nation's two million agricultural workers and their families. These changes will afford farmworkers similar health protections that are already afforded to workers in other industries while taking into account the unique working environment of many agricultural jobs.

The regulation seeks to protect and reduce the risks of injury or illness resulting from agricultural workers' (those who perform hand-labor tasks in pesticide-treated crops, such as harvesting, thinning, pruning) and pesticide handlers' (those who mix, load and apply pesticides) use and contact with pesticides on farms, forests, nurseries and greenhouses. The regulation does not cover persons working with livestock.

Major changes to the regulation:

- Annual mandatory training to inform farmworkers on the required protections. This increases the likelihood that protections will be followed. Previously, training was required only once every 5 years.
- Expanded training includes instructions to reduce take-home exposure from pesticides on work clothing and other safety topics.
- First-time ever minimum age requirement: Children under 18 are prohibited from handling pesticides.
- Expanded mandatory posting of no-entry signs for the most hazardous pesticides. The signs prohibit entry into pesticide-treated fields until residues decline to a safe level.
- New no-entry application-exclusion zones up to 100 feet surrounding pesticide application equipment will protect workers and others from exposure to pesticide overspray.
- Requirement to provide more than one way for farmworkers and their representatives to gain access to

pesticide application information and safety data sheets – centrally-posted, or by requesting records.

Mandatory record-keeping to improve states' ability to follow up on pesticide violations and enforce compliance. Records of application-specific pesticide information, as well as farmworker training, must be kept for two years.

- Anti-retaliation provisions are comparable to Department of Labor's (DOL's).
- Changes in personal protective equipment will be consistent with the DOL's Occupational Safety & Health Administration standards for ensuring respirators are effective, including fit test, medical evaluation and training.
- Specific amounts of water to be used for routine washing, emergency eye flushing and other decontamination, including eye wash systems for handlers at pesticide mixing/loading sites.
- Continue the exemption for farm owners and their immediate family with an expanded definition of immediate family.

The revised WPS took effect in January 2016 and will be phased in over the next two years.

Pesticide Registration

Under FIFRA, EPA has registered approximately 50,000 pesticide products. How the EPA handles each registration application depends on whether the product is new or has one or more uses already registered.

New Pesticides or New Formulations (Since 1972)

The law requires EPA to take into account economic, social, and environmental cost and benefits in making decisions. Pesticide registration decisions are based on Agency evaluations of test data provided by the manufacturer. Required studies include testing to show whether a pesticide has the potential to cause adverse effects in humans, fish, wildlife, and endangered species. Potential human risks include acute reactions or eye irritation, as well as possible long-term effects like cancer, birth defects, or reproductive system disorders. Data on "environmental fate," or how a pesticide behaves in the environment, also are required so that EPA can determine, among other things, whether a pesticide poses a threat to ground or surface water. Most registration decisions are for new formulations containing active ingredients already registered with EPA, or new uses of existing products.

Old Pesticides

Old pesticides registered and in use before current scientific standards were established also must be evaluated by the "no unreasonable adverse effects" guidelines applied to

new pesticides. This is being accomplished through EPA's Data Call-In program by issuance of "Registration Standards and Reregistration of registered pesticides."

EPA Options for Regulation

In regulating pesticides under FIFRA, EPA chooses from a variety of options.

If the risk is to people who mix, load and apply the pesticide, EPA can require:

- personal protective clothing such as gloves, hats, respirators or chemical-resistant suits.
- restriction on uses of the pesticide, or require use only by certified pesticide applicators.
- prohibition of certain formulation types such as dusts, granules, ultra -low volume concentrates or sprays.
- engineering controls such as enclosed cabs or closed mixing/loading systems.
- warning statements on the label such as cancer or birth defect risks, to encourage greater compliance with risk reduction measures stated on the label.
- restrictions on application rates or in the frequency of applications.
- prohibition of certain application methods such as aerial applications or backpack sprayers.
- other integrated pest management practices such as mechanical methods or spraying only where infestation has occurred.

If the risk is to farmworkers who reenter treated fields, EPA can require:

- restricted entry intervals which restrict farmworkers from entering a field for a certain period of time, unless they are wearing specified protective clothing.
- restriction in formulation type or application rates.
- oral notification or posting of signs to warn farmworkers that treatment has occurred.

