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**Chapter I —Environmental Protection Agency**  
**Subchapter E —Pesticide Programs**

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**PART 171—CERTIFICATION OF PESTICIDE APPLICATORS**

**Authority:** 7 U.S.C. 136-136y.

**Source:** 39 FR 36449, Oct. 9, 1974, unless otherwise noted.

**Subpart A—General Provisions**

**§ 171.1 Scope.**

- (a) This part establishes Federal standards for the certification and recertification of applicators of restricted use pesticides, and requirements for pesticide applicator certification plans administered by State, Tribal, and Federal agencies. The standards address the requirements for certification and recertification of

applicators using restricted use pesticides, requirements for certified applicators supervising the use of restricted use pesticides by noncertified applicators, and requirements for noncertified persons using restricted use pesticides under the direct supervision of a certified applicator.

- (b) A person is a certified applicator for purposes of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. 136 *et seq.*, only if the person holds a certification issued pursuant to a plan approved in accordance with this part and currently valid in the pertinent jurisdiction. As provided in FIFRA section 12(a)(2)(F), it is unlawful for any person to make available for use or to use any pesticide classified for restricted use other than in accordance with the requirements of this part.

[82 FR 1028, Jan. 4, 2017]

### § 171.3 Definitions.

Terms used in this part have the same meanings they have in FIFRA and 40 CFR part 152. In addition, the following terms have the meaning specified in this section when used in this part:

**Agricultural commodity** means any plant, fungus, or algae, or part thereof, or any animal or animal product, produced by a person (including, but not limited to, farmers, ranchers, vineyardists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by man or animals.

**Agency** means the U.S. Environmental Protection Agency (EPA), unless otherwise specified.

**Application** and **applying** means the dispersal of a pesticide on, in, at, or directed toward a target site.

**Applicator** means any individual using a restricted use pesticide. An applicator may be certified as a commercial or private applicator as defined in FIFRA or may be a noncertified applicator as defined in this part.

**Calibration** means measurement of dispersal or output of application equipment and adjustment of such equipment to establish a specific rate of dispersal and, if applicable, droplet or particle size of a pesticide, and/or equalized dispersal pattern.

**Certification** means a certifying authority's issuance, pursuant to this part, of authorization to a person to use or supervise the use of restricted use pesticides.

**Certifying authority** means the Agency, or a State, Tribal, or Federal agency that issues restricted use pesticide applicator certifications pursuant to a certification plan approved by the Agency under this part.

**Compatibility** means the extent to which a pesticide can be combined with other chemicals without causing undesirable results.

**Competency** means having the practical knowledge, skills, experience, and judgment necessary to perform functions associated with restricted use pesticide application without causing unreasonable adverse effects, where the nature and degree of competency required relate directly to the nature of the activity and the degree of independent responsibility.

**Dealership** means any establishment owned or operated by a restricted use pesticide retail dealer where restricted use pesticides are distributed or sold.

**Fumigant** means a restricted use pesticide that bears labeling designating it as a fumigant.

**Fumigation** means the use of a fumigant.

**Immediate family** means familial relationships limited to the spouse, parents, stepparents, foster parents, father-in-law, mother-in-law, children, stepchildren, foster children, sons-in-law, daughters-in-law, grandparents, grandchildren, brothers, sisters, brothers-in-law, sisters-in-law, aunts, uncles, nieces, nephews, and first cousins. “First cousin” means the child of a parent’s sibling, *i.e.*, the child of an aunt or uncle.

**Indian country** means:

- (1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation.
- (2) All dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State.
- (3) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

**Indian Tribe or Tribe** means any Indian or Alaska Native Tribe, band, nation, pueblo, village, or community included in the list of Tribes published by the Secretary of the Interior pursuant to the Federally Recognized Indian Tribe List Act.

**Mishap** means an event that adversely affects man or the environment and that is related to the use or presence of a pesticide, whether the event was unexpected or intentional.

**Nontarget organism** means any plant, animal or other organism other than the target pests that a pesticide is intended to affect.

**Noncertified applicator** means any person who is not certified in accordance with this part to use or supervise the use of restricted use pesticides in the category appropriate to the type of application being conducted in the pertinent jurisdiction, but who is using restricted use pesticides under the direct supervision of a person certified as a commercial or private applicator in accordance with this part.

**Ornamental** means trees, shrubs, flowers, and other plantings intended primarily for aesthetic purposes in and around habitations, buildings and surrounding grounds, including residences, parks, streets, and commercial, industrial, and institutional buildings.

**Personal protective equipment** means devices and apparel that are worn to protect the body from contact with pesticides or pesticide residues, including, but not limited to, coveralls, chemical-resistant suits, chemical-resistant gloves, chemical-resistant footwear, respirators, chemical-resistant aprons, chemical-resistant headgear, and protective eyewear.

**Practical knowledge** means the possession of pertinent facts and comprehension sufficient to properly perform functions associated with use of restricted use pesticides, including properly responding to reasonably foreseeable problems and situations.

**Principal place of business** means the principal location, either residence or office, where a person conducts a business that involves the use of restricted use pesticides. A person who applies restricted use pesticides in more than one State or area of Indian country may designate a location within a State or area of Indian country as its principal place of business for that State or area of Indian country.

**Regulated pest** means a particular species of pest specifically subject to Tribal, State or Federal regulatory restrictions, regulations, or control procedures intended to protect the hosts, man and/or the environment.

**Restricted use pesticide** means a pesticide that is classified for restricted use under the provisions of section 3(d) of FIFRA and 40 CFR part 152, subpart I.

**Restricted use pesticide retail dealer** means any person who distributes or sells restricted use pesticides to any person, excluding transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail sellers, acting only in those capacities.

**Toxicity** means the property of a pesticide that refers to the degree to which the pesticide, and its degradates and metabolites, are able to cause an adverse physiological effect on an organism.

**Use, as in "to use a pesticide"** means any of the following:

- (1) Pre-application activities involving mixing and loading the pesticide.
- (2) Applying the pesticide, including, but not limited to, supervising the use of a pesticide by a noncertified applicator.
- (3) Other pesticide-related activities, including, but not limited to, transporting or storing pesticide containers that have been opened, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other pesticide-containing materials.

**Use-specific instructions** means the information and requirements specific to a particular pesticide product or work site that an applicator needs in order to use the pesticide in accordance with applicable requirements and without causing unreasonable adverse effects.

[82 FR 1028, Jan. 4, 2017]

## § 171.5 Effective date.

- (a) This part is effective March 6, 2017. Certification plans approved by EPA before the effective date remain approved except as provided in §§ 171.5(b)-(d) and 171.309.
- (b) **Status of certification plans approved before effective date.** A certification plan approved by EPA before March 6, 2017 remains approved until March 4, 2020, except as provided in paragraph (c) of this section and § 171.309.
- (c) **Extension of an existing plan during EPA review of proposed revisions.** If by March 4, 2020, a certifying authority has submitted to EPA a proposed modification of its certification plan pursuant to subpart D of this part, its certification plan approved by EPA before March 6, 2017 will remain in effect until EPA has approved or rejected the modified plan pursuant to § 171.309(a)(4) or November 4, 2023, whichever is earlier, except as provided in paragraph (d) of this section and § 171.309(b).
- (d) **Extension of an existing plan after EPA has approved a revised plan.** Where EPA has approved a certifying authority's modified certification plan pursuant to § 171.309(a)(4), the certification plan approved by EPA before March 6, 2017 shall remain in effect as specified in EPA's approval of the modified certification plan.
- (e) States, Tribes, or Federal agencies that do not have an EPA-approved certification plan in effect may submit to EPA for review and approval a certification plan that meets or exceeds all of the applicable requirements of this part any time.

[82 FR 1029, Jan. 4, 2017, as amended at 86 FR 71838, Dec. 20, 2021; 87 FR 50965, Aug. 19, 2022]

## Subpart B—Certification Requirements for Applicators of Restricted Use Pesticides

**Source:** 82 FR 1029, Jan. 4, 2017, unless otherwise noted.

### § 171.101 Commercial applicator certification categories.

*Certification categories.* Categories of commercial applicators using or supervising the use of restricted use pesticides are identified below.

(a) ***Agricultural pest control*** —

(1) ***Crop pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides in production of agricultural commodities, including but not limited to grains, vegetables, small fruits, tree fruits, peanuts, tree nuts, tobacco, cotton, feed and forage crops including grasslands, and non-crop agricultural lands.

(2) ***Livestock pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides on animals or to places on or in which animals are confined. Certification in this category alone is not sufficient to authorize the purchase, use, or supervision of use of products for predator control listed in paragraphs (k) and (l) of this section.

(b) ***Forest pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides in forests, forest nurseries and forest seed production.

(c) ***Ornamental and turf pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides to control pests in the maintenance and production of ornamental plants and turf.

(d) ***Seed treatment.*** This category applies to commercial applicators using or supervising the use of restricted use pesticides on seeds in seed treatment facilities.

(e) ***Aquatic pest control.*** This category applies to commercial applicators who use or supervise the use of any restricted use pesticide purposefully applied to standing or running water, excluding applicators engaged in public health related activities included in as specified in paragraph (h) of this section.

(f) ***Right-of-way pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides in the maintenance of roadsides, powerlines, pipelines, and railway rights-of-way, and similar areas.

(g) ***Industrial, institutional, and structural pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides in, on, or around the following: Food handling establishments, packing houses, and food-processing facilities; human dwellings; institutions, such as schools, hospitals and prisons; and industrial establishments, including manufacturing facilities, warehouses, grain elevators, and any other structures and adjacent areas, public or private, for the protection of stored, processed, or manufactured products.

(h) ***Public health pest control.*** This category applies to State, Tribal, Federal or other governmental employees and contractors who use or supervise the use of restricted use pesticides in government-sponsored public health programs for the management and control of pests having medical and public health importance.

- (i) **Regulatory pest control.** This category applies to State, Tribal, Federal, or other local governmental employees and contractors who use or supervise the use of restricted use pesticides in government-sponsored programs for the control of regulated pests. Certification in this category does not authorize the purchase, use, or supervision of use of products for predator control listed in paragraphs (k) and (l) of this section.
- (j) **Demonstration and research.** This category applies to individuals who demonstrate to the public the proper use and techniques of application of restricted use pesticides or supervise such demonstration and to persons conducting field research with restricted use pesticides, and in doing so, use or supervise the use of restricted use pesticides. This includes such individuals as extension specialists and county agents, commercial representatives demonstrating restricted use pesticide products, individuals demonstrating application or pest control methods used in public or private programs, and State, Federal, commercial, and other persons conducting field research on or involving restricted use pesticides.
- (k) **Sodium cyanide predator control.** This pest control category applies to commercial applicators who use or supervise the use of sodium cyanide in a mechanical ejection device to control regulated predators.
- (l) **Sodium fluoroacetate predator control.** This pest control category applies to commercial applicators who use or supervise the use of sodium fluoroacetate in a protective collar to control regulated predators.
- (m) **Soil fumigation.** This category applies to commercial applicators who use or supervise the use of a restricted use pesticide to fumigate soil.
- (n) **Non-soil fumigation.** This category applies to commercial applicators who use or supervise the use of a restricted use pesticide to fumigate anything other than soil.
- (o) **Aerial pest control.** This category applies to commercial applicators who use or supervise the use of restricted use pesticides applied by fixed or rotary wing aircraft.

### § 171.103 Standards for certification of commercial applicators.

- (a) **Determination of competency.** To be determined to have the necessary competency in the use and handling of restricted use pesticides by a State, Tribe, or Federal agency, a commercial applicator must receive a passing score on a written examination that meets the standards specified in paragraph (a)(2) of this section and any related performance testing that is required by the State, Tribe, or Federal agency. Examinations and any alternate methods employed by the certifying authority to determine applicator competency must include the core standards applicable to all categories (paragraph (c) of this section) and the standards applicable to each category in which an applicator seeks certification (paragraph (d) of this section). Certification processes must meet all of the following criteria:
  - (1) **Commercial applicator minimum age.** A commercial applicator must be at least 18 years old.
  - (2) **Examination standards.** The certifying authority must ensure that examinations conform to all of the following standards:
    - (i) The examination must be presented and answered in writing.
    - (ii) The examination must be proctored by an individual designated by the certifying authority and who is not seeking certification at any examination session that he or she is proctoring.

- (iii) Each person seeking certification must present at the time of examination valid, government-issued photo identification or other form of similarly reliable identification authorized by the certifying authority as proof of identity and age to be eligible for certification.
- (iv) Candidates must be monitored throughout the examination period.
- (v) Candidates must be instructed in examination procedures before beginning the examination.
- (vi) Examinations must be kept secure before, during, and after the examination period so that only the candidates have access to the examination, and candidates have access only in the presence of the proctor.
- (vii) Candidates must not have verbal or non-verbal communication with anyone other than the proctor during the examination period.
- (viii) No portion of the examination or any associated reference materials described in paragraph (a)(2)(ix) of this section may be copied or retained by any person other than a person authorized by the certifying authority to copy or retain the examination or any associated reference materials described in paragraph (a)(2)(ix) of this section.
- (ix) The only reference materials used during the examination are those that are approved by the certifying authority and provided and collected by the proctor.
- (x) Reference materials provided to examinees are reviewed after the examination is complete to ensure that no portion of the reference material has been removed, altered, or destroyed.
- (xi) The proctor reports to the certifying authority any examination administration inconsistencies or irregularities, including but not limited to cheating, use of unauthorized materials, and attempts to copy or retain the examination.
- (xii) The examination must be conducted in accordance with any other requirements of the certifying authority related to examination administration.
- (xiii) The certifying authority must notify each candidate of the results of his or her examination.

