

General Knowledge: Pesticides and the Law

Pesticides and the Law Learning Objectives

THIS CHAPTER IS PART OF THE GENERAL KNOWLEDGE REQUIRED FOR THE GENERAL EXAM FOR BOTH PRIVATE AND NON-PRIVATE CERTIFIED APPLICATORS.

After studying this section, you should be able to:

- ✓ Describe terms and definitions in the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).
- ✓ Describe unlawful acts and penalties listed in FIFRA.
- ✓ Describe other laws and regulations (non-FIFRA) related to pesticides.
- ✓ Discuss requirements of the Worker Protection Standard (WPS), including the 2015 update to the WPS.
- ✓ Discuss provisions related to pesticides in Chapter 555 of the Nevada Revised Statutes.
- ✓ Discuss new provisions in NRS Chapter 586.
- ✓ Discuss the differences between Authorized Commercial Applicators, Commercial Applicators, Non-Private Certified Applicators and Private Certified Applicators in Nevada.
- ✓ Discuss the new NAC 586 requirements for Certified Applicators supervising Non-Certified Applicators.

Pesticides and the Law

Both federal and state laws govern the use and application of restricted-use pesticides. The federal law serves as an umbrella, and the state law may be more restrictive, but not less. The following is an explanation of federal and state laws related to certified applicators.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) passed in 1972 and was last amended in 2012 by the Pesticide Registration Improvement Act (PRIA). FIFRA regulates the registration, manufacturing, transportation, distribution and use of pesticides.

State law may be more restrictive than Federal law, but not less.

FIFRA, the Federal Insecticide, Fungicide and Rodenticide Act, is administered by the U.S. Environmental Protection Agency.

A pesticide is any substance or mixture of substances intended to prevent, destroy, repel or mitigate any pest, or any substance or mixture of substances used as a plant regulator, defoliant or desiccant.

FIFRA Section 1: Administration

- The United States Environmental Protection Agency (EPA) administers FIFRA.

FIFRA Section 2: Definitions:

- Certified Applicator: any individual who is authorized (trained and/or tested for competency in the safe and effective handling and use of pesticides) to use or supervise the use of any pesticides classified for restricted use.
 - Private Applicator: a certified applicator who uses or supervises the use of any restricted-use pesticide for purposes of producing any agricultural commodity on property owned or rented by the applicator or the applicator's employer or, if applied without compensation, on another person's property. (EXAMPLES: farmers, ranchers, nurseries, greenhouse growers, grow facilities, floriculturists, orchardists).
 - Non-Private Applicator: a certified applicator who applies or supervises the application of restricted-used pesticides, except as part of a business of pest control, and does not qualify as a private applicator (EXAMPLES: federal, state, county, city or other municipal employees, school districts, mosquito districts, conservation districts, general improvement districts, churches, airports, HOA employees, private and public golf clubs, hotels/casinos/resorts, restaurants, tribes, mine staff, homeowners)
- "Under the Direct Supervision of a Certified Applicator": Unless otherwise prescribed by its labeling, a restricted-use pesticide may be applied by a competent person acting under the instructions and control of a certified applicator who is available, if and when needed, even though such certified applicator is not physically present at the time and place the pesticide is applied. The label may require the certified applicator to be physically present during the application; read the label carefully. See the section on requirements for the direct supervision of noncertified applicators by certified applicators at the end of this chapter.
- Person: any individual, partnership, association, corporation, or organized group of persons, whether incorporated or not.
- Pest:
 - any insect, rodent, nematode, fungus, weed or
 - any other form of terrestrial or aquatic plant or animal life or virus, bacteria or other micro-organism (except viruses, bacteria, or other micro-organisms on or in living humans or other living animals) that is considered a pest.

- Pesticide:
 - any substance or mixture of substances intended to prevent, destroy, repel or mitigate any pest,
 - or any substance or mixture of substances used as a plant regulator, defoliant or desiccant; does not include “new animal drugs.”
- Label and Labeling:
 - Label: the written, printed or graphic matter on, or attached to, the pesticide, container, device or wrapper.
 - Labeling: all labels and all other printed or graphic matter accompanying the pesticide or device.
 - Any additional information to which reference is made on the label or the literature accompanying the pesticide or device. For example, if the pesticide label directs you to a website, the information on the website is considered part of the label.
- To Use Any Registered Pesticide in a Manner Inconsistent with its Labeling means to use any pesticide in a manner NOT permitted by the labeling, provided that the term shall not include:
 - Applying a pesticide at any dosage, concentration or frequency less than that listed on the labeling.
 - Applying a pesticide against any target pest not on the labeling if the application is to a crop, animal or site that is listed on the label.
 - Use of any equipment or method of application that is not prohibited by the labeling.
 - Mixing a pesticide or pesticides with a fertilizer if the labeling does not prohibit the mixture.

FIFRA Section 3: Registration of Pesticides

- Requirement: No person in any state may distribute, sell, offer for sale, hold for sale, ship, deliver for shipment, or receive and deliver to any person any pesticide that is not registered with the EPA.
 - All states must accept all EPA-registered restricted-use pesticides.
 - A state may restrict any EPA-registered general use pesticide.
- General Use Pesticide (GUP): A pesticide that is less likely to harm humans or the environment when it is used according to label directions. The designation appears immediately below the heading of “Directions for Use”.
- Restricted-Use Pesticide (RUP): A pesticide that could cause human injury or environmental damage unless it is applied by competent “certified applicator,” which is a person who has shown the ability to use these pesticides safely and effectively. The designation appears in a box on a prominent part of the front panel of the pesticide label.
- Classification of pesticides and their uses by the EPA is based upon “risk

Pesticide labeling includes the printed material attached to the pesticide container and all supplemental pesticide information that may not be attached to the pesticide container. It is the law to read, understand and follow all pesticide labeling.

General Use Pesticides (GUP) are those that are less likely to harm humans or the environment. They are available to everyone.

Restricted Use Pesticides (RUP) are those that could cause harm to humans or the environment if not applied properly. Applications of these pesticides must be done by a certified applicator or a licensed applicator.

The Nevada Department of Agriculture, in cooperation with the University of Nevada, Reno Extension, conducts training and testing sessions for certification.

Certification requires training and/or testing for competency in the safe and effective handling and use of these pesticides.

assessment,” which includes:

- potential for poisoning humans
- type of formulation
- the way the pesticide is used
- site of application
- potential for environmental harm
- EPA will assign each registered pesticide a registration number. (EXAMPLE: Reg. No. 012S001).

FIFRA Section 5: Experimental Use Permits

- Issued to accumulate the necessary information and data required to register a new pesticide.
- Permit period shall not exceed one (1) year and is not required for areas less than 10 acres per pest for terrestrial pests or less than one (1) acre per pest for aquatic pests.
- A tolerance of exemption under the Federal Food, Drug and Cosmetic Act does not need to exist. EPA may establish a temporary tolerance level if the use of a pesticide may reasonably be expected to result in any residue on or in food or feed.

FIFRA Section 7: Registration of Establishments

- Requirement: No person shall “produce” any pesticide or active ingredient used in the production of a pesticide unless the establishment that it is produced in is registered with the EPA.
- “Produce” means:
 - to manufacture, prepare, compound, propagate or process any pesticide or
 - to repackage or otherwise change the container of any pesticide.
- EPA shall assign each registered establishment an establishment number. (EXAMPLE: EPA Est. No. 0123-NV-01).