If the risk is to consumers of crops which have been treated with pesticides, EPA can require:

- longer preharvest intervals so that residues will have more time to dissipate.
- changes in the manufacturing process of pesticides to reduce levels of contaminants or impurities.
- restrictions in the frequency of application and/or rates.

EPA can also cancel or deny registration for the uses of a pesticide. In such a case, EPA can either cancel or deny certain uses or all uses where risks are particularly high. It is possible that they may deny or gradually remove a pesticide from the marketplace to allow the development of alternative chemicals or technologies.

Recall of Suspended Pesticides

The 1988 amendments to FIFRA require the recall of pesticides if their registration is suspended, or if the EPA determines that a recall of the pesticide is necessary to protect health or the environment. If a pesticide is recalled, the registrant must take reasonable steps to inform users of the recall and must provide storage facilities to persons in possession of the pesticide and, if requested, transportation of the pesticide. Users of the recalled pesticide are entitled to an indemnity from the EPA for the price of the pesticide. An indemnity cannot be made unless there is a specific line item appropriation of funds made in advance by Congress.

EPA can suspend the use of a pesticide on a regular or an emergency basis if the Agency believes the pesticide poses an imminent hazard. Suspension halts the use of a pesticide until a decision on its registration can be made through the cancellation process.

- The Pesticide Registration Improvement Act of 2003 (PRIA) also amended FIFRA and FFDCA. PRIA was reauthorized by the Pesticide Registration Improvement Renewal Act of 2007 and the Pesticide Registration Improvement Extension Act of 2012. Under PRIA:
 - » Companies must pay service fees according to the category of the registration action.
 - » EPA must meet decision review time periods, which result in a more predictable evaluation process for companies.
 - » Shorter decision review periods are provided for reduced-risk registration applications.

Food, Drug and Cosmetic Act of 1938

The Food Drug and Cosmetic Act (FFDCA) of 1938 has been amended several times in its history. It is administered by the Food and Drug Administration of the Department of Health and Human Welfare.

FFDCA governs, among other things, pesticide residue levels in food or feed crops marketed in the U.S. Pesticide residues on agricultural commodities are regulated under both FIFRA and FFDCA. FIFRA regulates residues by forbidding the use of a pesticide in a manner inconsistent with its label and by denying registration to pesticides found to cause unreasonable adverse effects to people or the environment.

In order for EPA to register a pesticide under FIFRA, a tolerance must be established under FFDCA. Under the FFDCA, EPA has the responsibility for setting tolerances, or maximum legal limits for pesticide residues on food commodities marketed in the U.S. The purpose of the tolerance program is to ensure that U.S. consumers are not exposed to unsafe food-pesticide residue levels.

Information on a tolerance is useful in determining to register a pesticide and, if so, how the label will be composed. This takes into account that if the label's directions are followed correctly, then the tolerance will not be exceeded. If a pesticide is used on a crop not listed on the label, the crop may be determined to be unfit and destroyed by the government.

The Food and Drug Administration has the responsibility for enforcing tolerance levels set by EPA. This law:

- provides for monitoring of food crops for pesticide residues and enforces tolerances.
- provides for monitoring and enforcement of food additive tolerances and prosecutes violators.
- works jointly with EPA to register pesticides used on animals.
- provides for monitoring of pesticide residues in animals by the Meat Inspection Division of the U.S. Department of Agriculture.

Pesticide Record Keeping Requirements

The Food, Agriculture, Conservation, and Trade Act of 1990 (FACT Act, Farm Bill) contains regulations that require certified applicators of restricted use pesticides to keep records of applications. Certified applicators are determined to include both commercial and private applicators. The USDA Agricultural Marketing Service is responsible for implementing the record keeping provisions of the FACT Act. FACT further requires that certified applicators adhere to individual state record keeping requirements. If there is no state record keeping regulations, then certified applicators must include the following items as outlined by FACT:

- The pesticide's product name.
- The amount of pesticide applied.
- The date that the pesticide was applied.
- The location of the pesticide application.
- The size of the treated area.

FACT requires that all pesticide records be kept for at least 2 years after each application. Also, the application must be recorded within 14 days after the pesticide was applied.

Occupational Safety and Health Act (OSHA) of 1970

The Occupational Safety and Health Act (OSHA) of 1970 is administered by the Occupational Safety and Health Administration of the Department of Labor.