(b) **Additional methods of determining competency.** In addition to written examination requirements for determining competency, a certifying authority may employ additional methods for determining applicator competency, such as performance testing. Any such additional methods must be specified in the certifying authority's Agency-approved certification plan and must comply with the applicable standards in paragraph (a) of this section.

(c) **Core standards for all categories of certified commercial applicators.** Persons seeking certification as commercial applicators must demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticides by passing a written examination. Written examinations for all commercial applicators must address all of the following areas of competency:

- (1) **Label and labeling comprehension.** Familiarity with pesticide labels and labeling and their functions, including all of the following:
  - (i) The general format and terminology of pesticide labels and labeling.
  - (ii) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.

- (iii) Understanding that it is a violation of Federal law to use any registered pesticide in a manner inconsistent with its labeling.
  - (iv) Understanding labeling requirements that a certified applicator must be physically present at the site of the application.
  - (v) Understanding labeling requirements for supervising noncertified applicators working under the direct supervision of a certified applicator.
  - (vi) Understanding that applicators must comply with all use restrictions and directions for use contained in pesticide labels and labeling, including being certified in the certification category appropriate to the type and site of the application.
  - (vii) Understanding the meaning of product classification as either general or restricted use and that a product may be unclassified.
  - (viii) Understanding and complying with product-specific notification requirements.
  - (ix) Recognizing and understanding the difference between mandatory and advisory labeling language.
- (2) **Safety.** Measures to avoid or minimize adverse health effects, including all of the following:
- (i) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of pesticides.
  - (ii) Understanding that a pesticide's risk is a function of exposure and the pesticide's toxicity.
  - (iii) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.
  - (iv) Common types and causes of pesticide mishaps.
  - (v) Precautions to prevent injury to applicators and other individuals in or near treated areas.
  - (vi) Need for, and proper use of, protective clothing and personal protective equipment.
  - (vii) Symptoms of pesticide poisoning.
  - (viii) First aid and other procedures to be followed in case of a pesticide mishap.
  - (ix) Proper identification, storage, transport, handling, mixing procedures, and disposal methods for pesticides and used pesticide containers, including precautions to be taken to prevent children from having access to pesticides and pesticide containers.
- (3) **Environment.** The potential environmental consequences of the use and misuse of pesticides, including the influence of all of the following:
- (i) Weather and other indoor and outdoor climatic conditions.
  - (ii) Types of terrain, soil, or other substrate.
  - (iii) Presence of fish, wildlife, and other non-target organisms.
  - (iv) Drainage patterns.
- (4) **Pests.** The proper identification and effective control of pests, including all of the following:
- (i) The importance of correctly identifying target pests and selecting the proper pesticide product(s) for effective pest control.



- (ii) Verifying that the labeling does not prohibit the use of the product to control the target pest(s).
- (5) **Pesticides.** Characteristics of pesticides, including all of the following:
- (i) Types of pesticides.
  - (ii) Types of formulations.
  - (iii) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations.
  - (iv) Hazards and residues associated with use.
  - (v) Factors that influence effectiveness or lead to problems such as pesticide resistance.
  - (vi) Dilution procedures.
- (6) **Equipment.** Application equipment, including all of the following:
- (i) Types of equipment and advantages and limitations of each type.
  - (ii) Use, maintenance, and calibration procedures.
- (7) **Application methods.** Selecting appropriate application methods, including all of the following:
- (i) Methods used to apply various forms and formulations of pesticides.
  - (ii) Knowledge of which application method to use in a given situation and that use of a fumigant, aerial application, sodium cyanide, or sodium fluoroacetate requires additional certification.
  - (iii) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
  - (iv) Prevention of drift and pesticide loss into the environment.
- (8) **Laws and regulations.** Knowledge of all applicable State, Tribal, and Federal laws and regulations.
- (9) **Responsibilities of supervisors of noncertified applicators.** Knowledge of the responsibilities of certified applicators supervising noncertified applicators, including all of the following:
- (i) Understanding and complying with requirements in § 171.201 of this part for certified commercial applicators who supervise noncertified applicators using restricted use pesticides.
  - (ii) The recordkeeping requirements of pesticide safety training for noncertified applicators who use restricted use pesticides under the direct supervision of a certified applicator.
  - (iii) Providing use-specific instructions to noncertified applicators using restricted use pesticides under the direct supervision of a certified applicator.
  - (iv) Explaining pertinent State, Tribal, and Federal laws and regulations to noncertified applicators who use restricted use pesticides under the direct supervision of a certified applicator.
- (10) **Professionalism.** Understanding the importance of all of the following:
- (i) Maintaining chemical security for restricted use pesticides.
  - (ii) How to communicate information about pesticide exposures and risks with customers and the public.
  - (iii) Appropriate product stewardship for certified applicators.

(d) ***Specific standards of competency for each category of commercial applicators.*** In addition to satisfying the requirements of paragraph (c) of this section, to be certified as commercial applicators, persons must demonstrate through written examinations practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticides for each category for which they intend to apply restricted use pesticides, except as provided at §§ 171.303(a)(4) and 171.305(a)(5). The minimum competency standards for each category are listed in paragraphs (d)(1) through (15) of this section. Examinations for each category of certification listed in § 171.101 must be based on the standards of competency specified in paragraphs (d)(1) through (15) of this section and examples of problems and situations appropriate to the particular category in which the applicator is seeking certification.

(1) ***Agricultural pest control.***

(i) ***Crop pest control.*** Applicators must demonstrate practical knowledge of crops, grasslands, and non-crop agricultural lands and the specific pests of those areas on which they may be using restricted use 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.

(ii) ***Livestock pest control.*** Applicators 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.

(2) ***Forest pest control.*** Applicators must demonstrate practical knowledge of types of forests, forest nurseries, and seed production within the jurisdiction of the certifying authority 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.

(3) ***Ornamental and turf pest control.*** Applicators must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental plants and turf. The required knowledge 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. Because of the frequent proximity of human habitations 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.

- (4) **Seed treatment.** Applicators must demonstrate practical knowledge including recognizing types of seeds to be treated, the effects of carriers and surface active agents on pesticide binding and germination, the hazards associated with handling, sorting and mixing, and misuse of treated seed, the importance of proper application techniques to avoid harm to non-target organisms, and the proper disposal of unused treated seeds.
- (5) **Aquatic pest control.** Applicators must demonstrate practical knowledge of the characteristics of various aquatic use situations, the potential for adverse effects on non-target plants, fish, birds, beneficial insects and other organisms in the immediate aquatic environment and downstream, and the principles of limited area application.
- (6) **Right-of-way pest control.** Applicators must demonstrate practical knowledge of the types of environments (terrestrial and aquatic) traversed by rights-of-way, recognition of target pests, and 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.
- (7) **Industrial, institutional, and structural pest control.** 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 application that avoid contamination of food, minimize damage to and contamination of areas treated, minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications.
- (8) **Public health pest control.** Applicators must demonstrate practical knowledge of pests that are important vectors of disease, including recognizing the pests and 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 exposure of people and pets, and non-target exposures.
- (9) **Regulatory pest control.** Applicators must demonstrate practical knowledge of regulated pests, applicable laws relating to quarantine and other regulation of regulated pests, and the potential impact on the environment of restricted use pesticides used in suppression and eradication programs. They must demonstrate knowledge of factors influencing introduction, spread, and population dynamics of regulated pests.
- (10) **Demonstration and research.** Applicators must demonstrate practical knowledge of the potential problems, pests, and population levels reasonably expected to occur in a demonstration situation and the effects of restricted use pesticides on target and non-target organisms. In addition, they must demonstrate competency in each pest control category applicable to their demonstrations.
- (11) **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.

- (12) ***Sodium fluoroacetate 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 sodium fluoroacetate products, including the restrictions on the use of sodium fluoroacetate products ordered by the EPA Administrator. Applicators must also demonstrate practical knowledge and understanding of the specific use restrictions for sodium fluoroacetate in the livestock protection collar, including where and when sodium fluoroacetate products can be used, safe handling and placement of collars, and practical treatment of sodium fluoroacetate poisoning in humans and domestic animals. Applicators must also demonstrate practical knowledge and understanding of specific requirements for field posting, monitoring, recordkeeping, proper storage of collars, disposal of punctured or leaking collars, disposal of contaminated animal remains, vegetation, soil, and clothing, and reporting of suspected and actual poisoning, mishap, or injury to threatened or endangered species, humans, domestic animals, or non-target wild animals.
- (13) ***Soil fumigation.*** Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigation applications, including all the following:
  - (i) ***Label and labeling comprehension.*** Familiarity with the pesticide labels and labeling for products used to perform soil fumigation, including all of the following:
    - (A) Labeling requirements specific to soil fumigants.
    - (B) Requirements for certified applicators of fumigants, fumigant handlers and permitted fumigant handler activities, and the safety information that certified applicators must provide to noncertified applicators using fumigants under their direct supervision.
    - (C) Entry-restricted periods for tarped and untarped field application scenarios.
    - (D) Recordkeeping requirements.
    - (E) Labeling provisions unique to fumigant products containing certain active ingredients.
  - (ii) ***Safety.*** Measures to minimize adverse health effects, including all of the following:
    - (A) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, field workers, and bystanders can become exposed to fumigants.
    - (B) Common problems and mistakes that can result in direct exposure to fumigants.
    - (C) Signs and symptoms of human exposure to fumigants.
    - (D) Air concentrations of a fumigant that require that applicators wear respirators or exit the work area entirely.
    - (E) Steps to take if a fumigant applicator experiences sensory irritation.

- (F) Understanding air monitoring, when it is required, and where and when to take samples.
  - (G) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
  - (H) First aid measures to take in the event of exposure to a soil fumigant.
  - (I) Labeling requirements for transportation, storage, spill clean up, and emergency response for soil fumigants, including safe disposal of containers and contaminated soil, and management of empty containers.
- (iii) **Soil fumigant chemical characteristics.** Characteristics of soil fumigants, including all of the following:
- (A) Chemical characteristics of soil fumigants.
  - (B) Specific human exposure concerns for soil fumigants.
  - (C) How soil fumigants change from a liquid or solid to a gas.
  - (D) How soil fumigants disperse in the application zone.
  - (E) Compatibility concerns for tanks, hoses, tubing, and other equipment.
- (iv) **Application.** Selecting appropriate application methods and timing, including all of the following:
- (A) Application methods, including but not limited to water-run and non-water-run applications, and equipment commonly used for each soil fumigant.
  - (B) Site characteristics that influence fumigant exposure.
  - (C) Understanding temperature inversions and their impact on soil fumigant application.
  - (D) Weather conditions that could impact timing of soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications during specific weather conditions.
  - (E) Conducting pre-application inspection of application equipment.
  - (F) Understanding the purpose and methods of soil sealing, including the factors that determine which soil sealing method to use.
  - (G) Understanding the use of tarps, including the range of tarps available, how to seal tarps, and labeling requirements for tarp removal, perforation, and repair.
  - (H) Calculating the amount of product required for a specific treatment area.
  - (I) Understanding the basic techniques for calibrating soil fumigant application equipment.
- (v) **Soil and pest factors.** Soil and pest factors that influence fumigant activity, including all of the following:
- (A) Influence of soil factors on fumigant volatility and movement within the soil profile.
  - (B) Factors that influence gaseous movement through the soil profile and into the air.
  - (C) Soil characteristics, including how soil characteristics affect the success of a soil fumigant application, assessing soil moisture, and correcting for soil characteristics that could hinder a successful soil fumigant application.

- (D) Identifying pests causing the damage and verifying they can be controlled with soil fumigation.
- (E) Understanding the relationship between pest density and application rate.
- (F) The importance of proper application depth and timing.
- (vi) **Personal protective equipment.** Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:
  - (A) Following labeling directions for required personal protective equipment.
  - (B) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
  - (C) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
  - (D) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.
- (vii) **Fumigant management plans and post-application summaries.** Information about fumigant management plans, including all of the following:
  - (A) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.
  - (B) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
  - (C) The person responsible for verifying that a fumigant management plan is accurate.
  - (D) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.
- (viii) **Buffer zones and posting requirements.** Understanding buffer zones and posting requirements, including all of the following:
  - (A) Buffer zones and the buffer zone period.
  - (B) Identifying who is allowed in a buffer zone during the buffer zone period and who is prohibited from being in a buffer zone during the buffer zone period.
  - (C) Using the buffer zone table from the labeling to determine the size of the buffer zone.
  - (D) Factors that determine the buffer zone credits for application scenarios and calculating buffer zones using credits.
  - (E) Distinguishing buffer zone posting and treated area posting, including the pre-application and post-application posting timeframes for each.
  - (F) Proper choice and placement of warning signs.
- (14) **Non-soil fumigation.** Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications of restricted use pesticides to sites other than soil, including all the following:

- (i) **Label & labeling comprehension.** Familiarity with the pesticide labels and labeling for products used to perform non-soil fumigation, including labeling requirements specific to non-soil fumigants.
- (ii) **Safety.** Measures to minimize adverse health effects, including all of the following:
  - (A) Understanding how certified applicators, noncertified applicators using fumigants under direct supervision of certified applicators, and bystanders can become exposed to fumigants.
  - (B) Common problems and mistakes that can result in direct exposure to fumigants.
  - (C) Signs and symptoms of human exposure to fumigants.
  - (D) Air concentrations of a fumigant that require applicators to wear respirators or to exit the work area entirely.
  - (E) Steps to take if a fumigant applicator experiences sensory irritation.
  - (F) Understanding air monitoring, when it is required, and where and when to take samples.
  - (G) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
  - (H) First aid measures to take in the event of exposure to a fumigant.
  - (I) Labeling requirements for transportation, storage, spill clean up, and emergency response for non-soil fumigants, including safe disposal of containers and contaminated materials, and management of empty containers.
- (iii) **Non-soil fumigant chemical characteristics.** Characteristics of non-soil fumigants, including all of the following:
  - (A) Chemical characteristics of non-soil fumigants.
  - (B) Specific human exposure concerns for non-soil fumigants.
  - (C) How fumigants change from a liquid or solid to a gas.
  - (D) How fumigants disperse in the application zone.
  - (E) Compatibility concerns for tanks, hoses, tubing, and other equipment.
- (iv) **Application.** Selecting appropriate application methods and timing, including all of the following:
  - (A) Application methods and equipment commonly used for non-soil fumigation.
  - (B) Site characteristics that influence fumigant exposure.
  - (C) Conditions that could impact timing of non-soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications under specific conditions.
  - (D) Conducting pre-application inspection of application equipment and the site to be fumigated.
  - (E) Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.