FIFRA Section 11: Certification of Restricted-Use Pesticide Applicators

- EPA requires each state to maintain a program for certification of restricted-use pesticide applicators. The Nevada Department of Agriculture, in cooperation with the University of Nevada, Reno Extension, conducts training and testing sessions for certification. The Nevada Department of Agriculture provides testing and certification of pesticide applicators.
- Certification requires training and/or testing for competency in the safe and effective handling and use of pesticides. Persons who are not certified pesticide applicators may not use restricted-use pesticides unless they are directly supervised by a certified applicator.

FIFRA Section 12: Unlawful Acts

- It shall be unlawful for any person in any state to distribute, sell, offer for sale, deliver, etc., to any person:
 - any pesticide not registered by the EPA.
 - any registered pesticide whose composition or claims differ from those made in connection with its registration.
 - any pesticide that is “adulterated” or “misbranded” or any device that is misbranded.
- **“Adulterated”**: means any pesticide whose strength or purity falls below the standard expressed on its labeling, or any substance that has been wholly or partly substituted for the pesticide, or any valuable constituent of the pesticide that has been wholly or partially left out.
- **“Misbranded”**: A pesticide is misbranded if:
 - labeling bears any statement, design, graphics, etc. relative thereto or to its ingredients that is false or misleading.
 - the package, container or wrapper does not conform to specific EPA standards.
 - it imitates or is offered for sale under the name of another pesticide.
 - its label does not bear an EPA Establishment Registration Number.
 - any word, statement or other information required to appear on the labeling is not conspicuously or prominently placed, as to render it unlikely to be read and understood by the ordinary individual.
 - the label does not contain a cautionary statement that adequately protects human and domestic animal health and the environment.
- It shall also be unlawful for any person:
 - to detach, alter, deface or destroy, in whole or in part, any labeling.
 - to refuse to keep required records, or to refuse to allow the inspection of any records or establishment, or to refuse to allow a designated employee of the EPA to take a sample pursuant to Sections 8 and 9.
 - to advertise a restricted-use pesticide without giving the product’s classification.
 - to make available for use, or to use, any restricted-use pesticide for purposes other than those registered, except that it shall not be unlawful to sell a restricted-use pesticide to an uncertified person for application by a certified applicator.
 - to use any registered pesticide in a manner inconsistent with its labeling, or any experimental use permit contrary to the provisions of such permit.
 - to knowingly falsify any required application for registration, record, information or report; or failure to file reports required by this Act.

Persons who are not certified pesticide applicators may not use Restricted-Use Pesticides unless they are directly supervised by a certified applicator.

It is unlawful for any person to refuse to keep required records or to refuse to allow the inspection of any records or establishment.

It is unlawful to use any registered pesticide in a manner inconsistent with its labeling.

FIFRA can issue both Civil and Criminal Penalties for registrants, commercial applicators, wholesalers, dealers, retailers and other distributors who violate any provision of FIFRA

- to add, or take, any substance from any pesticide to defeat the purpose of this Act.
- to use any pesticide in tests on human beings unless they:
 - are fully informed of the consequences and
 - freely volunteer to participate.

FIFRA Section 14: Penalties

- Civil Penalties:
 - a. Any registrant, commercial applicator, wholesaler, dealer, retailer or other distributor who violates any provision of this Act may be assessed a civil penalty of not more than \$5,000 for each offense.
 - b. Any private applicator or other person not included in Paragraph (a) who violates any provision of this Act subsequent to receiving a written warning or a citation for a prior violation may be assessed a civil penalty of not more than \$1,000 for each offense.
 - c. Any applicator not included under Paragraph (a) who holds or applies registered pesticides, or uses dilutions of registered pesticides, only to provide a service of controlling pests without delivering any unapplied pesticide to any person and who violates any provision of this Act may be assessed a civil penalty of not more than \$500 for the first offense nor more than \$1,000 for each subsequent offense.
- Criminal Penalties:
 - a. Any registrant or producer who knowingly violates any provision of this Act shall be guilty of a misdemeanor and shall, on conviction, be fined not more than \$50,000 or imprisoned for not more than one (1) year, or both.
 - b. Any commercial applicator of a restricted-use pesticide, or any other person not described in paragraph (a), who distributes or sells pesticides or devices and knowingly violates any provision of this act shall be fined not more than \$25,000 or imprisoned for not more than one (1) year, or both.
 - c. Any private applicator or other person not included in Paragraph (a) who knowingly violates any provision of this Act shall be guilty of a misdemeanor and shall, on conviction, be fined not more than \$1,000 or imprisoned for not more than thirty (30) days, or both.

FIFRA Section 18 – Exemptions of Federal Agencies

- EPA may exempt any federal or state agency from any provision of this Act if it is determined that emergency conditions exist that require such exemption.
- This provision allows the sale and use of a product for a non-registered purpose for a specified time period when an emergency situation occurs.

FIFRA Section 19 – Storage, Disposal and Transportation

- The labeling of a pesticide contains requirements and procedures for the transportation, storage and disposal of pesticides. The EPA may also issue requirements for the design and disposal of pesticide containers and the disposal of pesticide rinsate.
- Section 19f establishes standards for removal of pesticides from containers and container rinsing, establishes standards for container design, labeling and refilling, and establishes requirements for containment of stationary bulk containers and pesticide dispensing areas.
- EPA will provide advice and assistance to the Department of Transportation (DOT) in functions relating to the transportation of pesticides and hazardous wastes.
 - DOT regulates shipments of pesticides between states and within states. DOT regulations also require that, for transportation of small quantities of many commonly used pesticides, training, markings on vehicles and shipping documents are required. Contact the DOT regarding their specific laws and regulations.

FIFRA Section 24(c): Authority of States (Special Local Need – SLN)

- Allows a state, under certain conditions, to register additional uses for a federally registered pesticide.
- These registrations may involve adding (a) application sites; (b) pests; or (c) alternate control techniques to those listed on the federally registered label.
- Provisions:
 - Registrant must provide supplemental labeling for each SLN registration.
 - Applicator must have a copy of the SLN label in their possession in order to apply the pesticide for that purpose (EXAMPLE: SLN-NV). Registration is only legal in the state or location specified in the labeling.
 - A tolerance or exemption under the Federal Food, Drug and Cosmetic Act must exist that permits residues of the pesticide on the food or feed before the SLN will be approved.

FIFRA Section 26: State Primary Enforcement Responsibility

- For the purposes of this Act, a state shall have primary enforcement responsibility for pesticide use violations.

**For more
information on
transporting
pesticides:**

**University of
Nevada, Reno
Extension
Pesticide Use &
Safety:
Transporting
Pesticides
Safely,
[https://
naes.agnt.unr.ed
u/PMS/
Pubs/2020-3352
.pdf.](https://naes.agnt.unr.edu/PMS/Pubs/2020-3352.pdf)**

For more information about The Food Quality Protection Act (FQPA) go to <https://www.epa.gov/epcra>.

For more information about the FAA, go to <https://www.faa.gov>

For more information about the EPCRA, go to <https://www.epa.gov/epcra>

II. Other Laws and Regulations

There are other federal laws that may have impacts on pesticide applications. Below is a short synopsis of several of those laws and a link for more information for the reader.

Food Quality Protection Act of 1996 (FQPA):

EPA regulates pesticides under two major federal statutes: 1) Under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), EPA governs the registration, distribution, sale and use of pesticides in the United States; 2) Under the Federal Food, Drug and Cosmetic Act (FFDCA), EPA establishes tolerances (maximum legally permissible levels) for pesticide residues in food or feed crops. Tolerances established for meat, poultry, some egg products and other foods are enforced by the United States Department of Agriculture (USDA). The 1996 FQPA law was a major breakthrough, amending both major pesticide laws to establish a more consistent, protective regulatory scheme grounded in sound science. It mandates a single, health-based standard for all pesticides in all foods, provides special protections for infants and children, expedites approval of safer pesticides, creates incentives for the development and maintenance of effective crop protection tools for American farmers, and requires periodic re-evaluations of pesticide registrations and tolerances to ensure that the scientific data supporting pesticide registrations will remain up to date in the future.

