§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.