- (F) Calculating the amount of product required for a specific treatment area.
- (G) Understanding the basic techniques for calibrating non-soil fumigant application equipment.
- (H) Understanding when and how to conduct air monitoring and when it is required.
- (v) **Pest factors.** Pest factors that influence fumigant activity, including all of the following:
  - (A) Influence of pest factors on fumigant volatility.
  - (B) Factors that influence gaseous movement through the area being fumigated and into the air.
  - (C) Identifying pests causing the damage and verifying they can be controlled with fumigation.
  - (D) Understanding the relationship between pest density and application rate.
  - (E) The importance of proper application rate and timing.
- (vi) **Personal protective equipment.** Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:
  - (A) Following labeling directions for required personal protective equipment.
  - (B) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
  - (C) Understanding the types of respirators required when using specific non-soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
  - (D) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.
- (vii) **Fumigant management plans and post-application summaries.** Information about fumigant management plans and when they are required, including all of the following:
  - (A) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.
  - (B) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
  - (C) The person responsible for verifying that a fumigant management plan is accurate.
  - (D) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.
- (viii) **Posting requirements.** Understanding posting requirements, including all of the following:
  - (A) Understanding who is allowed in an area being fumigated or after fumigation and who is prohibited from being in such areas.
  - (B) Distinguishing fumigant labeling-required posting and treated area posting, including the pre-application and post-application posting timeframes for each.
  - (C) Proper choice and placement of warning signs.



- (15) **Aerial pest control.** Applicators must demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application of restricted use pesticides, including all the following:
- (i) **Labeling.** Labeling requirements and restrictions specific to aerial application of pesticides including:
    - (A) Spray volumes.
    - (B) Buffers and no-spray zones.
    - (C) Weather conditions specific to wind and inversions.
  - (ii) **Application equipment.** Understand how to choose and maintain aerial application equipment, including all of the following:
    - (A) The importance of inspecting application equipment to ensure it is in proper operating condition prior to beginning an application.
    - (B) Selecting proper nozzles to ensure appropriate pesticide dispersal and to minimize drift.
    - (C) Knowledge of the components of an aerial pesticide application system, including pesticide hoppers, tanks, pumps, and types of nozzles.
    - (D) Interpreting a nozzle flow rate chart.
    - (E) Determining the number of nozzles for intended pesticide output using nozzle flow rate chart, aircraft speed, and swath width.
    - (F) How to ensure nozzles are placed to compensate for uneven dispersal due to uneven airflow from wingtip vortices, helicopter rotor turbulence, and aircraft propeller turbulence.
    - (G) Where to place nozzles to produce the appropriate droplet size.
    - (H) How to maintain the application system in good repair, including pressure gauge accuracy, filter cleaning according to schedule, and checking nozzles for excessive wear.
    - (I) How to calculate required and actual flow rates.
    - (J) How to verify flow rate using fixed timing, open timing, known distance, or a flow meter.
    - (K) When to adjust and calibrate application equipment.
  - (iii) **Application considerations.** The applicator must demonstrate knowledge of factors to consider before and during application, including all of the following:
    - (A) Weather conditions that could impact application by affecting aircraft engine power, take-off distance, and climb rate, or by promoting spray droplet evaporation.
    - (B) How to determine wind velocity, direction, and air density at the application site.
    - (C) The potential impact of thermals and temperature inversions on aerial pesticide application.
  - (iv) **Minimizing drift.** The applicator must demonstrate knowledge of methods to minimize off-target pesticide movement, including all of the following:
    - (A) How to determine drift potential of a product using a smoke generator.

- (B) How to evaluate vertical and horizontal smoke plumes to assess wind direction, speed, and concentration.
- (C) Selecting techniques that minimize pesticide movement out of the area to be treated.
- (D) Documenting special equipment configurations or flight patterns used to reduce off-target pesticide drift.
- (v) **Performing aerial application.** The applicator must demonstrate competency in performing an aerial pesticide application, including all of the following:
  - (A) Selecting a flight altitude that minimizes streaking and off-target pesticide drift.
  - (B) Choosing a flight pattern that ensures applicator and bystander safety and proper application.
  - (C) The importance of engaging and disengaging spray precisely when entering and exiting a predetermined swath pattern.
  - (D) Tools available to mark swaths, such as global positioning systems and flags.
  - (E) Recordkeeping requirements for aerial pesticide applications including application conditions if applicable.
- (e) **Exceptions.** The requirements in § 171.103(a)-(d) of this part do not apply to the following persons:
  - (1) Persons conducting laboratory research involving restricted use pesticides.
  - (2) Doctors of Medicine and Doctors of Veterinary Medicine applying restricted use pesticides to patients during the course of the ordinary practice of those professions.

### § 171.105 Standards for certification of private applicators.

- (a) **General private applicator certification.** Before using or supervising the use of a restricted use pesticide as a private applicator, a person must be certified by an appropriate certifying authority as having the necessary competency to use restricted use pesticides for pest control in the production of agricultural commodities, which includes the ability to read and understand pesticide labeling. Certification in this general private applicator certification category alone is not sufficient to authorize the purchase, use, or supervision of use of the restricted use pesticide products in the categories listed in paragraphs (b) through (f) of this section. Persons seeking certification as private applicators must demonstrate practical knowledge of the principles and practices of pest control associated with the production of agricultural commodities and effective use of restricted use pesticides, including all of the following:
  - (1) **Label and labeling comprehension.** Familiarity with pesticide labels and labeling and their functions, including all of the following:
    - (i) The general format and terminology of pesticide labels and labeling.
    - (ii) Understanding instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labels and labeling.
    - (iii) Understanding that it is a violation of Federal law to use any registered pesticide in a manner inconsistent with its labeling.
    - (iv) Understanding when a certified applicator must be physically present at the site of the application based on labeling requirements.

- (v) Understanding labeling requirements for supervising noncertified applicators working under the direct supervision of a certified applicator.
  - (vi) Understanding that applicators must comply with all use restrictions and directions for use contained in pesticide labels and labeling, including being certified in the appropriate category to use restricted use pesticides for fumigation or aerial application, or predator control devices containing sodium cyanide or sodium fluoroacetate, if applicable.
  - (vii) Understanding the meaning of product classification as either general or restricted use, and that a product may be unclassified.
  - (viii) Understanding and complying with product-specific notification requirements.
  - (ix) Recognizing and understanding the difference between mandatory and advisory labeling language.
- (2) **Safety.** Measures to avoid or minimize adverse health effects, including all of the following:
- (i) Understanding the different natures of the risks of acute toxicity and chronic toxicity, as well as the long-term effects of pesticides.
  - (ii) Understanding that a pesticide's risk is a function of exposure and the pesticide's toxicity.
  - (iii) Recognition of likely ways in which dermal, inhalation, and oral exposure may occur.
  - (iv) Common types and causes of pesticide mishaps.
  - (v) Precautions to prevent injury to applicators and other individuals in or near treated areas.
  - (vi) Need for, and proper use of, protective clothing and personal protective equipment.
  - (vii) Symptoms of pesticide poisoning.
  - (viii) First aid and other procedures to be followed in case of a pesticide mishap.
  - (ix) Proper identification, storage, transport, handling, mixing procedures, and disposal methods for pesticides and used pesticide containers, including precautions to be taken to prevent children from having access to pesticides and pesticide containers.
- (3) **Environment.** The potential environmental consequences of the use and misuse of pesticides, including the influence of the following:
- (i) Weather and other climatic conditions.
  - (ii) Types of terrain, soil, or other substrate.
  - (iii) Presence of fish, wildlife, and other non-target organisms.
  - (iv) Drainage patterns.
- (4) **Pests.** The proper identification and effective control of pests, including all of the following:
- (i) The importance of correctly identifying target pests and selecting the proper pesticide product(s).
  - (ii) Verifying that the labeling does not prohibit the use of the product to control the target pest(s).
- (5) **Pesticides.** Characteristics of pesticides, including all of the following:

- (i) Types of pesticides.
  - (ii) Types of formulations.
  - (iii) Compatibility, synergism, persistence, and animal and plant toxicity of the formulations.
  - (iv) Hazards and residues associated with use.
  - (v) Factors that influence effectiveness or lead to problems such as pesticide resistance.
  - (vi) Dilution procedures.
- (6) **Equipment.** Application equipment, including all of the following:
- (i) Types of equipment and advantages and limitations of each type.
  - (ii) Uses, maintenance, and calibration procedures.
- (7) **Application methods.** Selecting appropriate application methods, including all of the following:
- (i) Methods used to apply various forms and formulations of pesticides.
  - (ii) Knowledge of which application method to use in a given situation and that use of a fumigant, aerial application, or predator control device containing sodium cyanide or sodium fluoroacetate requires additional certification.
  - (iii) How selection of application method and use of a pesticide may result in proper use, unnecessary or ineffective use, and misuse.
  - (iv) Prevention of drift and pesticide loss into the environment.
- (8) **Laws and regulations.** Knowledge of all applicable State, Tribal, and Federal laws and regulations, including understanding the Worker Protection Standard in 40 CFR part 170 and the circumstances where compliance is required.
- (9) **Responsibilities for supervisors of noncertified applicators.** Certified applicator responsibilities related to supervision of noncertified applicators, including all of the following:
- (i) Understanding and complying with requirements in § 171.201 of this part for private applicators who supervise noncertified applicators using restricted use pesticides.
  - (ii) Providing use-specific instructions to noncertified applicators using restricted use pesticides under the direct supervision of a certified applicator.
  - (iii) Explaining appropriate State, Tribal, and Federal laws and regulations to noncertified applicators working under the direct supervision of a certified applicator.
- (10) **Stewardship.** Understanding the importance of all of the following:
- (i) Maintaining chemical security for restricted use pesticides.
  - (ii) How to communicate information about pesticide exposures and risks with agricultural workers and handlers and other persons.
- (11) **Agricultural pest control.** Practical knowledge of pest control applications to agricultural commodities including all of the following:
- (i) Specific pests of relevant agricultural commodities.

- (ii) How to avoid contamination of ground and surface waters.
- (iii) Understanding pre-harvest and restricted entry intervals and entry-restricted periods and areas.
- (iv) Understanding specific pesticide toxicity and residue potential when pesticides are applied to animal or animal product agricultural commodities.
- (v) Relative hazards associated with using pesticides on animals or places in which animals are confined based on formulation, application technique, age of animal, stress, and extent of treatment.

(b) ***Sodium cyanide predator control.*** In addition to satisfying the requirements in paragraph (a) of this section, in order to use sodium cyanide in a mechanical ejection device, private 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 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.

(c) ***Sodium fluoroacetate predator control.*** In addition to satisfying the requirements in paragraph (a) of this section, in order to use sodium fluoroacetate, private applicators must demonstrate comprehension of all laws and regulations applicable to the use of sodium fluoroacetate products, including the restrictions on the use of sodium fluoroacetate products ordered by the EPA Administrator. Applicators must also demonstrate practical knowledge and understanding of the specific use restrictions for sodium fluoroacetate in the livestock protection collar, including where and when sodium fluoroacetate products can be used, safe handling and placement of collars, and practical treatment of sodium fluoroacetate poisoning in humans and domestic animals. Applicators must also demonstrate practical knowledge and understanding of specific requirements for field posting, monitoring, recordkeeping, proper storage of collars, disposal of punctured or leaking collars, disposal of contaminated animal remains, vegetation, soil, and clothing, and reporting of suspected and actual poisoning, mishap, or injury to threatened or endangered species, humans, domestic animals, or non-target wild animals.

(d) ***Soil fumigation.*** In addition to satisfying the requirements in paragraph (a) of this section, private applicators that use or supervise the use of a restricted use pesticide to fumigate soil must demonstrate practical knowledge of the pest problems and pest control practices associated with performing soil fumigant applications, including all the following:

- (1) ***Label and labeling comprehension.*** Familiarity with the pesticide labels and labeling for products used to perform soil fumigation, including all of the following:
  - (i) Labeling requirements specific to soil fumigants.
  - (ii) Requirements for certified applicators of fumigants, fumigant handlers and permitted fumigant handler activities, and the safety information that certified applicators must provide to noncertified applicators using fumigants under the direct supervision of certified applicators.