Federal Aviation Administration (FAA)

- Oversees aerial applications, including those made by unmanned aerial vehicles (UAVs), more commonly known as drones.
- Judges the flying ability of pilots and the safety of their aircraft.

Emergency Planning and the Community Right-to-Know Act (Title III of the Superfund and Reauthorization Act of 1986 (SARA)):

- The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed in 1986 in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the 1984 disaster in Bhopal, India, caused by an accidental release of methylisocyanate. The release killed or severely injured more than 2000 people.
- To reduce the likelihood of such a disaster in the United States, Congress imposed requirements for federal, state and local governments, tribes, and industry. These requirements covered emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities,

uses of such chemicals, and their releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment.

- Section 2018 of the America's Water Infrastructure Act, enacted on October 23, 2018, amended the emergency release notification and the hazardous chemical inventory reporting requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA). This new legislation requires state and tribal emergency response commissions to notify the applicable state agency (i.e., the drinking water primacy agency) of any reportable releases and to provide community water systems with hazardous chemical inventory data. These requirements went into effect immediately upon signing the law.

Endangered Species Act (ESA)

- Sets up pesticide restrictions, beginning in 1991, for growers, applicators and dealers and is designed to protect endangered plant and animal species.
- Developed to bring FIFRA into compliance with the Endangered Species Act.
- U.S. Fish and Wildlife Service (FWS) is the final authority for the interpretation of the ESA.
- The label on a pesticide product that affects an endangered species will identify the state and the counties in the state where endangered species prohibitions on the use may occur. The label will also direct the pesticide user to follow all the measures contained in the Endangered Species Bulletin for the county in which they are applying the product. To obtain the Bulletin, go to <https://www.epa.gov/endangered-species> and click on "Endangered Species Protection Bulletins."
 - Select your intended application area.
 - Select the application month.
 - You can enter the active ingredient, product name or product registration number. The default is a search for all products and active ingredients.
 - Click the "SEARCH" button.
 - If a Pesticide Use Limitation Area (PULA) occurs within the selected area of intended pesticide use, click on the PULA to select it. This will activate the results tab with the associated limitation. Click the "Printable Bulletin" button for a pdf you can print or save.
 - If no PULA occurs in your selected area, click the "SEARCH" button. This will activate the "No Limitations" screen. Click the "Printable Bulletin" button for a pdf you can print or save.

U.S. Fish and Wildlife Service (FWS) is the final authority for the interpretation of the Endangered Species Act.

Information on endangered species can be found at the EPA's Endangered Species Protection Bulletins Website. at <https://www.epa.gov/endangered-species> click on "Endangered Species Protection Bulletins."

ESA Bulletins are provided only six months in advance, and you must use the bulletin for the area you are applying product and the month you are applying the product.

For more information on OSHA, go to <https://www.osha.gov/>

The Worker Protection Standard (WPS) seeks to protect workers on farms, nurseries, greenhouses, and forests.

The WPS requires employers to take steps to reduce the risk of pesticide related illnesses.

An agricultural worker is anyone who is employed doing tasks such as harvesting, weeding, or watering, related to the production of agricultural plants.

Chemical Hazard Communication Standard part of the Occupational Safety and Health Act (OSHA) – workers right-to-know

- Employer must inform employees of chemical hazards.
- Safety Data Sheets (SDS), formerly Materials Safety Data Sheets (MSDS), must be available.
- Written training program must be implemented.
- Labeling must be attached to all chemical and service containers (not application devices).
- The EPA has not adopted the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) for pesticides. The GHS has two categories of signal words: Warning and Danger. The EPA still has three signal words: Caution, Warning and Danger. Be advised that the signal words on SDS (Safety Data Sheets) may not match the signal word on the pesticide label.

Worker Protection Program (WPS)

In 1992, EPA revised the worker protection standard (WPS) for agricultural pesticides. The WPS governs the use of pesticides used in the production of agricultural plants on farms, forests, nurseries, and in greenhouses. With few exceptions, if you are an employer of agricultural workers or pesticide handlers, the WPS requires you to take steps to reduce the risk of pesticide-related illnesses.

An agricultural worker is anyone who is employed doing tasks such as harvesting, weeding or watering, related to the production of agricultural plants. A pesticide handler is defined as anyone who is employed by an agricultural establishment to apply, mix, load, or transfer pesticides, handle open containers of pesticide, act as a flagger, or assist in the maintenance of application equipment.

This section provides an overview of who is required to comply with the WPS and a list of compliance requirements.

In general, employers are responsible for WPS compliance. These include:

- Owners/employers on agricultural establishments that grow and harvest for commercial production:
 - Fruits and vegetables on farms.
 - Timber and trees in forests and nurseries.
 - Plants in greenhouses and nurseries.
 - Marijuana grow-rooms/greenhouses
 - Hemp farms
- Employers of researchers who help grow and harvest plants.
- Employers at commercial pesticide handling establishments

Under the WPS, **all employers** are required to do the following:

- Do not retaliate against a worker or handler.
- Provide annual pesticide safety training.
- Provide access to specific information for workers and handlers at a central location during normal work hours, including (agricultural employers only):
 - Pesticide applications on the establishment.
 - Safety Data Sheets for pesticides applied on the establishment.
 - Pesticide safety information that includes emergency information.
- Provide WPS-required safety, pesticide application, and hazard information to workers and handlers or their designated representative, or to treating medical personnel if requested. For additional details, see Chapter 2 of the WPS How to Comply Manual. See full requirements at 40 CFR 170.311(b).
- Provide decontamination supplies.
- Exchange information (between a commercial handler employer and an operator of an agricultural establishment).
- Provide emergency assistance by making transportation available to a medical care facility in case of a pesticide injury or poisoning and provide information to the facility about the pesticide(s) to which the person may have been exposed.

In addition to the duties listed above for all employers, employers of **workers** are required to do the following:

- Implement restrictions during applications by keeping workers and other people out of the treated field and application exclusion zones.
- Implement restricted-entry intervals (REIs).
- Implement protections for early entry by workers, providing:
 - Access to labeling information.
 - Specific information on early entry tasks.
 - Required early entry Personal Protective Equipment.
- Notify workers about applications and pesticide-treated areas and informing them not to enter during the REI by:
 - providing oral warnings or
 - posting warning signs.

In addition to the duties listed above for all employers, employers of **pesticide handlers** are required to do the following:

- Implement restrictions during applications by ensuring that pesticides applied do not contact workers or other people. Handlers must suspend an application if workers or other people are in the application exclusion zone.
- Monitor handlers working with toxic pesticides.

In 2015 the EPA revised the WPS. For more information go to “How To Comply With the 2015 Revised Worker Protection Standard for Agricultural Pesticides: What Owners and Employers Need to Know” at <http://pesticideresources.org/wps/htc/htcmanual.pdf>.

A pesticide handler is defined as anyone who is employed by an agricultural establishment to apply, mix, load, transfer, handle open containers of pesticide, act as a flagger, or assist in the maintenance of application equipment.

A WPS reference statement will appear on agricultural pesticide products that require employers to provide pesticide handlers and agricultural workers with all WPS protections.

Not all pesticides are covered by the WPS. Only pesticide products that are used in the production of agricultural crops will reference the WPS. You will know that the product is covered by the WPS if you see the Agricultural Use Requirement statement under the “Directions for Use” section of the pesticide labeling.