This law:

- requires any employer with eleven or more employees to keep records of all work-related deaths, injuries and

illness and to make periodic reports. Minor injuries needing only first aid treatment need not be recorded. Records must be made if the injury involved medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.

- requires investigation of employee complaints that may be related to pesticide use, reentry or accidents.

Hazard Communication Standard (HCS)

This rule is written and administered by OSHA and provides protection for employees exposed to hazardous chemicals. Pesticides are considered hazardous chemicals. An employee is defined as a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Exposure or exposed means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption), and includes potential (i.e. accidental or possible) exposure.

This law:

- requires employers to read the Standard and understand the provisions and responsibilities of an employer.
- requires a list of the hazardous chemicals in the work place be made.
- requires employers to obtain material safety data sheets (MSDS) for all hazardous substances on their list.
- requires all containers to be labeled.
- requires a written communication program be developed and implemented.
- requires that employee training be conducted based upon the chemical list, MSDS and labeling information.
- employers must create a hazard communication file, and make it available to any employee upon request in a reasonable period of time.

Resource Conservation and Recovery Act of 1976

The Environmental Protection Agency regulates all hazardous wastes under the Federal Resource Conservation and Recovery Act (RCRA). EPA issues a list of materials that are considered hazardous.

Under RCRA:

- private applicators (farmers) who properly dispose of pesticide wastes, excess pesticides, and triple rinsed empty containers on their own property are in general exempt from the requirements of this law (state requirements are often more strict).
- “Wastes” include unrinsed containers, excess pesticides and pesticide dilutions, and rinse and wash water that contain a listed chemical and cannot be used.

- Those who accumulate wastes of acutely toxic pesticides totaling 2.2 pounds or more per month or wastes of any RCRA-regulated pesticides totaling 2,200 pounds per month are regulated. Such users must register as a generator of hazardous waste, obtain an identification number from EPA, State, or tribe and follow certain disposal requirements.
- triple-rinsed used containers can be disposed of in EPA approved sanitary landfills without an ID number or further regulation. Regulated waste includes unrinsed containers, excess pesticide and pesticide dilutions, rinse water, etc. which contain a listed chemical and cannot be properly used.
- any pesticide not listed as hazardous in RCRA should still be treated as hazardous because any flammable, corrosive, reactive, or toxic waste is considered hazardous even if not on the list. State hazardous waste regulations should also be followed.

To find out if a pesticide is listed in RCRA call:

EPA RCRA Hotline 1-800-424-9346

Hazardous Materials Transportation Safety Act (HMTA)

The Hazardous Materials Transportation Safety Act of 1974 authorized the U.S. Department of Transportation (DOT) to declare, issue and enforce hazardous materials regulations for all modes of transportation. These regulations, contained in Title 49 of the Code of Federal Regulations (49 CFR), cover any safety aspect of transporting hazardous materials, including the packing, repacking, handling, describing, labeling, marking, placarding and routing of such materials. Many states have adopted these federal regulations and are enforcing them.

The HMTA was enacted over the concern for spills of unknown substances on public highways. It is under the jurisdiction of the Department of Transportation (DOT) since it is the agency responsible for the safe transportation of all materials on public highways. HMTA authorizes the Secretary of Transportation broad authority to designate any material shipped in commerce as hazardous if it poses an unreasonable risk to health, safety, and property.

The materials included under this regulation are explosives, compressed gases, flammable liquids and solids, poisons and several other classifications of chemicals. Many pesticides are not defined by the DOT as hazardous although most of the hazard classes defined include pesticides.

The regulations apply to common, contract, or private carriers of hazardous materials. A commercial pesticide applicator transporting pesticides for application under contract would constitute either a contractor or private

carrier and be subject to the regulations. Under certain circumstances, a private applicator transporting pesticides may be subject to the regulations.

Generally, the carriers subject to HMTA:

- Operate across state lines and transport materials listed in the Hazardous Material Table; or
- Transport materials above the reportable quantities for various chemicals listed in the Hazardous Substance Table; or
- Do not meet the above requirements, but operate in a state that requires compliance with DOT regulations.

Most states have adopted the DOT requirements for intrastate commerce. It is important to note that one should always follow the DOT regulations if there are no state requirements and there is no interstate commerce.

To avoid liability, manufacturers and distributors of hazardous materials often provide the information needed to follow HMTA regulations. However, it is the responsibility of anyone handling hazardous chemicals to ensure that the information is correct. Anyone who falls under the jurisdiction of the DOT and HMTA should know how to use the Hazardous Materials Table and Hazardous Substance Table.