- (iii) Entry-restricted period for different tarped and untarped field application scenarios.
  - (iv) Recordkeeping requirements imposed by product labels and labeling.
  - (v) Labeling provisions unique to products containing certain active ingredients.
  - (vi) Labeling requirements for fumigant management plans, such as when a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it; the elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan; the person responsible for verifying that a fumigant management plan is accurate; and the elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.
- (2) **Safety.** Measures to minimize adverse health effects, including all of the following:
- (i) Understanding how certified applicators, noncertified applicators using fumigants under the direct supervision of certified applicators, field workers, and bystanders can become exposed to fumigants.
  - (ii) Common problems and mistakes that can result in direct exposure to fumigants.
  - (iii) Signs and symptoms of human exposure to fumigants.
  - (iv) Air concentrations of a fumigant that require applicators to wear respirators or to exit the work area entirely.
  - (v) Steps to take if a fumigant applicator experiences sensory irritation.
  - (vi) Understanding air monitoring, when it is required, and where and when to take samples.
  - (vii) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
  - (viii) First aid measures to take in the event of exposure to a soil fumigant.
  - (ix) Labeling requirements for transportation, storage, spill cleanup, and emergency response for soil fumigants, including safe disposal of containers and contaminated soil, and management of empty containers.
- (3) **Soil fumigant chemical characteristics.** Characteristics of soil fumigants, including all of the following:
- (i) Chemical characteristics of soil fumigants.
  - (ii) Specific human exposure concerns for soil fumigants.
  - (iii) How soil fumigants change from a liquid or solid to a gas.
  - (iv) How soil fumigants disperse in the application zone.
  - (v) Compatibility concerns for tanks, hoses, tubing, and other equipment.
- (4) **Application.** Selecting appropriate application methods and timing, including all of the following:
- (i) Application methods, including but not limited to water-run and non-water-run applications, and equipment commonly used for each soil fumigant.

- (ii) Site characteristics that influence fumigant exposure.
- (iii) Understanding temperature inversions and their impact on soil fumigant application.
- (iv) Weather conditions that could impact timing of soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications during specific weather conditions.
- (v) Conducting pre-application inspection of application equipment.
- (vi) Understanding the purpose and methods of soil sealing, including the factors that determine which soil sealing method to use.
- (vii) Understanding the use of tarps, including the range of tarps available, how to seal tarps, and labeling requirements for tarp removal, perforation, and repair.
- (viii) Calculating the amount of product required for a specific treatment area.
- (ix) Understanding the basic techniques for calibrating soil fumigant application equipment.
- (5) ***Soil and pest factors.*** Soil and pest factors that influence fumigant activity, including all of the following:
  - (i) Influence of soil factors on fumigant volatility and movement within the soil profile.
  - (ii) Factors that influence gaseous movement through the soil profile and into the air.
  - (iii) Soil characteristics, including how soil characteristics affect the success of a soil fumigant application, assessing soil moisture, and correcting for soil characteristics that could hinder a successful soil fumigant application.
  - (iv) Identifying pests causing the damage and verifying they can be controlled with soil fumigation.
  - (v) Understanding the relationship between pest density and application rate.
  - (vi) The importance of proper application depth and timing.
- (6) ***Personal protective equipment.*** Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:
  - (i) Following labeling directions for required personal protective equipment.
  - (ii) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
  - (iii) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
  - (iv) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.
- (7) ***Fumigant management plans and post-application summaries.*** Information about fumigant management plans, including all of the following:
  - (i) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.

- (ii) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
- (iii) The person responsible for verifying that a fumigant management plan is accurate.
- (iv) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(8) **Buffer zones and posting requirements.** Understanding buffer zones and posting requirements, including all of the following:

- (i) Buffer zones and the buffer zone period.
- (ii) Identifying who may be in a buffer zone during the buffer zone period and who is prohibited from being in a buffer zone during the buffer zone period.
- (iii) Using the buffer zone table from the labeling to determine the size of the buffer zone.
- (iv) Factors that determine the buffer zone credits for application scenarios and calculating buffer zones using credits.
- (v) Distinguishing buffer zone posting and treated area posting, including the pre-application and post-application posting timeframes for each.
- (vi) Proper choice and placement of warning signs.

(e) **Non-soil fumigation.** In addition to satisfying the requirements in paragraph (a) of this section, private applicators that use or supervise the use of a restricted use pesticide to fumigate anything other than soil must demonstrate practical knowledge of the pest problems and pest control practices associated with performing fumigation applications to sites other than soil, including all the following:

- (1) **Label and labeling comprehension.** Familiarity with the pesticide labels and labeling for products used to perform non-soil fumigation, including labeling requirements specific to non-soil fumigants.
- (2) **Safety.** Measures to minimize adverse health effects, including all of the following:
  - (i) Understanding how certified applicators, handlers, and bystanders can become exposed to fumigants.
  - (ii) Common problems and mistakes that can result in direct exposure to fumigants.
  - (iii) Signs and symptoms of human exposure to fumigants.
  - (iv) When air concentrations of a fumigant triggers handlers to wear respirators or to exit the work area entirely.
  - (v) Steps to take if a person using a fumigant experiences sensory irritation.
  - (vi) Understanding air monitoring, when it is required, and where and when to take samples.
  - (vii) Buffer zones, including procedures for buffer zone monitoring and who is permitted to be in a buffer zone.
  - (viii) First aid measures to take in the event of exposure to a fumigant.
  - (ix) Labeling requirements for transportation, storage, spill clean up, and emergency response for non-soil fumigants, including safe disposal of containers and contaminated materials, and management of empty containers.



- (3) **Non-soil fumigant chemical characteristics.** Characteristics of non-soil fumigants, including all of the following:
  - (i) Chemical characteristics of non-soil fumigants.
  - (ii) Specific human exposure concerns for non-soil fumigants.
  - (iii) How fumigants change from a liquid or solid to a gas.
  - (iv) How fumigants disperse in the application zone.
  - (v) Compatibility concerns for tanks, hoses, tubing, and other equipment.
- (4) **Application.** Selecting appropriate application methods and timing, including all of the following:
  - (i) Application methods and equipment commonly used for non-soil fumigation.
  - (ii) Site characteristics that influence fumigant exposure.
  - (iii) Conditions that could impact timing of non-soil fumigant application, such as air stability, air temperature, humidity, and wind currents, and labeling statements limiting applications when specific conditions are present.
  - (iv) Conducting pre-application inspection of application equipment and the site to be fumigated.
  - (v) Understanding the purpose and methods of sealing the area to be fumigated, including the factors that determine which sealing method to use.
  - (vi) Calculating the amount of product required for a specific treatment area.
  - (vii) Understanding the basic techniques for calibrating non-soil fumigant application equipment.
  - (viii) Understanding when and how to conduct air monitoring and when it is required.
- (5) **Pest factors.** Pest factors that influence fumigant activity, including all of the following:
  - (i) Influence of pest factors on fumigant volatility.
  - (ii) Factors that influence gaseous movement through the area being fumigated and into the air.
  - (iii) Identifying pests causing the damage and verifying they can be controlled with fumigation.
  - (iv) Understanding the relationship between pest density and application rate.
  - (v) The importance of proper application rate and timing.
- (6) **Personal protective equipment.** Understanding what personal protective equipment is necessary and how to use it properly, including all of the following:
  - (i) Following labeling directions for required personal protective equipment.
  - (ii) Selecting, inspecting, using, caring for, replacing, and disposing of personal protective equipment.
  - (iii) Understanding the types of respirators required when using specific soil fumigants and how to use them properly, including medical evaluation, fit testing, and required replacement of cartridges and canisters.
  - (iv) Labeling requirements and other laws applicable to medical evaluation for respirator use, fit tests, training, and recordkeeping.

(7) **Fumigant management plans and post-application summaries.** Information about fumigant management plans and when they are required, including all of the following:

- (i) When a fumigant management plan must be in effect, how long it must be kept on file, where it must be kept during the application, and who must have access to it.
- (ii) The elements of a fumigant management plan and resources available to assist the applicator in preparing a fumigant management plan.
- (iii) The person responsible for verifying that a fumigant management plan is accurate.
- (iv) The elements, purpose and content of a post-application summary, who must prepare it, and when it must be completed.

(8) **Posting requirements.** Understanding posting requirements, including all of the following:

- (i) Understanding who is allowed in an area being fumigated or after fumigation and who is prohibited from being in such areas.
- (ii) Distinguishing fumigant labeling-required posting and treated area posting, including the pre-application and post-application posting timeframes for each.
- (iii) Proper choice and placement of warning signs.

(f) **Aerial pest control.** In addition to satisfying the requirements in paragraph (a) of this section, private applicators that use or supervise the use of restricted use pesticides applied by fixed or rotary wing aircraft must demonstrate practical knowledge of the pest problems and pest control practices associated with performing aerial application, including all the following:

(1) **Labeling.** Labeling requirements and restrictions specific to aerial application of pesticides including:

- (i) Spray volumes.
- (ii) Buffers and no-spray zones.
- (iii) Weather conditions specific to wind and inversions.
- (iv) Labeling-mandated recordkeeping requirements for aerial pesticide applications including application conditions if applicable.

(2) **Application equipment.** Understand how to choose and maintain aerial application equipment, including all of the following:

- (i) The importance of inspecting application equipment to ensure it is in proper operating condition prior to beginning an application.
- (ii) Selecting proper nozzles to ensure appropriate pesticide dispersal and to minimize drift.
- (iii) Knowledge of the components of an aerial pesticide application system, including pesticide hoppers, tanks, pumps, and types of nozzles.
- (iv) Interpreting a nozzle flow rate chart.
- (v) Determining the number of nozzles for intended pesticide output using nozzle flow rate chart, aircraft speed, and swath width.
- (vi) How to ensure nozzles are placed to compensate for uneven dispersal due to uneven airflow from wingtip vortices, helicopter rotor turbulence, and aircraft propeller turbulence.

- (vii) Where to place nozzles to produce the appropriate droplet size.
- (viii) How to maintain the application system in good repair, including pressure gauge accuracy, filter cleaning according to schedule, and checking nozzles for excessive wear.
- (ix) How to calculate required and actual flow rates.
- (x) How to verify flow rate using fixed timing, open timing, known distance, or a flow meter.
- (xi) When to adjust and calibrate application equipment.

(3) **Application considerations.** The applicator must demonstrate knowledge of factors to consider before and during application, including all of the following:

- (i) Weather conditions that could impact application by affecting aircraft engine power, take-off distance, and climb rate, or by promoting spray droplet evaporation.
- (ii) How to determine wind velocity, direction, and air density at the application site.
- (iii) The potential impact of thermals and temperature inversions on aerial pesticide application.

(4) **Minimizing drift.** The applicator must demonstrate knowledge of methods to minimize off-target pesticide movement, including all of the following:

- (i) How to determine drift potential of a product using a smoke generator.
- (ii) How to evaluate vertical and horizontal smoke plumes to assess wind direction, speed, and concentration.
- (iii) Selecting techniques that minimize pesticide movement out of the area to be treated.
- (iv) Documenting special equipment configurations or flight patterns used to reduce off-target pesticide drift.

(5) **Performing aerial application.** The applicator must demonstrate competency in performing an aerial pesticide application, including all of the following:

- (i) Selecting a flight altitude that minimizes streaking and off-target pesticide drift.
- (ii) Choosing a flight pattern that ensures applicator and bystander safety and proper application.
- (iii) The importance of engaging and disengaging spray precisely when entering and exiting a predetermined swath pattern.
- (iv) Tools available to mark swaths, such as global positioning systems and flags.

(g) **Private applicator minimum age.** A private applicator must be at least 18 years old.

(h) **Private applicator competency.** The competency of each candidate for private applicator certification must be established by the certifying authority based upon the certification standards set forth in paragraphs (a) through (g) of this section in order to assure that private applicators have the competency to use and supervise the use of restricted use pesticides in accordance with applicable State, Tribal, and Federal laws and regulations. The certifying authority must use either a written examination process as described in paragraph (h)(1) of this section or a non-examination training process as described in paragraph (h)(2) of this section to assure the competency of private applicators in regard to the general certification

standards applicable to all private applicators outlined in paragraph (a) of this section, and, if applicable, the specific standards for the each of the categories outlined in paragraphs (b) through (f) of this section in which a private applicator is to be certified.

- (1) **Determination of competency by examination.** If the certifying authority uses an examination process to determine the competency of private applicators, the examination process must meet all of the requirements of § 171.103(a)(2).
- (2) **Training for competency without examination.** Any candidate for certification as a private applicator may complete a training program approved by the certifying authority to establish competency. A training program to establish private applicator competency must conform to all of the following criteria:
  - (i) **Identification.** Each person seeking certification must present a valid, government-issued photo identification, or other form of similarly reliable identification authorized by the certifying authority, to the certifying authority or designated representative as proof of identity and age at the time of the training program to be eligible for certification.
  - (ii) **Training programs for private applicator general certification and category certification.**
    - (A) The training program for general private applicator certification must cover the competency standards outlined in paragraph (a) of this section in sufficient detail to allow the private applicator to demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticides.
    - (B) The training program for each relevant category for private applicator certification must cover the competency standards outlined in paragraphs (b) through (f) of this section in sufficient detail to allow the private applicator to demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticides for each category in which he or she intends to apply restricted use pesticides, and must be in addition to the training program required for general private applicator certification.
- (i) **Exceptions.** The requirements in § 171.105(a)-(h) of this part do not apply to the following persons:
  - (1) Persons conducting laboratory research involving restricted use pesticides.
  - (2) Doctors of Medicine and Doctors of Veterinary Medicine applying restricted use pesticides to patients during the course of the ordinary practice of those professions.