- Provide specific instructions for handlers.
- Provide access to labeling information for handlers.
- Take steps to ensure equipment safety.
- Personal Protective Equipment (PPE):
 - Provide required PPE in clean and good operating condition.
 - Ensure PPE is worn correctly.
 - Provide a clean place for storing personal clothing and removing PPE.
 - Care for, maintain and replace damaged or worn PPE.
 - Replace respirator purifying elements.
 - Dispose of contaminated PPE.
 - Provide instructions for people who clean PPE.
- Provide a medical evaluation, fit test and respirator training to handlers required to wear a respirator by the pesticide label.

Not all pesticides are covered by the WPS. Only pesticide products that are used in the production of agricultural crops will reference the WPS. You will know that the product is covered by the WPS if you see the Agricultural Use Requirement statement under the “Directions for Use” section of the pesticide labeling. An example is shown in the box below.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

In 2015 the EPA revised the WPS; the new regulations became effective January 1, 2018. These most recent changes are outlined below:

- Mandatory annual training to inform employees about the required protections, including instructions on reducing take-home exposure from pesticide work clothing.
- Requirement that only certified applicators or an individual that completes an EPA-approved “train the trainer” program is authorized to conduct the mandatory training.
- Anyone under 18 years of age is prohibited from being a pesticide handler or doing early-entry work during a REI.
- Expanded mandatory posting of no-entry signs for outdoor production if the REI is greater than 48 hours.

- New application exclusion zones of up to 100 feet surrounding pesticide application equipment.
- If the label requires a respirator, the employer must provide a medical evaluation, fit testing and respirator training in compliance with the Occupational Health and Safety Administration (OSHA) respiratory protection standard.
- If the label requires protective eyewear, the employer must provide water for emergency eye washing at pesticide mixing/loading sites.
- Mandatory record-keeping to improve states' ability to follow up on pesticide violations and enforce compliance.
- Anti-retaliation provisions comparable to that of the U.S. Department of Labor.

If it is necessary for you to meet the requirements of the WPS, you will need to obtain a copy of the "How to Comply With the 2015 Revised Worker Protection Standard for Agricultural Pesticides" at <http://pesticideresources.org/wps/htc/htcmanual.pdf>

III. Nevada Revised Statutes (NRS) Chapter 555

The use and application of restricted-use pesticides is governed by both federal and state laws. The federal law serves as an umbrella, determining the minimum regulations and standards. State laws can be more restrictive or stringent but may not negate or reduce the federal law. For more information on federal law, see Chapter 2 in the National Pesticide Applicator Certification Core Manual.

Nevada Revised Statutes (NRS) are laws enacted by the legislature, and Nevada Administrative Code (NAC) are the regulations that outline how laws are administered (detail of the NRS). State laws that pertain to pesticides can be found in Chapters 555 and 586 of the Nevada Revised Statutes (NRS) at <https://www.leg.state.nv.us/Division/Legal/LawLibrary/NRS/NRS-555.html> and <https://www.leg.state.nv.us/Division/Legal/LawLibrary/NRS/NRS-586.html> and Chapters 555 and 586 of the Nevada Administrative Code (NAC) at <https://www.leg.state.nv.us/Division/Legal/LawLibrary/NAC/NAC-555.html> and <https://www.leg.state.nv.us/Division/Legal/LawLibrary/NAC/NAC-586.html>

The following is an explanation of the Nevada State law, Nevada Revised Statutes (NRS) Chapter 555.

- A) The purpose of the statute is to regulate, in the public interest, the application of pesticides. Although these restricted-use pesticides are

If the label requires protective eyewear, the employer must provide water for emergency eye washing at pesticide mixing/loading sites.

State pesticide laws can be more restrictive or stringent but may not negate or reduce the federal law.

It is unlawful for any person to sell, distribute, transport or use a restricted-use pesticide in the state of Nevada that is not registered with the Nevada Department of Agriculture.

valuable for the control of pests, they may seriously injure humans, animals and crops over wide areas if not applied properly.

- B) Licenses and certificates issued fall into two main categories, detailed in Table 1.
- C) Penalties: suspension, modification or revocation of license; grounds for automatic suspension.
 - 1) The Department of Agriculture may suspend, pending inquiry, for no longer than ten (10) days, and after opportunity for a hearing, may revoke, suspend or modify any license or certificate if it is found that the applicator:
 - a) is no longer qualified;
 - b) applied known ineffective or improper materials or made any application in a faulty, careless or negligent manner;
 - c) aided or abetted a person to evade the provisions of NRS 555;
 - d) was intentionally guilty of fraud or deception in the procurement of a license or certificate;
 - e) deliberately falsified any record or report; or
 - f) violated any provisions of NRS 555 or regulations made thereunder.
 - 2) The Department of Agriculture may assess monetary penalties for any violation of the provisions outlined in NRS 555 or the regulation made thereunder.

IV. Nevada Revised Statutes (NRS) Chapter 586: Pesticide Registration

- Every pesticide that is distributed, sold or offered for sale within this State, or delivered for transportation or transported in intrastate commerce shall be registered with the Nevada Department of Agriculture.
 - Registrations require an annual renewal.
 - \$125 for each pesticide registered
- It shall be unlawful for any person to distribute, sell or offer for sale in this State any pesticide:
 - Not registered in the State,
 - Unless it is in the registrant’s or manufacturer’s unbroken immediate container and there is affixed to such container the required information.
- It shall be unlawful for any person to sell or offer to sell at the retail level or distribute or deliver for transportation for delivery to the consumer or user a restricted-use pesticide that is not registered with the Nevada Department of Agriculture.

- Restricted-use pesticide Dealer registrations expire on December 31 and are renewable annually at a fee of \$25.00.
- All licensed dealerships are required to submit RUP sales reports on or before the 15th day of each month (even if that dealer has not sold any RUPs during that previous month) and to maintain a record of all RUP sales for two (2) years showing:
 - date of sale or delivery
 - name and address of person to whom the product is sold
 - brand name and EPA registration number of the pesticide
 - amount of pesticide sold
 - certification / license number
 - expiration date
 - certification / license categories
- A marijuana establishment or medical marijuana establishment may use a pesticide in the cultivation and production of marijuana, edible marijuana products, marijuana products and marijuana-infused products if the pesticide:
 - is exempt from registration (25b) product or is allowed to be used on Crop Group 19, hops or unspecified crops or plants,
 - has a label that allows the pesticide to be used at the intended site of application, or
 - has a label that allows the pesticide to be used on crops or plants intended for human consumption.
- The Nevada Department of Agriculture (NDA) will establish and publish a list of pesticides not illegal to use on marijuana or medical marijuana. NDA will accept requests from pesticide manufacturers and marijuana establishments to add pesticides to the list. This list is updated periodically and can be found at http://agri.nv.gov/Plant/Environmental_Services/Pesticide_Use_on_Medical_Marijuana/

All restricted-use pesticide dealers must keep and maintain for two (2) years a record of all sales of restricted-use pesticides.

NDA has a list of pesticides not illegal to use on marijuana or medical marijuana at [http://agri.nv.gov/Plant/Environmental_Services/Pesticide Use on Medical Marijuana/](http://agri.nv.gov/Plant/Environmental_Services/Pesticide_Use_on_Medical_Marijuana/).

V. Nevada Administrative Code (NAC) Chapter 555: Certified Applicator Regulations

- A) Establishes categories for the certification of applicators who apply restricted-use pesticides and general use pesticides.
- B) As shown in Table 1, there are two types of certified applicators: Non-Private Certified Applicators and Private Applicators. These two different types of certified applicators have similar required general knowledge but have very different certification categories.