The shipper who offers a hazardous material for transportation in commerce shall describe the hazardous material on the shipping paper as required by the regulations. The applicator or carrier may not transport a hazardous material unless it is accompanied by a shipping paper. However, in most cases pesticides do not need shipping papers unless the quantity of the material in one package equals or exceeds the "Reportable Quantity" (RQ) listed in the regulations. A pesticide would be considered a "hazardous substance" if its active ingredient is equal to or greater than the reportable quantity (RQ) per package.

When transporting hazardous materials, the shipping paper must be within reach of the driver while in the seat belt. When the driver is away from the vehicle the shipping paper must be on the driver's seat or in the pouch of the vehicle door.

Private carriers transporting only within the borders of a single state are exempted from this requirement provided the transport vehicle has a gross vehicle weight of less than 10,000 pounds. If the vehicle is a tank truck, it must have a tank of less than 3,500 water gallons capacity to be exempted.

Superfund Amendments and Reauthorization Act of 1986 (SARA Title III)

SARA Title III is a Federal Right-to-Know law that affects those that produce or store hazardous chemicals. Pesticide producers, distributors, retailers and some pesticide applicators are among those that must comply with this law. It is designed to inform communities regarding hazardous chemicals located in the vicinity and addresses the need for community emergency response plans in the event of an accident.

Title III has many sections, however, the areas that affect the pesticide applicator, applicator business, or dealer are confined to four sections:

- section 302 - Emergency planning and notification describes when notification of the state and local officials is required. EPA has assigned a Threshold Planning Quantity (TPQ) for each active ingredient (not total weight of formulated product). When the product in storage is at or above the TPQ the State Emergency Response Commission (SERC) must be notified in writing. Each facility is also required to designate a coordinator to work with the Local Emergency Planning Committee (LEPC). The state will notify the LEPC that your operation is covered under SARA. This is a one time notification.
- section 304- Emergency release reporting describes the safety measures when an accidental release (such as a spill) of any extremely hazardous substance occurs. If all the following occur:
 1. the pesticide was spilled.
 2. is covered under SARA Title III.
 3. the spill quantity was greater than the Reportable Quantity (RQ).
 4. and the spill created off-site exposure.

You must:

1. notify the SERC.
2. notify the LEPC.
3. report the release to the National Response Center (1-800-424-8802).

If a pesticide is applied according to the label, the use is exempt from emergency release reporting.

- section 311 - Safety data sheets (SDS) reporting: employers are required to obtain and keep safety data sheets. They must submit copies of each SDS, or a listing of SDSs that must be maintained, to their local fire department, the LEPC, and the SERC. There is one exclusion: if a chemical is used solely for household, consumer, or agricultural purposes, notification is not required.

- section 312 - Annual inventory reporting: all regulated facilities must submit an annual inventory to their local fire department, LEPC, and SERC. The inventory must include:
 - » All hazardous chemicals stored at the facility in quantities of 10,000 pounds or more, and
 - » All extremely hazardous chemicals stored in quantities of 500 pounds, or 55 gallons, or more, or in a quantity that exceeds the TPQ, whichever is less.

Agricultural producers are exempt from this section

The Endangered Species Act (ESA) of 1973

The purpose of the Endangered Species Act (ESA) is to protect endangered species. The ESA is administered by the Fish and Wildlife Service (FWS), of the Department of the Interior. The ESA makes it illegal to kill, harm or collect endangered wildlife or fish or remove endangered plants from areas under federal jurisdiction. It also mandates that other federal agencies ensure that any action they carry out or authorize is not likely to jeopardize the continued existence of any endangered species, or to destroy or adversely modify its critical habitat.

The FWS determines whether a species is endangered. An endangered species is a plant or animal which is in danger of extinction throughout all or a significant portion of its range. A threatened species is one likely to become endangered in the foreseeable future. The reasons a species becomes endangered or threatened are complex and difficult to correct. Destruction of habitat is one of the major reasons for the decline of some species. Habitat destruction is usually the result of industrial, agricultural, residential or recreational development. Within the United States about 275 animals and 190 plants have been listed as endangered or threatened. Once a species is listed as endangered, the FWS may designate that its critical habitat be protected from destruction or modification in any way.