#### § 171.107 Standards for recertification of certified applicators.

- (a) **Maintenance of continued competency.** Each commercial and private applicator certification shall expire five years after issuance, unless the applicator is recertified in accordance with this section. A certifying authority may establish a shorter certification period. In order for a certified applicator's certification to continue without interruption, the certified applicator must be recertified under this section before the expiration of his or her current certification.
- (b) **Process for recertification.** Minimum standards for recertification by written examination, or through continuing education programs, are as follows:

- (1) **Written examination.** A certified applicator may be found eligible for recertification upon passing a written examination approved by the certifying authority and that is designed to evaluate whether the certified applicator demonstrates the level of competency required by § 171.103 for commercial applicators or § 171.105 for private applicators. The examination shall conform to the applicable standards for examinations set forth in § 171.103(a)(2) of this part.
- (2) **Continuing education programs.** A certified applicator may be found eligible for recertification upon successfully completing a continuing education program pursuant to the certifying authority's EPA-approved certification plan.
  - (i) The quantity, content, and quality of a continuing education program to maintain applicator certification must be sufficient to ensure the applicator continues to demonstrate the level of competency required by § 171.103 for commercial applicators or § 171.105 for private applicators.
  - (ii) Any continuing education course or event relied upon for applicator recertification must be approved by the certifying authority as being suitable for its purpose in the certifying authority's recertification process.
  - (iii) A certifying authority must ensure that any continuing education course or event, including an online or other distance education course or event, relied upon for applicator recertification includes a process to verify the applicator's successful completion of the course or event.

## Subpart C—Supervision of Noncertified Applicators

**Source:** 82 FR 1040, Jan. 4, 2018, unless otherwise noted.

### § 171.201 Requirements for direct supervision of noncertified applicators by certified applicators.

- (a) **Applicability.** This section applies to any certified applicator who allows or relies on a noncertified applicator to use a restricted use pesticide under the certified applicator's direct supervision.
- (b) **General requirements.**
  - (1) Requirements for the certified applicator.
    - (i) The certified applicator must have a practical knowledge of applicable Federal, State and Tribal supervisory requirements, including any requirements on the product label and labeling, regarding the use of restricted use pesticides by noncertified applicators.
    - (ii) The certified applicator must be certified in each category as set forth in §§ 171.101 and 171.105(a) through (f) applicable to the supervised pesticide use.
  - (2) Requirements for the noncertified applicator. The certified applicator must ensure that each noncertified applicator using a restricted use pesticide under his or her direct supervision meets all of the following requirements before using a restricted use pesticide:
    - (i) The noncertified applicator has satisfied the qualification requirements under paragraph (c) of this section.

- (ii) The noncertified applicator has been instructed within the last 12 months in the safe operation of any equipment he or she will use for mixing, loading, transferring, or applying pesticides.
- (iii) The noncertified applicator has met the minimum age required to use restricted use pesticides under the supervision of a certified applicator. A noncertified applicator must be at least 18 years old, except that a noncertified applicator must be at least 16 years old if all of the following requirements are met:
  - (A) The noncertified applicator is using the restricted use pesticide under the direct supervision of a private applicator who is an immediate family member.
  - (B) The restricted use pesticide is not a fumigant, sodium cyanide, or sodium fluoroacetate.
  - (C) The noncertified applicator is not applying the restricted use pesticide aurally.
- (3) Use-specific conditions that must be met in order for a noncertified applicator to use a restricted use pesticide. The certified applicator must ensure that all of the following requirements are met before allowing a noncertified applicator to use a restricted use pesticide under his or her direct supervision:
  - (i) The certified applicator must ensure that the noncertified applicator has access to the applicable product labeling at all times during its use.
  - (ii) Where the labeling of a pesticide product requires that personal protective equipment be worn for mixing, loading, application, or any other use activities, the certified applicator must ensure that any noncertified 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.
  - (iii) The certified applicator must provide to each noncertified applicator before use of a restricted use pesticide 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 ground water, endangered species, local population) and the conditions of application (e.g., equipment, method of application, formulation) might increase or decrease the risk of adverse effects. The certified applicator must provide this information in a manner that the noncertified applicator can understand.
  - (iv) The certified applicator must 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 noncertified applicator, other persons, or the environment.
  - (v) The certified applicator must ensure that a means to immediately communicate with the certified applicator is available to each noncertified applicator using restricted use pesticides under his or her direct supervision.
  - (vi) The certified applicator must be physically present at the site of the use being supervised when required by the product labeling.
  - (vii) If the certified applicator is a commercial applicator, the certified applicator must create or verify the existence of the records required by paragraph (e) of this section.

- (c) **Noncertified applicator qualifications.** Before any noncertified applicator uses a restricted use pesticide under the direct supervision of the certified applicator, the supervising certified applicator must ensure that the noncertified applicator has met at least one of the following qualifications:
- (1) The noncertified applicator has been trained in accordance with paragraph (d) of this section within the last 12 months.
  - (2) The noncertified applicator has met the training requirements for an agricultural handler under 40 CFR 170.501 of this title within the last 12 months.
  - (3) The noncertified applicator has met the requirements established by a certifying authority that meet or exceed the standards in § 171.201(c)(1).
  - (4) The noncertified applicator is currently a certified applicator but is not certified to perform the type of application being conducted or is not certified in the jurisdiction where the use will take place.
- (d) **Noncertified applicator training program.**
- (1) General noncertified applicator training must be presented to noncertified applicators either orally from written materials or audiovisually. The information must be presented in a manner that the noncertified applicators can understand, such as through a translator. The person conducting the training must be present during the entire training program and must respond to the noncertified applicators' questions.
  - (2) The person who conducts the training must meet one of the following criteria:
    - (i) Be currently certified as an applicator of restricted use pesticides under this part.
    - (ii) Be currently designated as a trainer of certified applicators or pesticide handlers by EPA, the certifying authority, or a State, Tribal, or Federal agency having jurisdiction.
    - (iii) Have completed an EPA-approved pesticide safety train-the-trainer program for trainers of handlers under 40 CFR part 170.
  - (3) The noncertified applicator training materials must include the information that noncertified applicators need in order to protect themselves, other people, and the environment before, during, and after making a restricted use pesticide application. The noncertified applicator training materials must include, at a minimum, the following:
    - (i) Potential hazards from toxicity and exposure that pesticides present to noncertified 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. Noncertified 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. Noncertified 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 women 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 noncertified applicator working under the direct supervision of a certified applicator.
- (xxi) The certified applicator's responsibility to provide to each noncertified 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 ground water, 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 noncertified applicator can understand.
- (xxii) The certified applicator's responsibility to ensure that each noncertified 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 noncertified 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 noncertified applicator, other persons, or the environment.
- (xxv) The certified applicator's responsibility to ensure that a means to immediately communicate with the certified applicator is available to each noncertified applicator using restricted use pesticides under his or her direct supervision.

(e) **Recordkeeping.**

- (1) Commercial applicators must create or verify the existence of records documenting that each noncertified applicator has the qualifications required in paragraph (c) of this section. For each noncertified applicator, the records must contain the information appropriate to the method of qualification as provided in paragraphs (e)(1)(i) through (e)(1)(iv).
  - (i) If the noncertified applicator was trained in accordance with paragraph (c)(1) of this section, the record must contain all of the following information:
    - (A) The noncertified applicator's printed name and signature.
    - (B) The date the training requirement in paragraph (c) of this section was met.
    - (C) The name of the person who provided the training.
    - (D) The title or a description of the training provided.
  - (ii) If the noncertified applicator was trained as an agricultural handler under 40 CFR 170.501 in accordance with paragraph (c)(2) of this section, the record must contain all of the information required at 40 CFR 170.501(d)(1).
  - (iii) If the noncertified applicator qualified by satisfying the requirements established by the certifying authority, as described in paragraph (c)(3) of this section, the record must contain the information required by the certifying authority.
  - (iv) If the noncertified applicator is a certified applicator who is not certified to perform the type of application being conducted or not certified in the jurisdiction where the use will take place, as described in paragraph (c)(4) of this section, the record must include all of the following information:
    - (A) The noncertified applicator's name.
    - (B) The noncertified applicator's certification number.
    - (C) The expiration date of the noncertified applicator's certification.
    - (D) The certifying authority that issued the certification.
- (2) The commercial applicator must create or verify the existence of the record containing the information in paragraph (e)(1) of this section before allowing the noncertified applicator to use restricted use pesticides under his or her direct supervision.
- (3) The commercial applicator supervising any noncertified applicator must have access to records documenting the information required in paragraph (e)(1) of this section at the commercial applicator's principal place of business for two years from the date the noncertified applicator used the restricted use pesticide.

- (f) **Exceptions.** The requirements in § 171.201(a) through (e) of this part do not apply to the following persons:
- (1) Persons conducting laboratory research involving restricted use pesticides.
  - (2) Doctors of Medicine and Doctors of Veterinary Medicine applying restricted use pesticides to patients during the course of the ordinary practice of those professions.

## Subpart D—Certification Plans

**Source:** 82 FR 1042, Jan. 4, 2017, unless otherwise noted.

### § 171.301 General.

- (a) **Jurisdiction.** A certification issued under a particular certifying authority's certification plan is only valid within the geographical area specified in the certification plan approved by the Agency.

### § 171.303 Requirements for State certification plans.

- (a) **Conformance with Federal standards for certification of applicators of restricted use pesticides.** A State may certify applicators of restricted use pesticides only in accordance with a State certification plan approved by the Agency. The State certification plan must meet all of the following requirements:
- (1) The State certification plan must include a full description of the proposed process the State will use to assess applicator competency to use or supervise the use of restricted use pesticides in the State.
  - (2) The State certification plan must specify which of the certification categories listed in § 171.101 will be included in the plan.
    - (i) A State certification plan may omit any unneeded certification categories.
    - (ii) A State certification plan may designate subcategories within the categories described in §§ 171.101 and 171.105(b) through (f) as it deems necessary.
    - (iii) A State certification plan may include additional certification categories not covered by the existing Federal categories described in §§ 171.101 and 171.105(b)-(f).
    - (iv) A State certification plan may combine the categories described in § 171.101(m) through (n) into a single general fumigation category for commercial applicators.
    - (v) A State certification plan may combine the categories described in § 171.105(d) through (e) into a single general fumigation category for private applicators.
  - (3) For each of the categories adopted pursuant to paragraph (b)(1) of this section, the State certification plan must include standards for the certification of applicators of restricted use pesticides that meet or exceed those standards prescribed by the Agency under §§ 171.101 through 171.105, except as provided in paragraph (a)(4) of this section.

- (4) A State may adopt a limited use category for commercial applicators. A limited use category covers a small number of commercial applicators engaged in a use that does not clearly fit within any of the commercial applicator categories specified pursuant to paragraph (b)(2) of this section, and allows only the use of a limited set of restricted use pesticides by specific application methods. A State adopting a limited use category must include all of the following in its certification plan:
- (i) A definition of the limited use category, specifying the restricted use pesticide(s), use sites, and specific application methods permitted.
  - (ii) An explanation of why it is not practical to include the limited use within any of the commercial applicator categories specified pursuant to paragraph (b)(2) of this section.
  - (iii) A requirement that candidates for certification in a limited use category pass the written examination covering the core standards at § 171.103(c) and demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticide(s) covered by the limited use category.
  - (iv) Specific competency standards for the limited use category.
  - (v) The process by which applicators must demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of the restricted use pesticides authorized under the limited use category based on the competency standards identified in paragraph (a)(4)(iv) of this section. This does not have to be accomplished by a written examination.
  - (vi) A description of the recertification standards for the limited use category and how those standards meet or exceed the standards prescribed by the Agency under § 171.107.
  - (vii) A description of the limited use certification credential. The credential must clearly state that the applicator is only authorized to purchase and use the specific restricted use pesticide(s) identified in that credential.
- (5) The State certification plan must include standards for certification examinations that meet or exceed the standards prescribed by the Agency under § 171.103(a)(2), including a description of any alternative identification that a State will authorize in addition to a valid, government-issued photo identification.
- (6) The State certification plan must include standards for the recertification of applicators of restricted use pesticides that meet or exceed those standards prescribed by the Agency under § 171.107.
- (7) The State certification plan must include standards for the direct supervision of noncertified applicators by certified private and commercial applicators of restricted use pesticides that meet or exceed those standards prescribed by the Agency under § 171.201, or must state that use by noncertified applicators is not permitted.
- (8) The State certification plan must describe the credentials or documents the State certifying authority will issue to each certified applicator verifying certification.
- (9) A State may waive any or all of the procedures specified in § 171.103, § 171.105, and § 171.107 of this part when certifying applicators in reliance on valid current certifications issued by another State, Tribal, or Federal agency under an EPA-approved certification plan. The State certification plan

must explain whether, and if so, under what circumstances, the State will certify applicators based in whole or in part on their holding a valid current certification issued by another State, Tribe or Federal agency. Such certifications are subject to all of the following conditions:

- (i) A State may rely only on valid current certifications that are issued under an approved State, Tribal or Federal agency certification plan.
- (ii) The State has examined the standards of competency used by the State, Tribe, or Federal agency that originally certified the applicator and has determined that, for each category of certification that will be accepted, they are comparable to its own standards.
- (iii) Any State that chooses to certify applicators based, in whole or in part, on the applicator having been certified by another State, Tribe, or Federal agency, must include in its plan a mechanism that allows the State to terminate an applicator's certification upon notification that the applicator's original certification terminates because the certificate holder has been convicted under section 14(b) of FIFRA or has been subject to a final order imposing a civil penalty under section 14(a) of FIFRA.
- (iv) The State issuing a certification based in whole or in part on the applicator holding a valid current certification issued by another State, Tribe or Federal agency must issue an appropriate State credential or document to the applicator.