Table 1. 2023 Types of Licenses and Certificates for Pesticide Applicators

	Authorized Commercial Applicator	Commercial Applicator	Non-Private Certified Applicator	Private Certified Applicator
Definition	Licensed to apply Restricted-Use and General Use Pesticides for hire.	Licensed to apply General Use Pesticides ONLY for hire.	City, County, Federal or other government agency personnel certified to apply both Restricted-Use and General Use Pesticides. All other applicators other than private certified applicators certified to apply Restricted-Use Pesticides.	Applicator who uses or supervises the use of any restricted-use pesticide for purposes of producing any agricultural commodity. See full definition at the bottom of this table.
Previous Designation	Licensed Applicator, Primary Principal, Principal, Agent, Consultant, Demonstration and Research Specialist	No previous designation	Licensed Government Applicator, Non-Primary Principal Commercial	Private
Examples	Pest control business owners and their licensed operators doing custom Restricted-Use and General Use Pesticide applications for hire. Landscapers doing Restricted-Use and General Use Pesticide applications for hire on commercial and residential properties.	Pest control business owners and their licensed operators doing custom General Use Pesticide applications for hire. Landscapers doing General Use Pesticide applications for hire on commercial and residential properties. Exempt from licensure if the landscaper only applies general use pesticides (containing the "caution" signal word) to residential properties without power equipment and does NOT solicit pest control work.	Employees of BLM, USFS, State, County, City or other municipality (including state, county or city owned recreational facilities and golf courses); School district employees; Mosquito, Weed Control and Conservation Districts, Cooperative Weed Management Areas, General Improvement Districts; Landscapers (who do not fall under licensing requirements), hotels, casinos, resorts, private golf clubs, tribes, mine staff	Ranchers, farmers, nurseries, greenhouse growers (including marijuana grow facilities).

Table 1. 2023 Types of Licenses and Certificates for Pesticide Applicators

	Authorized Commercial Applicator	Commercial Applicator	Non-Private Certified Applicator	Private Certified Applicator
Education/Experience	Principal: 2 years of experience or 6 months experience plus 16 college credits in biological sciences. Operator, Agent, Demonstration and Research Specialist: None	Principal: 2 years of experience or 6 months experience plus 16 college credits in biological sciences. Operator, Agent, Demonstration and Research Specialist: None	None	None
Number of Questions on Exams	Primary Principal will be required to take 100 question Law Exam. Primary Principal, Principal, Operator, Consultant, Demonstration and Research Specialist and Agent will be required to take a Core Exam (General test): 50 questions for Primary Principal; 100 questions for Operator, Principal, Consultant, Demonstration and Research Specialist and Agent. Primary Principal, Principal, Operator, Consultant and Demonstration and Research Specialist will be required to take category exams in all categories they wish to perform pest control activities. Category exams: 50 to 100 questions each.	Primary Principal will be required to take 100 question law exam. Primary Principal, Principal, Operator, Consultant, Demonstration and Research Specialist and Agent will be required to take a Core Examination (General test): 50 questions for Primary Principal; 100 questions for Operator, Principal, Consultant, Demonstration and Research Specialist and Agent. Primary Principal, Principal, Operator, Consultant, Demonstration and Research Specialist will be required to take category exams in all categories they wish to perform pest control activities. Category exams: 50 to 100 questions each.	General test: 50 questions, Category tests: 20 to 50 questions each.	General test: 80 questions, Category tests: 50 questions each.

Table 1. 2023 Types of Licenses and Certificates for Pesticide Applicators

	Authorized Commercial Applicator	Commercial Applicator	Non-Private Certified Applicator	Private Certified Applicator
Passing Grade for Exams	70% is passing grade for Law Exam, Core Exam and all Category Exams.	70% is passing grade for Law Exam, Core Exam and all Category Exams.	70% is passing grade for both general and category exams	70% is passing grade for both general and category exams
Exam Fees	\$50 initial exam, \$35 each subsequent exam	\$50 initial exam, \$35 each subsequent exam	\$50 per exam session	\$50 per exam session
Additional Annual Fees	\$250 per Business License, \$50 each Primary Principal, Principal, Operator, Consultant, and Demonstration and Research Specialist. \$50 per agent. \$50 inactive license.	\$250 per Business License, \$50 each Primary Principal, Principal, Operator, Consultant, and Demonstration and Research Specialist. \$50 per agent. \$50 inactive license.	\$25 for lost card replacement	\$25 for lost card replacement
Renewal	Annual (calendar year), by December 31 of each year	Annual (calendar year), by December 31 of each year	Every 4 years	Every 4 years
Retest Period	Principal: 10 days*; Operator, Agent, Consultant, Demonstration and Research Specialist: 7 days* *6 months if caught using an unauthorized testing aid	Principal: 10 days*; Operator, Agent, Consultant, Demonstration and Research Specialist: 7 days* *6 months if caught using an unauthorized testing aid	5 days* *6 months if caught using an unauthorized testing aid	5 days* *6 months if caught using an unauthorized testing aid
Continuing Education Requirements for Renewal	6 total hours each year for Primary Principals, Principals, Operators, Consultants and Demonstration and Research Specialists. At least 1 of the 6 hours must be in Laws and Regulations. Agents have no continuing education requirement; Agents must retest each year.	6 total hours each year for Primary Principals, Principals, Operators, Consultants and Demonstration and Research Specialists. At least 1 of the 6 hours must be in Laws and Regulations. Agents have no continuing education requirement; Agents must retest each year.	12 total hours during the 4-year certification period. At least 2 of the 12 hours must be in Laws and Regulations.	12 total hours during the 4-year certification period. At least 2 of the 12 hours must be in Laws and Regulations.

Table 1. 2023 Types of Licenses and Certificates for Pesticide Applicators

	Authorized Commercial Applicator	Commercial Applicator	Non-Private Certified Applicator	Private Certified Applicator
Report Requirements	A pesticide usage report must be submitted each month for aerial and agricultural licensees for both Restricted-Use and General Use Pesticides. All pest control companies must submit annual pesticide usage report for both Restricted-Use and General Use Pesticides.	A pesticide usage report must be submitted each month for aerial and agricultural licensees for both Restricted-Use and General Use Pesticides. All pest control companies must submit annual pesticide usage report for both Restricted-Use and General Use Pesticides.	None Required	None Required
Records	Keep and maintain records for 2 years of both Restricted-Use (RUP) and General Use (GUP) Pesticide Applications. Wood-destroying Pest Inspection Reports must be kept for 3 years, as per NAC 555.430.2.b	Keep and maintain records for 2 years of both Restricted-Use (RUP) and General Use (GUP) Pesticide Applications. Wood-destroying Pest Inspection Reports must be kept for 3 years, as per NAC 555.430.2.b	Non-Private Certified Applicators must keep records for 2 years for all Restricted-Use Pesticides (RUPs). Non-Private Government Worker Certified Applicators must keep records for 2 years of both Restricted-Use (RUPs) and General Use (GUPs) Pesticides applied on public lands.	Keep records for 2 years for all Restricted-Use Pesticides (RUPs)

Definitions:

Agent: A person licensed to only solicit business on behalf of a pest control company.

Agricultural product: Wheat, cotton, flax, corn, dry beans, oats, barley, rye, tobacco, rice, peanuts, soybeans, sugar beets, sugar cane, tomatoes, grain sorghum, sunflowers, raisins, oranges, sweet corn, dry peas, freezing and canning peas, forage, apples, grapes, potatoes, timber and forests, nursery crops, citrus, and other fruits and vegetables, nuts, tame hay, native grass, hemp, aquacultural species (including, but not limited to, any species of finfish, mollusk, crustacean, or other aquatic invertebrate, amphibian, reptile, or aquatic plant propagated or reared in a controlled or selected environment), or any other agricultural commodity, excluding stored grain, determined by the Board, or any one or more of such commodities, as the context may indicate.

