

National: Supplement



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Acknowledgments

This guide is a supplement to the National Core Manual.

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Commercial and Noncommercial Recordkeeping Requirements

Recordkeeping is a very important part of pesticide application for personal safety and liability reasons. It is better to over document than under document. For example, if a form requires the start time and environmental conditions of the application, it's a good idea to include the end time and environmental conditions even if not asked for on the form, as conditions may change during application. Records must be kept for at least two years for private applicators and three years for commercial applicators and should be kept at the principal place of business. These records shall be completed within three (3) business days from the date of use. These records are to be available for inspection by a director, at a reasonable time during regular business hours at the physical location from which certified applicators use or supervise the use of pesticides or, upon request in writing. The director will be given a copy of all records within ten working days of a receipt of request. Refer to Section 2 CSR 70-25.120 - Contents of Records Maintained by Certified Commercial Applicators, Certified Noncommercial Applicators and Certified Public Operators for Missouri recordkeeping requirements. These requirements are derived from EPA Code of Federal Regulations 40 CFR 171.303(b)(7)(vi).

Records need to include the following for each application site:

- Name and license number of the certified applicator using or supervising the use of pesticides
- Name of the noncertified applicator, name and license number of the noncertified RUP applicator, or the name and license number of the pesticide technician using the pesticide(s), if applicable
- Application date, start time, and end time
- Name and address of the person requesting the pesticide use
- Address or brief description of the application site
- Size of the area treated (such as square feet, linear feet, acres, etc.) excluding indoor spot and crack and crevice applications
- The site, crop and variety name, commodity, or stored product to which pesticide was applied, if applicable
- Target pests
- Complete trade (manufacturer's brand) name(s) from the label(s) of the pesticide(s) used

- The United States EPA registration number(s) from the label(s) of the pesticide(s) used and the special local need registration number, if applicable. In lieu of recording the United States EPA registration number(s) for each pesticide use, documentation shall be maintained which provides incontrovertible correlation between each pesticide use and the United States EPA registration number(s) of the pesticide(s) used
- The pesticide(s) mixture rate, the total amount of mixture used, and the rate of application expressed in reasonable and understandable terms
- For pre-mixed, ready-to-use pesticide products, a reasonable estimate of the amount of pesticide used and the actual rate of application expressed in reasonable and understandable terms
- The air temperature, measured wind speed, and wind direction at the site of the outdoor pesticide applications, excluding applications of pesticides in general structural pest control and termite pest control within ten feet (10') of a building
- A written, signed, and dated request from the agricultural producer requesting the use of a lesser concentration of a pesticide than is provided on the pesticide label, if applicable

Additional records recommended for outdoor applications include:

- Restricted Entry Interval (REI).
- The site of the application (type of surface or area treated, such as fence line, lawn, type of trees or shrubs).
- Method of disposal of unused pesticide. Record if no unused pesticide remains.
- Method of application (spot treat with hand sprayer, broadcast with granular spreader, incorporated, etc.).

1. Applicators for a noncertified RUP applicator license shall complete one of the following options:
 - A. Pass a written examination based on the general standards of competence provided by 2 CSR 70-25.101(3); or
 - B. Complete a noncertified RUP applicator training program.
 1. Prior to employment of noncertified RUP applicators, certified applicators or their employers must have an approved training program. Approved training programs shall be valid until revoked.
 2. Noncertified RUP applicator training must be presented to noncertified RUP applicators either orally from written materials or audiovisually. The information must be presented in a manner that the noncertified RUP applicators can understand.
 3. The person conducting the training must be currently certified as an applicator of restricted use pesticides or employed as an educator with a land grant college or university or other public educational institutions or professional associations. The person conducting the training must also be present during the entire training program and must respond to the noncertified applicators' questions.
 4. The noncertified RUP 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 RUP applicator training materials must include, at a minimum, information regarding the following:
 1. Potential hazards from toxicity and exposure that pesticides present to noncertified applicators and their families, including acute and chronic effects, delayed effects, and sensitization.
 2. Routes through which pesticides can enter the body.
 3. Signs and symptoms of common types of pesticide poisoning.
 4. Emergency first aid for pesticide injuries or poisonings.
 5. Routine and emergency decontamination procedures, including emergency eye flushing techniques. Noncertified RUP applicators must be instructed that if pesticides are spilled or sprayed on the body, to immediately wash or to rinse off in the nearest water. Noncertified RUP applicators must also be instructed to wash or shower with soap and water, shampoo hair, and change into clean clothes as soon as possible.
 6. How and when to obtain emergency medical care.
 7. How and when to wash hands after working with pesticides, such as before eating, drinking, using chewing gum or tobacco, or using the toilet.
 8. Potential hazards from pesticide residues on clothing. Noncertified RUP applicators must also be instructed how to properly wash work clothes before wearing them again, such as washing them separately from other clothes. Applicators should remove work boots or shoes before entering their home, and remove work clothes and wash or shower before physical contact with children or family members.
 9. The risks of taking pesticides or pesticide containers used at work to a home.
 10. Potential hazards to children and pregnant women from pesticide exposure.
 11. How to report suspected pesticide use violations to the appropriate state or tribal agency responsible for pesticide enforcement.