(b) *Contents of an application for EPA approval of a State plan for certification of applicators of restricted use pesticides.*

- (1) The application for Agency approval of a State certification plan must list and describe the categories of certification.
- (2) The application for Agency approval of a State certification plan must contain satisfactory documentation that the State standards for the certification of commercial applicators meet or exceed those standards prescribed by the Agency under §§ 171.101 and 171.103. Such documentation must include one of the following:
  - (i) A statement that the State has adopted the same standards for certification of commercial applicators prescribed by the Agency under §§ 171.101 and 171.103 and a citation of the specific State laws and/or regulations demonstrating that the State has adopted such standards.
  - (ii) A statement that the State has adopted its own standards that meet or exceed the standards for certification of commercial applicators prescribed by the Agency under §§ 171.101 and 171.103. If the State selects this option, the application for Agency approval of a State certification plan must include all of the following:
    - (A) A list and detailed description of all the categories and subcategories to be used for certification of commercial applicators in the State and a citation to the specific State laws and/or regulations demonstrating that the State has adopted such categories and subcategories.
    - (B) A list and detailed description of all of the standards for certification of commercial applicators adopted by the State and a citation to the specific State laws and/or regulations demonstrating that the State has adopted such standards. Any additional

categories or subcategories established by a State must be included in the application for Agency approval of a State plan and must clearly describe the standards the State will use to determine if the applicator has the necessary competency.

- (C) A description of the State's commercial applicator certification examination standards and an explanation of how they meet or exceed the standards prescribed by the Agency under § 171.103(a)(2).
- (3) The application for Agency approval of a State certification plan must contain satisfactory documentation that the State standards for the certification of private applicators meet or exceed those standards prescribed by the Agency under § 171.105. Such documentation must include a statement that the State has adopted its own standards that meet or exceed the standards for certification of private applicators of restricted use pesticides prescribed by the Agency under § 171.105. The application for Agency approval of a State certification plan must include all of the following:
- (i) A list and detailed description of all the categories and subcategories to be used for certification of private applicators in the State and a citation to the specific State laws and/or regulations demonstrating that the State has adopted such categories and subcategories.
  - (ii) A list and detailed description of all of the standards for certification of private applicators adopted by the State and a citation to the specific State laws and/or regulations demonstrating that the State has adopted such standards. Any additional categories or subcategories established by a State must be identified in the application for Agency approval of a State plan and the application must clearly describe the standards the State will use to determine if the applicator has the necessary competency.
  - (iii) If private applicator certification is based upon written examination, a description of the State's private applicator certification examination standards and an explanation of how those meet or exceed the standards prescribed by the Agency under § 171.103(a)(2).
  - (iv) If private applicator certification is based upon training, an explanation of how the quantity, content, and quality of the State's training program ensure that a private applicator demonstrates the level of competency required § 171.105 for private applicators, addressing, at the minimum, all of the following factors:
    - (A) The quantity of training required to become certified as a private applicator.
    - (B) The content that is covered by the training and how the State ensures that required content is covered.
    - (C) The process the State uses to approve training programs for private applicator certification.
    - (D) How the State ensures the ongoing quality of the training program for private applicator certification.
- (4) The application for Agency approval of a State certification plan must contain satisfactory documentation that the State standards for the recertification of applicators of restricted use pesticides meet or exceed those standards prescribed by the Agency under § 171.107. Such documentation must include a statement that the State has adopted its own standards that meet or exceed the standards for recertification prescribed by the Agency under § 171.107. The application for Agency approval of a State certification plan must include all of the following:

- (i) A list and detailed description of all of the State standards for recertification of private and commercial applicators, including the elements described in § 171.303(b)(4)(ii) through (iv), and a citation of the specific State laws and/or regulations demonstrating that the State has adopted such standards.
- (ii) The certification period, which may not exceed five years.
- (iii) If recertification is based upon written examination, a description of the State's process for reviewing, and updating as necessary, the written examination(s) to ensure that the written examination(s) evaluates whether a certified applicator demonstrates the level of competency required by § 171.103 for commercial applicators or § 171.105 for private applicators.
- (iv) If recertification is based upon continuing education, an explanation of how the quantity, content, and quality of the State's continuing education program ensures that a certified applicator continues to demonstrate the level of competency required by § 171.103 for commercial applicators or § 171.105 for private applicators, including but not limited to:
  - (A) The quantity of continuing education required to maintain certification.
  - (B) The content that is covered by the continuing education program and how the State ensures the required content is covered.
  - (C) The process the State uses to approve continuing education courses or events, including information about how the State ensures that any continuing education courses or events verify the applicator's successful completion of the course or event.
  - (D) How the State ensures the ongoing quality of the continuing education program.
- (5) The application for Agency approval of a State certification plan must contain satisfactory documentation that the State standards for the direct supervision of noncertified applicators by certified private and commercial applicators of restricted use pesticides meet or exceed those standards prescribed by the Agency under § 171.201. Such documentation may include one or more of the following as applicable:
  - (i) A statement that the State has adopted the standards for direct supervision of noncertified applicators by certified private and/or commercial applicators prescribed by the Agency under § 171.201 and a citation of the specific State laws and/or regulations demonstrating that the State has adopted such standards.
  - (ii) A statement that the State prohibits noncertified applicators from using restricted use pesticides under the direct supervision of certified private and/or commercial applicators, and a citation of the specific State laws and/or regulations demonstrating that the State has adopted such a prohibition.
  - (iii) A statement that the State has adopted standards for direct supervision of noncertified applicators by certified private and/or commercial applicators that meet or exceed the standards prescribed by the Agency under § 171.201, a citation of the specific State laws and/or regulations demonstrating that the State has adopted such standards, and an explanation of how the State standards meet or exceed the standards prescribed by the Agency under § 171.201.
- (6) The application for Agency approval of a State certification plan must include all of the following:

- (i) A written statement by the Governor of the State designating a lead agency responsible for administering the State certification plan. The lead agency will serve as the central contact point for the Agency. The State certification plan must identify the primary point of contact at the lead agency responsible for administering the State certification plan and serving as the central contact for the Agency on any issues related to the State certification plan. In the event that more than one agency or organization will be responsible for performing functions under the State certification plan, the application for Agency approval of a State plan must identify all such agencies and organizations and list the functions to be performed by each, including compliance monitoring and enforcement responsibilities. The application for Agency approval of a State plan must indicate how these functions will be coordinated by the lead agency to ensure consistency of the administration of the State certification plan.
  - (ii) A written opinion from the State attorney general or from the legal counsel of the State lead agency that states that the lead agency and other cooperating agencies have the legal authority necessary to carry out the State certification plan.
  - (iii) A listing of the qualified personnel that the lead agency and any cooperating agencies or organizations have to carry out the State certification plan. The list must include the number of staff, job titles, and job functions of such personnel of the lead agency and any cooperating organizations.
  - (iv) A commitment by the State that the lead agency and any cooperators will ensure sufficient resources are available to carry out the applicator certification program as detailed in the State certification plan.
  - (v) A document outlining the State's proposed approach and anticipated timeframe for implementing the State certification plan after EPA approves the State certification plan.
- (7) The application for Agency approval of a State certification plan must include a complete copy of all State laws and regulations relevant to the State certification plan. In addition, the application for Agency approval of a State plan must include citations to the specific State laws and regulations that demonstrate specific legal authority for each of the following:
- (i) Provisions for and listing of the acts which would constitute grounds for denying, suspending, and revoking certification of applicators. Such grounds must include, at a minimum, misuse of a pesticide, falsification of any records required to be maintained by the certified applicator, a criminal conviction under section 14(b) of FIFRA, a final order imposing civil penalty under section 14(a) of FIFRA, and conclusion of a State enforcement action for violations of State laws or regulations relevant to the State certification plan.
  - (ii) Provisions for reviewing, and where appropriate, suspending or revoking an applicator's certification based on any of the grounds listed in the plan pursuant to paragraph (b)(7)(i) of this section, or a criminal conviction under section 14(b) of FIFRA, a final order imposing civil penalty under section 14(a) of FIFRA, or conclusion of a State enforcement action for violations of State laws or regulations relevant to the State certification plan.
  - (iii) Provisions for assessing criminal and civil penalties for violations of State laws or regulations relevant to the State certification plan.
  - (iv) Provisions for right of entry by consent or warrant by State officials at reasonable times for sampling, inspection, and observation purposes.

- (v) Provisions making it unlawful for persons other than certified applicators or noncertified applicators working under a certified applicator's direct supervision to use restricted use pesticides.
- (vi) Provisions requiring certified commercial applicators to record and maintain for the period of at least two years routine operational records containing information on types, amounts, uses, dates, and places of application of restricted use pesticides and for ensuring that such records will be available to appropriate State officials. Such provisions must require commercial applicators to record and maintain, at a minimum, all of the following:
  - (A) The name and address of the person for whom the restricted use pesticide was applied.
  - (B) The location of the restricted use pesticide application.
  - (C) The size of the area treated.
  - (D) The crop, commodity, stored product, or site to which the restricted use pesticide was applied.
  - (E) The time and date of the restricted use pesticide application.
  - (F) The brand or product name of the restricted use pesticide applied.
  - (G) The EPA registration number of the restricted use pesticide applied.
  - (H) The total amount of the restricted use pesticide applied per location per application.
  - (I) The name and certification number of the certified applicator that made or supervised the application, and, if applicable, the name of any noncertified applicator(s) that made the application under the direct supervision of the certified applicator.
  - (J) Records required under § 171.201(e).
- (vii) Provisions requiring restricted use pesticide retail dealers to record and maintain at each individual dealership, for the period of at least two years, records of each transaction where a restricted use pesticide is distributed or sold to any person, excluding transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail sellers, acting only in those capacities. Records of each such transaction must include all of the following information:
  - (A) Name and address of the residence or principal place of business of each certified applicator to whom the restricted use pesticide was distributed or sold, or if applicable, the name and address of the residence or principal place of business of each noncertified person to whom the restricted use pesticide was distributed or sold for application by a certified applicator.
  - (B) The certification number on the certification document presented to the seller evidencing the valid certification of the certified applicator authorized to purchase the restricted use pesticide, the State, Tribe or Federal agency that issued the certification document, the expiration date of the certified applicator's certification, and the category(ies) in which the applicator is certified relevant to the pesticide(s) sold.
  - (C) The product name and EPA registration number of the restricted use pesticide(s) distributed or sold in the transaction, including any applicable emergency exemption or State special local need registration number.



(D) The quantity of the restricted use pesticide(s) distributed or sold in the transaction.

(E) The date of the transaction.

(c) **Requirement to submit reports to the Agency.** The State must agree to submit the following reports to the Agency in a manner and containing the information that the Agency requires:

(1) An annual report to be submitted by the State lead agency to the Agency by the date established by the Agency that includes all of the following information:

(i) The number of new general private applicator certifications and recertifications issued during the last 12 month reporting period, and total number of applicators holding a valid general private applicator certification at the end of the last 12 month reporting period.

(ii) For each private applicator category specified in the certification plan, the numbers of new certifications and recertifications issued during the last 12 month reporting period, and the total number holding valid certifications in each category at the end of the last 12 month reporting period.

(iii) The numbers of new commercial applicator certifications and recertifications issued during the last 12 month reporting period, and the total number of applicators certified in at least one commercial applicator certification category at the end of the last 12 month reporting period.

(iv) For each commercial applicator certification category or subcategory specified in the certification plan, the numbers of new certifications and recertifications issued during the last 12 month reporting period, and the total number of commercial applicators holding a valid certification in each category or subcategory at the end of the last 12 month reporting period.

(v) A description of any modifications made to the approved certification plan during the last 12 month reporting period that have not been previously evaluated by the Agency under § 171.309(a)(3).

(vi) A description of any proposed changes to the certification plan that the State anticipates making during the next reporting period that may affect the certification program.

(vii) A summary of enforcement activities related to the use of restricted use pesticides during the last 12 month reporting period.

(2) Any other reports reasonably required by the Agency in its oversight of restricted use pesticides.

### **§ 171.305 Requirements for Federal agency certification plans.**

(a) A Federal agency may certify applicators of restricted use pesticides only in accordance with a Federal agency certification plan approved by the Agency. Certification must be limited to the employees of the Federal agency covered by the certification plan and will be valid only for those uses of restricted use pesticides conducted in the performance of the employees' official duties.

(1) The Federal agency certification plan must include a full description of the proposed process the Federal agency will use to assess applicator competency to use or supervise the use of restricted use pesticides.

(2) Employees certified by the Federal agency must meet the standards for commercial applicators.