Authorized Commercial Applicator: Licensed to apply Restricted-Use and General Use Pesticides for hire.

Commercial Applicator: Licensed to apply General Use Pesticides ONLY for hire.

Consultant: A person who publicly holds him or herself as being in the business of identifying pests or recommending pesticides for the purpose of detecting, preventing, controlling or exterminating pests.

Demonstration and Research Specialist: An industry representative or other person who publicly holds himself or herself out as being in the business of conducting field research for experimental purposes using pesticides not registered in the State or demonstrations using registered pesticides for the purpose of detecting, preventing, controlling or exterminating pests.

For Hire: Any pesticide application performed for hire, including such activity when performed by a government agency.

GUP: General Use Pesticide

Location Principal: Primary Principal at the business location when the business has more than one location.

Non-Private Certified Applicator: All other certified applicators, other than private certified applicators, certified to apply Restricted-Use Pesticides as part of their job, not for hire.

Operator: A person licensed to apply pesticides without the immediate supervision of a principal.

Primary Principal: The licensee responsible for the daily supervision of the pest control business.

Principal: Owner, officer partner, member or technician of a pest control business who has qualified by examination in one or more categories of pest control.

Private Applicator: A certified applicator who uses or supervises the use of any restricted-use pesticide for purposes of producing any agricultural commodity on property owned or rented by the certified applicator or the certified applicator's employer or on the property of the certified applicator's neighbors if applied without compensation other than trading of personal services between producers of agricultural commodities.

RUP: Restricted-Use Pesticide

NON-PRIVATE CERTIFIED APPLICATORS: Non-Private Applicators are required to take a general exam and at least one category exam. The General Knowledge Exam is information based on the details provided in the first five chapters of this manual. The category(ies) exam(s) are selected based on the sites and situations the certified applicator plans to apply pesticides. The Category Exams are based on material found in the first five chapters of this manual and the corresponding category chapter in this manual. General (Core) knowledge for Non-Private Certified Applicators includes the following: labeling and label comprehension, safety, environmental concerns, pests, pesticides, equipment, application methods, laws and regulations and the responsibilities of supervisors of non-certified applicators.

Competency for Non-Private Certified applicator categories are:

Category A: Agricultural Plant Pest Control: The control of any pests in the production of agricultural commodities, including but not limited to grains, vegetables, small fruits, fruit trees, peanuts, tree nuts, tobacco, cotton, feed and forage crops, including grasslands and non-crop agricultural lands. This category excludes fumigation. Applicators must demonstrate a practical knowledge of crops, grass lands and non-crop agricultural lands and specific pests of those areas on which they may be using pesticides. The importance of such competency is amplified by the extensive areas involved, the quantities of pesticides needed, and the ultimate use of many commodities as food and feed. The required knowledge includes pre-harvest intervals, restricted entry intervals, phytotoxicity, potential for environmental contamination such as soil and water problems, non-target injury and other problems resulting from the use of restricted-use pesticides in agricultural areas. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control and for non-target exposures.

Category B: Agricultural Animal Pest Control: The control of any pest in, on or around agricultural animals, including places on or in which agricultural animals are confined, such as barns and corrals. This category excludes fumigation and predatory animal control. Applicators who apply a pesticide directly to animals must demonstrate practical knowledge of such animals and their associated pests. The required knowledge includes specific pesticide toxicity and residue potential and the hazards associated with such factors as formulation, application techniques, age of animals, stress and extent of treatment.

Category C: Forest Pest Control: The control of any pest in forests, forest nurseries and forest seed-producing areas. This category excludes

The agricultural-plant category is for applicators using pesticides in agricultural cropland. This includes insect, weed and rodent control.

Category A: Agricultural Plant Pest Control, and Category B: Agricultural Animal Pest Control are considered general knowledge for Private Applicators.

The ornamental and turf pest control category is for applicators who apply pesticides in parks, golf courses or other similar settings.

The aquatic pest control category is for applicators using pesticides in and near aquatic sites, such as rivers, creeks, ditches and ponds.

fumigation. Applicators must demonstrate practical knowledge of the type of forests, forest nurseries, and seed production in the State and the pests involved. The required knowledge includes the cyclic occurrence of certain pests and specific population dynamics as a basis for programming pesticide applications, the relevant organisms causing harm and their vulnerability to the pesticides to be applied, how to determine when pesticide use is proper, selection of application method and proper use of application equipment to minimize non-target exposures, and appropriate responses to meteorological factors and adjacent land use. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures.

Category D: Ornamental and Turf Pest Control: The control of any pest in the maintenance and production of ornamental plants and turf. Applicators must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental trees, shrubs, plantings and turf. The required knowledge includes potential of phytotoxicity due to a wide variety of plants to be protected, for drift, for persistence beyond the intended period of pest control, and for non-target exposures. Because of the frequent proximity of human habitation to application activities, applicators in this category must demonstrate practical knowledge of application methods that will minimize or prevent hazards to humans, pets, and other domestic animals.

Category E: Seed Treatment: Treatment of seeds and in seed treatment facilities to control insects, fungi, bacteria and other micro-organisms. This category excludes fumigation pest control. Applicators must demonstrate practical knowledge of types of seeds that require chemical protection against pests and factors such as seed coloration, carriers and surface-active agents that influence pesticide binding and may affect germination. They must demonstrate practical knowledge of hazards associated with handling, sorting, and mixing and misuse of treated seed, such as introduction of treated seed into food and feed channels, as well as proper disposal of unused treated seeds.

Category F: Aquatic Pest Control: The control of any pest in standing or running water, excluding public health pest control and fumigation pest control. Applicators must demonstrate practical knowledge of the characteristics of various aquatic use situations, the potential for adverse effects on non-target effects on non-target plants, fish, birds, beneficial insects, and other organisms which may be present in the immediate aquatic environment and downstream. Applicators must demonstrate practical

knowledge of the principles of limited-area application.

Category G: Right-of-Way Pest Control: The control of pests in the maintenance of rights-of-way, including, but not limited to, public roads, electric power lines, pipelines and railway rights-of-way. This category excludes fumigation. Applicators must demonstrate practical knowledge of the wide variety of environments which rights-of-way may traverse, including waterways. The applicator must demonstrate practical knowledge of pest recognition, techniques to minimize non-target exposure, runoff, drift and excessive foliage destruction. The required knowledge also includes the potential for phytotoxicity due to a wide variety of plants and pests to be controlled and for persistence beyond the intended period of pest control.

Category H: Industrial, Institutional, Structural Pest Control: The control of any pest in, on or around the following: food handling establishments, packing houses, food processing facilities, human dwellings, institutions such as schools, hospitals and prisons, industrial establishments including manufacturing facilities, warehouses, grain elevators, and any other structures and adjacent areas, public or private, for the production of stored or manufactured products. This category excludes fumigation. Applicators must demonstrate a practical knowledge of industrial, institutional and structural pests, including recognizing those pests and signs of their presence, their habitats, their life cycles, biology and behavior as it may be relevant to problem identification and control. Applicators must demonstrate practical knowledge of types of formulations appropriate for control of industrial, institutional and structural pests and methods of applications that avoid contamination of food, minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications.