EPA is required to ensure that registered pesticide use is unlikely to jeopardize endangered species. Jeopardize means that the action “appreciably reduces the likelihood of survival of the species.” To accomplish this, EPA estimates the maximum environmental concentration of each pesticide. If this estimated concentration may affect an endangered species the pesticide is referred to the FWS. The FWS determines if the pesticide uses are likely to jeopardize the endangered species. When FWS finds that the uses may cause jeopardy to the endangered species, the agency will recommend alternatives and /or restrict the use of the pesticide within the habitat of the affected species. If the pesticide will adversely affect the species,

but not to the point of jeopardy, FWS provides discretionary conservation recommendations.

EPA responds to the FWS jeopardy opinions by making changes to the pesticide label. The new label language may contain specific restrictions or it may direct pesticide applicators to read an Endangered Species Bulletin with directions for the use of the pesticide where endangered species may be affected.

Ultimately, protection of endangered species from pesticides will fall to the pesticide applicator. Preserving the biological diversity of our planet by protecting endangered species will contribute to the overall quality of life. Each plant or animal is part of a complex food chain; break one of the links and others are adversely affected. One disappearing plant can take with it up to thirty other species that depend on it, including insects, higher animals and even other plants.

Food Quality Protection Act (FQPA)

The FQPA was signed into law in 1996 and was the first significant amendment to FIFRA since 1988. Under FQPA, EPA must find that a pesticide poses a “reasonable certainty of no harm” before it can be registered for use on food or feed.

The following are some of the major provisions of FQPA:

- Periodic review of pesticide registrations. FQPA requires EPA to establish a system for periodic review of all pesticide registrations on a 15-year cycle using new food safety standards mandated under the act. Several factors must be addressed before a tolerance can be established, including:
 - » the aggregate, non-occupational exposure from the pesticide (exposure through diet and drinking water and from using pesticides in and around the home);
 - » the cumulative effects from exposure to pesticides that have a common mechanism of toxicity, that is, two or more pesticide chemicals or other substances that cause a common toxic effect(s) by the same, or essentially the same, sequence of major biochemical events (i.e., interpreted as mode of action);
 - » whether there is increased susceptibility to infants and children, or other sensitive subpopulations, from exposure to the pesticide; and
 - » whether the pesticide produces an effect in humans similar to an effect produced by a naturally-occurring estrogen or produces other endocrine-disruption effects.
- Emergency suspension authority. EPA may suspend a pesticide registration immediately. A notice of intent to cancel must be issued within 90 days, or the emergency suspension would expire.

- Minor use pesticides. FQPA enhances incentives for the development and maintenance of minor use registrations through extensions for exclusive use of data, flexibility to waive certain data requirements, and requiring EPA to expedite review of minor-use applications.
- Time-limited tolerances. FQPA requires the establishment of a time-limited tolerance for pesticides that have received registration under Section 18 of FIFRA.

Safe Drinking Water Act (SDWA)

EPA establishes national drinking water standards, called Maximum Contaminant Levels (MCLs), for protecting the quality of drinking water for both underground and above ground sources. Public water systems may not deliver water exceeding the MCLs. Congress amended the law to require the development of a screening and testing program for chemicals, including pesticides, for possible endocrine disrupting effects. EPA has the same requirement within the FQPA.

Other Regulations

Regulations governing agricultural aircraft operations are administered by the Federal Aviation Administration in the U.S. Department of Transportation. It issues commercial and private aircraft operator certificates for such operations under Title 14, Code of Federal Regulations, Part 137.

Pesticide regulation is very complex, merging science, public policy, and law. Since scientific knowledge constantly changes, as do the needs of society, the pesticide regulatory process is never ending. EPA continuously updates pesticide decisions as knowledge increases and improves.

Anyone applying pesticides must comply with federal and state laws. In general, states have primary authority for compliance monitoring and enforcing against illegal pesticide use. Often, a state's department of agriculture has this responsibility, but it can be a state's environmental or other agency.

Remember as you are likely to learn from the judge if you end up in court for violating one of these laws, "Ignorance of the law is no excuse." This means that when an individual violates the law, it doesn't matter whether or not they knew what the law said. If it's a crime, and they are found to have committed the elements of that crime, they are guilty!

Use pesticides safely. Read and follow directions on the manufacturer's label and be sure to be aware of all applicable laws.

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