(3) The Federal agency certification plan must list and describe the categories of certification from the certification categories listed in § 171.101 that will be included in the plan except that:

- (i) A Federal agency certification plan may omit any unneeded certification categories.
  - (ii) A Federal agency certification plan may designate subcategories within the categories described in § 171.101 as it deems necessary.
  - (iii) A Federal agency certification plan may include additional certification categories not covered by the existing Federal categories described in § 171.101.
  - (iv) A Federal agency certification plan may combine the categories described in § 171.101(m) through (n) into a single general fumigation category for commercial applicators.
- (4) For each of the categories adopted pursuant to paragraph (b)(1) of this section, the Federal agency plan must include standards for the certification of applicators of restricted use pesticides that meet or exceed those standards prescribed by the Agency under §§ 171.101 through 171.103, except as provided at paragraph (a)(5) of this section.
- (5) A Federal agency may adopt a limited use category for commercial applicators. A limited use category covers a small number of applicators engaged in a use that does not clearly fit within any of the categories in § 171.101, and allows only the use of a limited set of restricted use pesticides by specific application methods. A Federal agency adopting a limited use category must include all of the following in its certification plan:
- (i) A definition of the limited use category, specifying the restricted use pesticide(s), use sites, and specific application methods permitted.
  - (ii) An explanation of why it is not practical to include the limited use category in any of the categories in § 171.101.
  - (iii) A requirement that candidates for certification in a limited use category pass the written examination covering the core standards at § 171.103(c) and demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticide(s) covered by the limited use category.
  - (iv) Specific competency standards for the limited use category.
  - (v) The process by which applicators must demonstrate practical knowledge of the principles and practices of pest control and proper and effective use of restricted use pesticides covered by the limited use category based on the competency standards identified in paragraph (a)(5)(iv) of this section. This does not have to be accomplished by a written examination.
  - (vi) A description of the recertification standards for the limited use category and how those standards meet or exceed the standards prescribed by the Agency under § 171.107.
  - (vii) A description of the limited use certification credential. The credential must clearly state that the applicator is only authorized to purchase and use the specific restricted use pesticide(s) identified in that credential.
- (6) The Federal agency standards for certification examinations must meet or exceed the standards prescribed by the Agency under § 171.103(a)(2), including a description of any alternative identification that the Federal agency will authorize in addition to a valid, government-issued photo identification.
- (7) The Federal agency standards for the recertification of applicators of restricted use pesticides must meet or exceed those standards prescribed by the Agency under § 171.107.

- (8) The Federal agency standards for the direct supervision of noncertified applicators by certified private and commercial applicators of restricted use pesticides must meet or exceed those standards prescribed by the Agency under § 171.201.
  - (9) The Federal agency certification plan must describe the credentials or documents the Federal agency will issue to each certified applicator verifying certification of applicators.
  - (10) A Federal agency may waive any or all of the procedures specified in § 171.103, § 171.105, and § 171.107 of this part when certifying applicators in reliance on valid current certifications issued by another State, Tribal, or Federal agency under an EPA-approved certification plan. The Federal agency certification plan must explain whether, and if so, under what circumstances, the Federal agency will certify applicators based in whole or in part on their holding a valid current certification issued by another State, Tribe or Federal agency. Such certifications are subject to all of the conditions listed at § 171.303(a)(9).
- (b) *Contents of an application for EPA approval of a Federal agency plan for certification of applicators of restricted use pesticides.*
- (1) The application for Agency approval of a Federal agency certification plan must list and describe the categories of certification.
  - (2) The application for Agency approval of a Federal agency certification plan must contain satisfactory documentation that the Federal agency standards for certification of commercial applicators meet or exceed those standards prescribed by the Agency under §§ 171.101 and 171.103. Such a statement must include one of the following:
    - (i) A statement that the Federal agency has adopted the same standards for certification prescribed by the Agency under §§ 171.101 through 171.103.
    - (ii) A statement that the Federal agency has adopted its own standards that meet or exceed the standards for certification prescribed by the Agency under §§ 171.101 through 171.103. If the Federal agency selects this option, the application for Agency approval of a Federal agency certification plan must include all of the following:
      - (A) A list and detailed description of all the categories and subcategories to be used for certification of commercial applicators.
      - (B) A list and detailed description of all of the standards for certification of commercial applicators adopted by the Federal agency. Any additional categories or subcategories established by a Federal agency must be included in the application for Agency approval of a Federal agency plan and must clearly describe the standards the Federal agency will use to determine if the applicator has the necessary competency.
      - (C) A description of the Federal agency's certification examination standards and an explanation of how those meet or exceed the standards prescribed by the Agency under § 171.103(a)(2).
  - (3) The application for Agency approval of a Federal agency plan must contain satisfactory documentation that the Federal agency standards for recertification of commercial applicators of restricted use pesticides meet or exceed the standards for recertification prescribed by the Agency under § 171.107. Such documentation must include a statement that the Federal agency has

adopted its own standards that meet or exceed the standards for recertification prescribed by the Agency under § 171.107. The application for Agency approval of a Federal agency certification plan must include all of the following:

- (i) A list and detailed description of all the standards for recertification adopted by the Federal agency.
- (ii) The certification period, which may not exceed five years.
- (iii) If recertification is based upon written examination, a description of the Federal agency's process for reviewing, and updating as necessary, the written examination(s) and to ensure that the written examination(s) evaluate whether a commercial applicator demonstrates the level of competency required by § 171.103.
- (iv) If recertification is based upon continuing education, an explanation of how the quantity, content and quality of the Federal agency's continuing education program ensure that a commercial applicator continues to demonstrate the level of competency required by § 171.103 for commercial applicators, including but not limited to, all of the following:
  - (A) The quantity of continuing education required to maintain certification.
  - (B) The content that is covered by the continuing education program and how the Federal agency ensures the relevant content is covered.
  - (C) The process the Federal agency uses to approve continuing education training courses or events, including information about how the Federal agency ensures that any continuing education courses or events verify the commercial applicator's successful completion of the course or event.
  - (D) How the Federal agency ensures the ongoing quality of the continuing education program.
- (4) The application for Agency approval of a Federal agency certification plan must contain satisfactory documentation that the Federal agency standards for direct supervision of noncertified applicators by commercial applicators meet or exceed those standards prescribed by the Agency under § 171.201. Such documentation may include one or more of the following as applicable:
  - (i) A statement that the Federal agency has adopted the standards for direct supervision of noncertified applicators by commercial applicators prescribed by the Agency under § 171.201.
  - (ii) A statement that the Federal agency prohibits noncertified applicators from using restricted use pesticides under the direct supervision of commercial applicators.
  - (iii) A statement that the Federal agency has adopted standards for direct supervision of noncertified applicators by commercial applicators that meet or exceed the standards prescribed by the Agency under § 171.201 and an explanation of how the Federal agency standards meet or exceed the standards prescribed by the Agency under § 171.201.
- (5) The application for Agency approval of a Federal agency certification plan must meet or exceed all of the applicable requirements in § 171.303. However, in place of the legal authorities required in § 171.303(b)(7), the Federal agency may use administrative controls inherent in the employer-employee relationship to accomplish the objectives of § 171.303(b)(7). The application for Agency approval of a Federal agency certification plan must include a detailed description of how the Federal agency will exercise its administrative authority, where appropriate to deny, suspend or revoke certificates of employees who misuse pesticides, falsify records, or violate relevant

provisions of FIFRA. Similarly, the application for Agency approval of a Federal agency certification plan must include a commitment that the Federal agency will record and maintain for the period of at least two years routine operational records containing information on types, amounts, uses, dates, and places of application of restricted use pesticides and that such records will be available to State and Federal officials. Such recordkeeping requirements must require Federal agency employees certified as commercial applicators to record and maintain, at a minimum, all of the records specified in § 171.303(b)(7)(vi).

- (c) The application for Agency approval of a Federal agency certification plan must include a commitment by the Federal agency to submit an annual report to the Agency in a manner that the Agency requires that includes all of the following information:
  - (1) The numbers of new, recertified, and total commercial applicators certified in at least one certification category at the end of the last 12 month reporting period.
  - (2) For each commercial applicator certification category specified in § 171.101 or subcategory specified in the Federal agency certification plan, the numbers of new, recertified and total commercial applicators holding a valid certification in each of those categories at the end of the last 12 month reporting period.
  - (3) A description of any modifications made to the approved certification plan during the last 12 month reporting period that have not been previously evaluated under § 171.309(a)(3).
  - (4) A description of any proposed changes to the certification plan that may affect the certification program that the Federal agency anticipates making during the next reporting period.
  - (5) A summary of enforcement activities related to use of restricted use pesticides by applicators certified by the Federal agency during the last 12 month reporting period.
- (d) The application for Agency approval of a Federal agency certification plan must include a commitment by the Federal agency to submit any other reports reasonably required by the Agency in its oversight of the use of restricted use pesticides.
- (e) If applicators certified under the Federal agency plan will make any applications of restricted use pesticides in areas that are not subject to exclusive federal jurisdiction, the application for Agency approval of a Federal agency certification plan must meet all of the following additional requirements:
  - (1) The Federal agency plan must have a provision that affirms Federal agency certified applicators will comply with all applicable State and Tribal pesticide laws and regulations of the jurisdiction in which the restricted pesticide is being used when using restricted use pesticides areas that are not subject to exclusive federal jurisdiction, including any substantive State or Tribal standards in regard to qualifications for commercial applicator certification that exceed the Federal agency's standards.
  - (2) The Federal agency plan must have a provision for the Federal agency to notify the appropriate EPA Regional office and State or Tribal pesticide authority in the event of misuse or suspected misuse of a restricted use pesticide by a Federal agency employee and any pesticide exposure incident involving human or environmental harm that may have been caused by an application of a restricted use pesticide made by a Federal agency employee in an area not subject to exclusive federal jurisdiction.

- (3) The Federal agency plan must have a provision for the Federal agency to cooperate with the Agency and the State or Tribal pesticide authority in any investigation or enforcement action undertaken in connection with an application of a restricted use pesticide made by a Federal agency employee in an area not subject to exclusive federal jurisdiction.

### **§ 171.307 Certification of applicators in Indian country.**

All applicators of restricted use pesticides in Indian country must hold a certification valid in that area of Indian country, or be working under the direct supervision of a certified applicator whose certification is valid in that area of Indian country. An Indian Tribe may certify applicators of restricted use pesticides in Indian country only pursuant to a certification plan approved by the Agency that meets the requirements of paragraph (a) or (b) of this section. The Agency may implement a Federal certification plan, pursuant to paragraph (c) of this section and § 171.311, for an area of Indian country not covered by an approved plan.

- (a) An Indian Tribe may choose to allow persons holding currently valid certifications issued under one or more specified State, Tribal, or Federal agency certification plans to use restricted use pesticides within the Tribe's Indian country.
  - (1) A certification plan under paragraph (a) of this section must consist of a written agreement between the Tribe and the relevant EPA Region(s) that contains all of the following information:
    - (i) A detailed map or legal description of the area(s) of Indian country covered by the plan.
    - (ii) A listing of the State(s), Tribe(s) or Federal agency(ies) upon whose certifications the Tribe will rely.
    - (iii) A description of any Tribal law, regulation, or code relating to application of restricted use pesticides in the covered area of Indian country, including a citation to each applicable Tribal law, regulation, or code.
    - (iv) A description of the procedures and relevant authorities for carrying out compliance monitoring under and enforcement of the plan, including all of the following:
      - (A) A description of the Agency and Tribal roles and procedures for conducting inspections.
      - (B) A description of the Agency and Tribal roles and procedures for handling case development and enforcement actions and actions on certifications, including procedures for exchange of information.
      - (C) A description of the Agency and Tribal roles and procedures for handling complaint referrals.
    - (v) A description and copy of any separate agreements relevant to administering the certification plan and carrying out related compliance monitoring and enforcement activities. The description shall include a listing of all parties involved in each separate agreement and the respective roles, responsibilities, and relevant authorities of those parties.
  - (2) To the extent that an Indian Tribe is precluded from exercising criminal enforcement authority, the Federal government will exercise primary criminal enforcement authority in regard to a certification plan under paragraph (a) of this section. The Tribe and the relevant EPA Region(s) shall develop a procedure whereby the Tribe will provide potential investigative leads to EPA and/or other appropriate Federal agencies in an appropriate and timely manner. This procedure shall encompass,

at a minimum, all circumstances in which the Tribe is precluded from exercising relevant criminal enforcement authority. This procedure shall be included as part of the agreement between the Tribe and relevant EPA Region(s) described in paragraph (a)(1) of this section.

(3) A plan for the certification of applicators under paragraph (a) of this section shall not be effective until the agreement between the Tribe and the relevant EPA Region(s) has been signed by the Tribe and the appropriate EPA Regional Administrator(s).

(b) An Indian Tribe may choose to develop its own certification plan for certifying private and commercial applicators to use or supervise the use of restricted use pesticides.

(1) A certification plan under paragraph (b) of this section shall consist of a written plan submitted by the Tribe to the Agency for approval that includes all of the following information:

(i) A detailed map or legal description of the area(s) of Indian country covered by the plan.

(ii) A demonstration that the plan meets all requirements of § 171.303 applicable to State plans, except that the Tribe's plan will not be required to meet the requirements of § 171.303(b)(6)(iii) with respect to provisions for criminal penalties, or any other requirement for assessing criminal penalties.