Category K: Public Health Pest Control: Control of any pest having medical and public health importance by state, federal or other governmental employees. This category excludes fumigation. Applicators must demonstrate practical knowledge of pests that are important vectors of disease, including recognizing the pests and the signs of their presence, their habitats, their life cycles, biology, and behavior as it may be relevant to problem identification and control. The required knowledge also includes how to minimize damage to, and contamination of areas treated, acute and chronic exposures of pesticides to people, and non-target exposures.

Category L2: Non-soil Fumigation Pest Control: The control of any pest by fumigation with poisonous and lethal gases in anything but soil. Applicators must demonstrate practical knowledge of pesticide problems and pest control practices with non-soil fumigant applications pursuant to 40 CFR

The Right-of-Way Pest Control category is for applicators who apply pesticides along roads, railroads or utility rights-of-way.

Industrial, Institutional and Structural Pest Control have now been combined into one category.

Public Health Pest Control now includes Mosquito Pest Control.

Applying fumigants requires certification in a fumigation category.

There are two categories for Fumigation certification: Non-Soil Fumigation and Soil Fumigation.

The M-44 Predatory Pest Control category is available only to employees of the USDA Animal and Plant Health Inspection Service (APHIS) Wildlife Services.

171.103.d.14. These pest control practices include, but are not limited to, labeling and labeling comprehension, safety measures specific to the use of fumigants, non-soil fumigant chemical characteristics, selection of appropriate application methods and timing, pest factors that influence activity, personal protective equipment, fumigant management plans and post application summaries, and posting requirements for fumigant applications.

Category L3: Soil Fumigation: The control of any soil pest, when present in the soil, by using fumigants. Applicators in this category must demonstrate practical knowledge of pest problems and pest control in soil fumigation applications pursuant to 40 CFR 171.103.d.13. These pest control practices include, but are not limited to, labeling and labeling comprehension, safety measures specific to the use of fumigants, soil fumigant chemical characteristics, selection of appropriate application methods and timing, soil and pest factors that influence fumigant activity, personal protective equipment, fumigant management plans and post-application summaries, and buffer zones and posting requirements for soil fumigant applications.

Category N: Predatory Pest Control/M-44: The control of any predator using sodium cyanide in any habitat, including, but not limited to, rangelands, forests, and cropland. An Applicator must demonstrate a practical knowledge of pest problems and pest control practices in sodium cyanide applications pursuant to 40 CFR 171.103.d.11 and 40 CFR 171.103.d.12, respectively. Sodium cyanide predator control applicators must demonstrate practical knowledge of mammalian predator pests, including recognizing those pests and signs of their presence, their habitats, their life cycles, biology, and behavior as it may be relevant to pest identification and control. Applicators must demonstrate comprehension of all laws and regulations applicable to the use of mechanical ejection devices for sodium cyanide, including the restrictions on the use of sodium cyanide products ordered by the EPA Administrator. Applicators must also demonstrate practical knowledge and understanding of all of the specific use restrictions for sodium cyanide devices, including safe handling and proper placement of the capsules and device, proper use of the antidote kit, notification to medical personnel before use of the device, conditions of and restrictions on when and where devices can be used, requirements to consult U.S. Fish and Wildlife Service maps before use to avoid affecting endangered species, maximum density of devices, provisions for supervising and monitoring applicators, required information exchange in locations where more than one agency is authorized to place devices, and specific requirements for recordkeeping, monitoring, field posting, proper storage, and disposal of damaged or used sodium cyanide capsules.

PRIVATE CERTIFIED APPLICATORS: Private Applicators are required to take a general exam and have the **option** of taking two category exams (only if the Private applicator plans to perform soil and/or non-soil fumigation). The General Knowledge Exam is information based on the details provided in the first five General Knowledge chapters of this manual and the information in Category A: Agricultural Plant Pest Control and Category B: Agricultural Animal Pest Control. General (Core) knowledge for Private Certified Applicators includes labeling and label comprehension, safety, environmental concerns, pests, pesticides, equipment, application methods, laws and regulations and the responsibilities of supervisors of non-certified applicators, stewardship, and thorough knowledge of agricultural pest control.

Private Certified Applicators can only certify in two categories: Non-Soil Fumigation and Soil Fumigation. Competency for the two private certified applicator categories are:

Category L2: Non-soil Fumigation Pest Control: The control of any pest by fumigation with poisonous and lethal gases in anything but soil. Applicators must demonstrate practical knowledge of pesticide problems and pest control practices with non-soil fumigant applications pursuant to 40 CFR 171.103.d.14. These pest control practices include, but are not limited to, labeling and labeling comprehension, safety measures specific to the use of fumigants, non-soil fumigant chemical characteristics, selection of appropriate application methods and timing, pest factors that influence activity, personal protective equipment, fumigant management plans and post-application summaries, and posting requirements.

Category L3: Soil Fumigation: The control of any soil pest, when present in the soil, by the use of fumigants. Applicators in this category must demonstrate practical knowledge of pest problems and pest control in soil fumigation applications pursuant to 40 CFR 171.103.d.13. These pest control practices include, but are not limited to, labeling and labeling comprehension, safety measures specific to the use of fumigants, soil fumigant chemical characteristics, selection of appropriate application methods and timing, soil and pest factors that influence fumigant activity, personal protective equipment, fumigant management plans and post application summaries, and buffer zones and posting requirements.

Private Certified Applicators must study Category A: Agricultural Plant Pest Control and Category B: Agricultural Animal Pest Control as part of their General Knowledge Exam.

Applying fumigants requires certification in a fumigation category.

Revisions to the EPA Certification of Pesticide Applicators (40 CFR 171) have changed the requirements for persons under the direct supervision of a licensed or certified applicator.

Please read this section very carefully if you supervise non-certified applicators as the requirements have significantly changed

As the supervising certified applicator, YOU must be licensed to perform the type of application being performed

VI. Nevada Administrative Code (NAC) Chapter 586: Requirements for the direct supervision of noncertified applicators by certified applicators

Restricted Use Pesticides may only be applied by an authorized commercial licensed applicator, a non-private certified applicator or a private applicator with the appropriate license or certification to use the restricted use pesticide OR a person under the **direct supervision** of an authorized commercial licensed applicator, a non-private certified applicator or a private applicator with the appropriate license or certification to use the restricted use pesticide. Revisions to the EPA Certification of Pesticide Applicators (40 CFR 171) have changed the requirements for persons under the direct supervision of a licensed or certified applicator. The following information is an excerpt from the 2021 Meeting Competency Standards for Certified Pesticide Applicators publication by the Pesticide Educational Resources Collaborative (PERC). The entire document can be found at https://pesticideresources.org/ct/PERC_Updated_Competency_Guide_2021.pdf

As the supervising certified applicator, you must:

- Be licensed to perform the type of application being performed, including any required categories or endorsements. For example, if you are supervising the use of a restricted-use product to control a pest on turf, you must be certified in 'ornamental and turf' pest control or a similar certification category.
- Be physically present at the site where the restricted use pesticide is applied when required by product labeling.
- Ensure that the non-certified applicator is at least 18 years old. A non-certified applicator can be 16 years old if they are applying restricted use pesticides under the direct supervision of a PRIVATE certified applicator who is an immediate family member and if the restricted use pesticides they are applying are NOT a fumigant or applied aurally.
- Ensure that the non-certified applicator has clean Personal Protective Equipment (PPE) as specified on the label and it is in proper operating condition.
- Ensure that the non-certified applicator uses required PPE properly for its intended purpose.
- Ensure that the non-certified applicator has access to the product's labeling at all times during the application.
- Ensure that all equipment is in proper working condition prior to each day of use. Ensure that the equipment can be used without risk of

reasonably foreseeable harm to either the non-certified applicator, other people, or the environment.