12. 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.
 13. Need for, and appropriate use and removal of, personal protective equipment.
 14. How to recognize, prevent, and provide first aid treatment for heat related illness.
 15. Safety requirements for handling, transporting, storing, and disposing of pesticides, including general procedures for spill cleanup.
 16. Environmental concerns such as drift, runoff, and wildlife hazards.
 17. Restricted use pesticides may be used only by a certified applicator or by a noncertified RUP applicator working under the direct supervision of a certified applicator.
 18. The certified applicator's responsibility to provide each noncertified RUP 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 RUP applicator can understand.
 19. The certified applicator's responsibility to ensure that each noncertified RUP applicator has access to the applicable product labeling at all times during its use.
 20. 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 RUP 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.
 21. 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 RUP applicator, other persons, or the environment.
 22. The certified applicator's responsibility to ensure that a means to immediately communicate with the certified applicator is available to each noncertified RUP applicator using restricted use pesticides under his or her direct supervision.
5. Certified applicators must submit to the director a Notice of Training form provided by the director.
 6. Certified applicators shall keep and maintain a copy of the Notice of Training form and noncertified RUP applicator license for a period of two (2) years from the date the training was completed.

2. Additional training of noncertified RUP applicators is required annually. Training shall pertain to maintaining competence and meeting the needs of changing technology in the safe and proper use of pesticides.
 - A. Licensed noncertified RUP applicators must complete a training program meeting the requirements of paragraph 4 of subsection (B) of this rule
3. Reexamination of noncertified RUP applicators is required within three (3) years from initial licensure and within each subsequent three (3) year period.
 - A. Licensed noncertified RUP applicators must reexamine on the general standards of competence exam (CORE).
 - Missouri civil penalty is \$1,000 per violation instead of \$5,000 stated in this manual. However, section 281.120 of the Missouri Pesticide Use Act addresses civil penalties in instances where an herbicide is used on crops it is not labeled for and for those instances the civil penalty can be up to \$25,000 per violation.
 - The acronym MSDS (Material Safety Data Sheet) has been changed to SDS (Safety Data Sheet).
 - For more information about Missouri law changes please see Senate Bill No. 491.

Corrections to the Manual

- On page 170, disregard the extra number (25,434) in the area of a circle equation. That number is the number of square feet you would get if you incorrectly square the diameter of 90ft instead of the correct radius of 45ft.
- Table 7.1 on page 109 is based from S572 which has been updated several times since the initial publication. Check your spray tip manufacturer's website or catalog to make sure your spray tips are in compliance with the pesticide label.

Other Updates

- The review questions at the end of each chapter are to help you better understand the material and are not the actual questions on the exam.
- Missouri is one of the states that does not allow direct supervision of RUPs. All applicators will need at least a noncertified restricted use pesticide (RUP) applicator license.
- The use of a fumigant, and aerial applications including both aircraft and drones requires additional certification.
- Mandatory labeling language uses words such as "must," "shall," and "do not," and must be followed to be legally compliant. Advisory labeling language uses words such as "should," or "recommended" but is not legally required.
- A lot of new labels are requiring farmers to know which of the Hydrologic Soil Groups (HSG) their fields are. MU Extension Publication ipm1038 explains how to determine your hydrologic soil group(s). <https://extension.missouri.edu/publications/ipm1038>



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