(2) To the extent that an Indian Tribe is precluded from exercising criminal enforcement authority, the Federal government will exercise primary criminal enforcement authority in regard to a certification plan under paragraph (b) of this section. The Tribe and the relevant EPA Region(s) shall develop a procedure whereby the Tribe will provide potential investigative leads to EPA and/or other appropriate Federal agencies in an appropriate and timely manner. This procedure shall encompass, at a minimum, all circumstances in which the Tribe is precluded from exercising relevant criminal enforcement authority and shall be described in a memorandum of agreement signed by the Tribe and the relevant EPA Regional Administrator(s).

(3) A plan for the certification of applicators under paragraph (b) of this section shall not be effective until the memorandum of agreement required under paragraph (b)(2) of this section has been signed by the Tribe and the relevant EPA Region(s) and the plan has been approved by the Agency.

(c) In any area of Indian country not covered by an approved certification plan, the Agency may, in consultation with the Tribe(s) affected, implement an EPA-administered certification plan under § 171.311 for certifying private and commercial applicators to use or supervise the use of restricted use pesticides.

(1) Prior to publishing a notice of a proposed EPA-administered certification plan for an area of Indian country in the FEDERAL REGISTER for review and comment under § 171.311(d)(3), the Agency shall notify the relevant Indian Tribe(s) of EPA's intent to propose the plan.

(2) The Agency will not implement an EPA-administered certification plan for any area of Indian country where, prior to the expiration of the notice and comment period provided under § 171.311(d)(3), the chairperson or equivalent elected leader of the relevant Tribe provides the Agency with a written statement of the Tribe's position that the plan should not be implemented.

### § 171.309 Modification and withdrawal of approval of certification plans.

(a) *Modifications to approved certification plans.* A State, Tribe, or Federal agency may make modifications to its approved certification plan, provided that all of the following conditions are met:

- (1) **Determination of plan compliance.** Before modifying an approved certification plan, the State, Tribe, or Federal agency must determine that the proposed modifications will not impair the certification plan's compliance with the requirements of this part or any other Federal laws or regulations.
  - (2) **Requirement for Agency notification.** The State, Tribe, or Federal agency must notify the Agency of any plan modifications within 90 days after the final State, Tribal, or Federal agency plan modifications become effective or when it submits its required annual report to the Agency, whichever occurs first.
  - (3) **Additional requirements for substantial modifications to approved certification plans.** Before making any substantial modifications to an approved certification plan, the State, Tribe or Federal agency must consult with the Agency and obtain Agency approval of the proposed modifications. Substantial modifications include the following:
    - (i) Addition or deletion of a mechanism for certification and/or recertification.
    - (ii) Establishment of a new private applicator category, private applicator subcategory, commercial applicator category, or commercial applicator subcategory.
    - (iii) Any other changes that the Agency has notified the State, Tribal or Federal agency that the Agency considers to be substantial modifications.
  - (4) **Agency decision.** The Agency shall make a written determination regarding the modified certification plan's compliance with the requirements of this part. The Agency shall give the certifying authority submitting a certification plan notice and opportunity for an informal hearing before rejecting the plan. The Agency's approval may be subject to reasonable terms and conditions. If the Agency approves modifications to a certification plan, that approval shall specify a schedule for implementation of the modified certification plan.
- (b) **Withdrawal of approval.** If at any time the Agency determines that a State, Tribal, or Federal agency certification plan does not comply with the requirements of this part or any other Federal laws or regulations, or that a State, Tribal, or Federal agency is not administering the certification plan as approved under this part, or that a State is not carrying out a program adequate to ensure compliance with FIFRA section 19(f), the Agency may withdraw approval of the certification plan. Before withdrawing approval of a certification plan, the Agency will notify the State, Tribal, or Federal agency and provide the opportunity for an informal hearing. If appropriate, the Agency may allow the State, Tribe, or Federal agency a reasonable time, not to exceed 90 days, to take corrective action.

#### **§ 171.311 EPA-administered applicator certification programs.**

- (a) **Applicability.** This section applies in any State or area of Indian country where there is no approved State or Tribal certification plan in effect.
- (b) **Certification requirement.** In any State or area of Indian country where EPA administers a certification plan, any person who uses or supervises the use of any restricted use pesticide must meet one of the following criteria:
  - (1) A commercial applicator must be certified in each category and subcategory, if any, as described in the EPA-administered plan, for which the applicator is applying or supervising the application of restricted use pesticides.



- (2) A private applicator must be certified in each category and subcategory, if any, as described in the EPA-administered plan, for which the applicator is applying or supervising the application of restricted use pesticides.
- (3) A noncertified applicator may only use a restricted use pesticide under the direct supervision of an applicator certified under the EPA-administered plan, in accordance with the requirements in § 171.201, and only for uses in categories authorized by that certified applicator's certification.

(c) ***Implementation of EPA-administered plans in States.***

- (1) In any State where this section is applicable, the Agency, in consultation with the Governor, may implement an EPA-administered plan for the certification of applicators of restricted use pesticides.
- (2) Such a plan will meet the applicable requirements of § 171.303. Prior to the implementation of the plan, the Agency will publish in the FEDERAL REGISTER for review and comment a summary of the proposed EPA-administered plan for the certification of applicators and will generally make available copies of the proposed plan within the State. The summary will include all of the following:
  - (i) An outline of the proposed procedures and requirements for private and commercial applicator certification and recertification.
  - (ii) A description of the proposed categories and subcategories for certification.
  - (iii) A description of any proposed conditions for the recognition of State, Tribal, or Federal agency certifications.
  - (iv) An outline of the proposed arrangements for coordination and communication between the Agency and the State regarding applicator certifications and pesticide compliance monitoring and enforcement.

(d) ***Implementation of EPA-administered plans in Indian country.***

- (1) In any area of Indian country where this section is applicable and consistent with the provisions of § 171.307(c), the Agency, in consultation with the appropriate Indian Tribe(s), may implement a plan for the certification of applicators of restricted use pesticides.
- (2) An EPA-administered plan may be implemented in the Indian country of an individual Tribe or multiple Tribes located within a specified geographic area.
- (3) Such a plan will meet the applicable requirements of § 171.303 and § 171.307(c). Prior to the implementation of the plan, the Agency will publish in the FEDERAL REGISTER for review and comment a summary of the proposed EPA-administered plan for the certification of applicators and will generally make available copies of the proposed plan within the area(s) of Indian country to be covered by the proposed plan. The summary will include all of the following:
  - (i) A description of the area(s) of Indian country to be covered by the proposed plan.
  - (ii) An outline of the proposed procedures and requirements for private and commercial applicator certification and recertification.
  - (iii) A description of the proposed categories and subcategories for certification.
  - (iv) A description of any proposed conditions for the recognition of State, Tribal, or Federal agency certifications.

- (v) An outline of the proposed arrangements for coordination and communication between the Agency and the relevant Tribe(s) regarding applicator certifications and pesticide compliance monitoring and enforcement.

(e) *Denial, suspension, modification, or revocation of a certification.*

- (1) The Agency may suspend all or part of a certified applicator's certification issued under an EPA-administered plan or, after opportunity for a hearing, may deny issuance of, or revoke or modify, an applicator's certification issued under an EPA-administered plan, if the Agency finds that the applicator has been convicted under FIFRA section 14(b), has been subject to a final order imposing a civil penalty under FIFRA section 14(a), or has committed any of the following acts:
  - (i) Used any registered pesticide in a manner inconsistent with its labeling.
  - (ii) Made available for use, or used, any registered pesticide classified for restricted use other than in accordance with FIFRA section 3(d) and any regulations promulgated thereunder.
  - (iii) Refused to keep and maintain any records required pursuant to this section.
  - (iv) Made false or fraudulent records, invoices or reports.
  - (v) Failed to comply with any limitations or restrictions on a valid current certificate.
  - (vi) Violated any other provision of FIFRA and the regulations promulgated thereunder.
  - (vii) Allowed a noncertified applicator to use a restricted use pesticide in a manner inconsistent with the requirements in § 171.201.
  - (viii) Violated any provision of a State, Tribal or Federal agency certification plan or its associated laws or regulations.
- (2) If the Agency intends to deny, revoke, or modify an applicator's certification, the Agency will:
  - (i) Notify the applicator of all of the following:
    - (A) The legal and factual ground(s) upon which the denial, revocation, or modification is based.
    - (B) The time period during which the denial, revocation or modification is effective, whether permanent or otherwise.
    - (C) The conditions, if any, under which the applicator may become certified or recertified.
    - (D) Any additional conditions the Agency may impose.
  - (ii) Provide the applicator an opportunity to request an informal hearing prior to final Agency action to deny, revoke or modify the certification, and the opportunity to offer written statements of facts, explanations, comments, and arguments relevant to the proposed action.
- (3) If a hearing is requested by an applicator pursuant to paragraph (e)(2)(ii) of this section, the Agency will appoint an attorney in the Agency as Presiding Officer to conduct an informal hearing. No person shall serve as Presiding Officer if he or she has had any prior connection with the specific case.
- (4) The Presiding Officer appointed pursuant to paragraph (e)(3) of this section shall do all of the following:
  - (i) Conduct a fair, orderly and impartial hearing, without unnecessary delay.

- (ii) Provide such procedural opportunities as the Presiding Officer may deem necessary to a fair and impartial hearing.
  - (iii) Consider all relevant evidence, explanation, comment and argument properly submitted.
  - (iii) Promptly notify the parties of the final decision and order. Such an order is a final Agency action subject to judicial review in accordance with FIFRA section 16.
- (5) If the Agency determines that the public health, interest or welfare warrants immediate action to suspend the certified applicator's certification during the course of the procedures specified in paragraphs (e)(2) through (e)(4) of this section, the Agency will do all of the following:
- (i) Notify the certified applicator of the ground(s) upon which the suspension action is based.
  - (ii) Notify the certified applicator of the time period during which the suspension is effective.
  - (iii) Notify the certified applicator of the Agency's intent to revoke or modify the certification, as appropriate, in accord with paragraph (e)(2) of this section. If such revocation or modification notice has not previously been issued, it must be issued at the same time the suspension notice is issued.
- (6) In cases where the act constituting grounds for suspension of a certification is neither willful nor contrary to the public interest, health, or safety, the certified applicator may have additional procedural rights under 5 U.S.C. 558(c).
- (7) Any notice, decision or order issued by the Agency under paragraph (e) of this section, and any documents and information considered by the Presiding Officer in issuing an order under paragraph (e)(4)(iv) of this section, shall be available to the public except as otherwise provided by FIFRA section 10 or by 40 CFR part 2. Any hearing at which oral testimony is presented shall be open to the public, except that the Presiding Officer may exclude the public to the extent necessary to allow presentation of information that may be entitled to confidentiality under FIFRA section 10 or under 40 CFR part 2.

(f) ***Restricted use pesticide retail dealer reporting and recordkeeping requirements, availability of records, and failure to comply.***

- (1) ***Reporting requirements.*** Each restricted use pesticide retail dealer in a State or area of Indian country where the Agency implements an EPA-administered plan must do both of the following:
- (i) Report to the Agency the business name by which the restricted use pesticide retail dealer operates and the name and business address of each of his or her dealerships. This report must be submitted to the appropriate EPA Regional office no later than 60 days after the EPA-administered plan becomes effective or 60 days after the date the person becomes a restricted use pesticide retail dealer in an area where an EPA-administered plan is in effect, whichever occurs later.
  - (ii) Submit revisions to the initial report to the appropriate EPA Regional office reflecting any name changes, additions or deletions of dealerships. Revisions must be submitted to the appropriate EPA Regional office within 10 days of the occurrence of such change, addition or deletion.
- (2) ***Recordkeeping requirement.*** A restricted use pesticide retail dealer is required to create and maintain records of each sale of restricted use pesticides to any person, excluding transactions solely between persons who are pesticide producers, registrants, wholesalers, or retail sellers, acting only in those capacities. Each restricted use pesticide retail dealer must maintain at each individual

dealership records of each transaction where a restricted use pesticide is distributed or sold by that dealership to any person. Records of each such transaction must be maintained for a period of two years after the date of the transaction and must include all of the following information:

- (i) Name and address of the residence or principal place of business of each certified applicator to whom the restricted use pesticide was distributed or sold, or if applicable, the name and address of the residence or principal place of business of each noncertified person to whom the restricted use pesticide was distributed or sold, for application by a certified applicator.
  - (ii) The certification number on the certification document presented to the seller evidencing the valid certification of the certified applicator authorized to purchase the restricted use pesticide, the State, Tribe or Federal agency that issued the certification document, the expiration date of the certified applicator's certification, and the category(ies) in which the certified applicator is certified relevant to the pesticide(s) sold.
  - (iii) The product name and EPA registration number of the restricted use pesticide(s) distributed or sold in the transaction, including any emergency exemption or State special local need registration number, if applicable.
  - (iv) The quantity of the restricted use pesticide(s) distributed or sold in the transaction.
  - (v) The date of the transaction.
- (3) **Availability of required records.** Each restricted use pesticide retail dealer must, upon request of any authorized officer or employee of the Agency, or other authorized agent or person duly designated by the Agency, furnish or permit such person at all reasonable times to have access to and copy all records required to be maintained under this section.
- (4) **Failure to comply.** Any person who fails to comply with the provisions of this section may be subject to civil or criminal sanctions, under FIFRA section 14, or 18 U.S.C. 1001.