- Ensure that immediate communication is possible between the supervising certified applicator and the non-certified applicator(s). Properly charged cell phones could meet this criterion if signal strength is sufficient and phones are continuously available.
- Ensure that the non-certified applicator has been instructed in the last 12 months of the safe and proper use of any equipment needed for the application. Training on application equipment must take place before the noncertified applicator makes any application of a restricted-use pesticide.
- Ensure that the non-certified applicator received sufficient pesticide safety training, as described in the following section.

Pesticide safety training for non-certified applicators under your supervision

The non-certified applicator must have pesticide safety training at least every 12 months. Alternatively, they may also be a certified applicator who a) isn't certified to perform that particular application or b) isn't certified within the jurisdiction where the application will take place.

The pesticide safety training requirement is met by either:

- taking a non-certified applicator training course such as Pesticide Safety Training for Noncertified Applicators Using Restricted Use Pesticides at Nonagricultural Sites, which is available online at <http://pesticideresources.org/ct/rup.html>
- taking an agricultural handler training course [as specified by 40 CFR 170.501], such as those listed here: <http://pesticideresources.org/wps/ify/toh/index.html>, or
- taking another course approved by a certifying authority [40 CFR 171.201(c)(1)].

The trainer must be qualified and the content must be complete according to the federal regulations. Training can be conducted by someone who is currently certified as an applicator of restricted-use pesticides. It can also be done by someone who is a trainer of certified applicators or pesticide handlers. The trainer may also have completed an EPA-approved train-the-trainer course in pesticide safety for trainers of handlers. Additionally, a certifying authority such as a state, tribe, or territory, may designate a person as a qualified trainer.

The Certified Applicator must ensure that the non-certified applicator has been instructed in the last 12 months of the safe and proper use of any equipment needed for the application.

Training on application equipment must take place before the noncertified applicator makes any application of a restricted-use pesticide.

The non-certified applicator must have pesticide safety training at least every 12 months.

The information required by law for non-certified applicator training is extensive.

The requirements for education of non-certified applicators are very similar to the educational requirements for certified applicators. Certification of all pesticide applicators may be warranted.

The information that must be included in the training is specified by law and must include all of the information the non-certified applicator will need to keep themselves, anyone else, and the environment from harm.

The non-certified applicator training materials must include, at a minimum, the following: (40 CFR 171.201d(3))

- i. Potential hazards from toxicity and exposure that pesticides present to non-certified applicators and their families, including acute and chronic effects, delayed effects, and sensitization.
- ii. Routes through which pesticides can enter the body.
- iii. Signs and symptoms of common types of pesticide poisoning.
- iv. Emergency first aid for pesticide injuries or poisonings.
- v. Routine and emergency decontamination procedures, including emergency eye flushing techniques. Non-certified applicators must be instructed that if pesticides are spilled or sprayed on the body, to immediately wash or to rinse off in the nearest clean water. Non-certified applicators must also be instructed to wash or shower with soap and water, shampoo hair, and change into clean clothes as soon as possible.
- vi. How and when to obtain emergency medical care.
- vii. After working with pesticides, wash hands before eating, drinking, using chewing gum or tobacco, or using the toilet.
- viii. Wash or shower with soap and water, shampoo hair and change into clean clothes as soon as possible after working with pesticides.
- ix. Potential hazards from pesticide residues on clothing.
- x. Wash work clothes before wearing them again and wash them separately from other clothes.
- xi. Do not take pesticides or pesticide containers used at work to your home.
- xii. Potential hazards to children and pregnant individuals from pesticide exposure.
- xiii. After working with pesticides, remove work boots or shoes before entering your home, and remove work clothes and wash or shower before physical contact with children or family members.
- xiv. How to report suspected pesticide use violations to the appropriate State or Tribal agency responsible for pesticide enforcement.
- xv. Format and meaning of information contained on pesticide labels and in labeling applicable to the safe use of the pesticide, including the location and meaning of the restricted use product statement, how to identify when the labeling requires the certified applicator to be physically present during the use of the pesticide, and information on personal protective equipment.

- xvi. Need for, and appropriate use and removal of, personal protective equipment.
- xvii. How to recognize, prevent, and provide first aid treatment for heat-related illness.
- xviii. Safety requirements for handling, transporting, storing, and disposing of pesticides, including general procedures for spill cleanup.
- xix. Environmental concerns such as drift, runoff, and wildlife hazards.
- xx. Restricted use pesticides may be used only by a certified applicator or by a non-certified applicator working under the direct supervision of a certified applicator.
- xxi. The certified applicator's responsibility to provide to each non-certified applicator instructions specific to the site and pesticide used. These instructions must include labeling directions, precautions, and requirements applicable to the specific use and site, and how the characteristics of the use site (e.g., surface and groundwater, endangered species, local population, and risks) and the conditions of application (e.g., equipment, method of application, formulation, and risks) might increase or decrease the risk of adverse effects. The certified applicator must provide these instructions in a manner the non-certified applicator can understand.
- xxii. The certified applicator's responsibility to ensure that each non-certified applicator has access to the applicable product labeling at all times during its use.
- xxiii. The certified applicator's responsibility to ensure that where the labeling of a pesticide product requires that personal protective equipment be worn for mixing, loading, application, or any other use activities, each non-certified applicator has clean, labeling-required personal protective equipment in proper operating condition and that the personal protective equipment is worn and used correctly for its intended purpose.
- xxiv. The certified applicator's responsibility to ensure that before each day of use equipment used for mixing, loading, transferring, or applying pesticides is in proper operating condition as intended by the manufacturer, and can be used without risk of reasonably foreseeable adverse effects to the non-certified applicator, other persons, or the environment. The certified applicator's responsibility to ensure that a means to immediately communicate with the certified applicator is available to each non-certified applicator using restricted use pesticides under his or her direct supervision.

You are also responsible for providing use-specific instructions to the non-certified applicator for the restricted-use pesticide, and explaining any federal, state, or tribal regulations relevant for the application.

If you are supervising a noncertified applicator using a restricted-use pesticide, you are required to keep records of safety training for the non-certified applicator.

NEVADA LAW MUST BE AS RESTRICTIVE OR MORE SO THAN THE FEDERAL LAW.

In addition to the training concepts above, you are also responsible for providing **use-specific instructions** to the non-certified applicator for the restricted-use pesticide, and explaining any federal, state, or tribal regulations relevant for the application. For example, provide precautions and requirements applicable to the specific use and site, the conditions of the application, and actions that could increase or decrease the risk of adverse effects.

Recordkeeping

In addition to the other requirements listed above, you will need to ensure that all required records are kept if you are supervising a noncertified applicator using a restricted-use pesticide. This includes detailed documentation of the safety training provided to the noncertified applicator. It is your responsibility to create or verify the existence of the training record before allowing the noncertified applicator to use a restricted-use pesticide under your supervision.

Training records must include: (40 CFR 171.103(e)(1)(i))

- The noncertified applicator’s printed name and signature
- The date the training requirement was completed
- The name of the trainer
- The title or description of the training provided

If you used a piece of training material for agricultural handlers under the Worker Protection Standard (WPS), the record must contain all of the information required under that rule, including the trainer’s qualification to train, and the EPA approval number for the training material(s).

If you used another piece of training material approved by a local authority, the record must be complete according to the authority’s published rules. If the noncertified applicator is certified in another category/type of pesticide application, annual training is not required. However, the supervising certified applicator must keep a record including the noncertified applicator’s name, certification number, expiration date, and the name of the certifying authority that issued the certification.

The requirements for education of non-certified applicators are very similar to the educational requirements for certified applicators. Certification of all pesticide applicators may be warranted.

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