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Worker Protection: An Employer's Guide to Worker Protection Standard Compliance

David E. Baker

Food Science and Engineering Unit, University of Missouri-Columbia

The U. S. Environmental Protection Agency (EPA) has issued final rules governing the protection of employees on farms and in forests, nurseries and greenhouses from occupational exposure to agricultural pesticides. The new Worker Protection Standard (WPS) covers two types of employees:

- Agricultural workers — those who perform tasks related to the cultivation and harvesting of agricultural plants.
- Pesticide handlers — those assigned to handle pesticides in any way, including mixing, loading, transferring or applying pesticides; handling open pesticide containers; acting as a flagger; or cleaning, adjusting, handling or repairing contaminated equipment.

Employers are responsible for making sure that workers and handlers receive the protections required by the pesticide labeling and the WPS. The standard defines two types of employers:

- Agricultural employers — those who employ or contract for service of workers, or who own or operate an establishment that employs workers.
- Handler employers — those who hire pesticide handlers or are self-employed as a pesticide handler. This includes commercial applicators and companies that supply crop advisory services on agricultural establishments.

Other terms you need to know

These additional definitions will help you determine whether you are affected by the Worker Protection Standard and will help you understand the standard.

- Agricultural plants — plants grown or maintained for commercial or research purposes. Examples: food, feed or fiber plants, trees, turf grass, flowers, shrubs, ornamentals and seedlings.
- Agricultural establishment — farm, forest, nursery or greenhouse.
- Farm — an operation other than a nursery or forest that produces agricultural plants outdoors.
- Forest — an operation that produces agricultural plants outdoors for wood fiber or timber products.
- Greenhouse — an operation that produces agricultural plants indoors in an area that is enclosed with nonporous covering and that is large enough to allow a person to enter. Examples: polyhouses, rhubarb houses, mushroom houses and caves, and traditional greenhouses. Malls,

atriums, conservatories, arboretums and office buildings that grow or maintain plants primarily for decorative or environmental benefits are not included.

- Nursery — an operation that produces agricultural plants outdoors for transplants to another location, or for flower or fern cuttings.

This publication provides a general overview of specific duties that employers of handlers and workers must perform to be in compliance with the standard. It is important to note that there is a difference between how workers and handlers are regulated under the WPS. Depending on the tasks being performed, you may need to provide the same employee (including yourself) with worker protection on some occasions and pesticide handler protection on other occasions.

The WPS covers pesticides that are used in the production of agricultural plants on farms and in forests, nurseries and greenhouses. Both general-use and restricted-use pesticides are covered by the WPS. The WPS does NOT cover pesticides applied:

- On rights-of-way.
- On pastures or rangeland.
- For control of vertebrate pests, such as rodents.
- As attractants or repellents in traps.
- On the harvested portions of plants or on harvested timber.
- For mosquito abatement, Mediterranean fruit fly eradication, or similar government-sponsored, wide-area public pest control programs.
- On livestock or other animals, or in or around animal premises.
- On plants grown for other than commercial or research purposes, which may include plants in habitations, home fruit and vegetable gardens and home greenhouses.
- On plants that are on golf courses and public or private lawns and grounds, or in parks, ornamental gardens or other noncrop areas, and those that are intended only for decorative or environmental benefit. (Pesticides used on sod farms, however, ARE covered by the WPS.)
- For structural pest control, such as termite control and wood preservation.
- For research uses of unregistered pesticides.
- By injecting directly into agricultural plants. Direct injection does not include chemigation, soil incorporating or soil injection.

Duties for all employers

Some of the WPS requirements with which employers must comply are really the same whether the employees are workers or handlers. Following are descriptions of some requirements.

Information at a central location. For the benefit of all employees, information must be posted at an easily seen, central location on each agricultural establishment (for example, on the farm, not at the retailer dealer or custom applicator location). This information includes:

- EPA Worker Protection Standard Safety Poster.
- Name, address and telephone number of the nearest emergency medical facility.
- Facts about each pesticide application, including product name, EPA registration number and active ingredients, location and description of the treated areas, time and date of the application, restricted-entry interval (REI) for the pesticide (REI is the time immediately after a pesticide application when entry into the treated area is limited). The REI is listed on the pesticide WPS labeling; either under the heading "Agricultural Use Requirements" in the "Directions for Use" section of the pesticide labeling, or next to the crop or application method to which it applies.

Workers and handlers must be told where the information is posted and allowed access to it. They also must be told of emergency facility information changes. Furthermore, the posted information must be kept legible and current.

Pesticide safety training. Unless the workers or handlers are certified applicators or possess a valid EPA-approved training card, they must be trained. Handlers must be trained before they begin work and at least once each five years. Workers, however, must be trained by the sixth day (16th day until October 1997) of entering an area that has been treated or has been under an REI in the last 30 days.

Training may be conducted by a certified applicator or by someone who has completed a train-the-trainer program. The training must be presented orally, from written materials or audiovisually. The training must be conducted in a manner and language that the employees can understand, using easily understood terms; the trainer must be able to respond to questions.

Decontamination site. Employers must provide a site where workers and handlers can wash pesticides and residue from their hands and body. A decontamination site should supply:

- Enough water for routine and emergency whole-body washing and for eye flushing.
- Plenty of soap and single-use towels.
- A clean change of coveralls for use by handler (this is not required for workers).

Water for emergency eye flushes must be immediately available if the pesticide label calls for protective eye wear.

Employers also must provide water that is safe and cool enough for washing, eye flushing and drinking. Employers may not use tank-stored water that also is used for mixing pesticides.

A decontamination site must be within one-fourth mile of the employees' work site. If the work site is more than one-fourth mile from the nearest point of vehicular access, the decontamination site may be located at the nearest access point.

Employers must provide handlers with the previously mentioned supplies at each mixing site and at the place where personal protective equipment is removed at the end of a task. Worker decontamination sites may not be in areas being treated or under an REI. Handler decontamination sites may be in the treated area in which the handler is working, as long as the materials are stored in enclosed containers.

Employer information exchange

An agricultural employer must be informed when a pesticide is to be applied on his/her agricultural establishment by a commercial applicator. The agricultural employer is responsible for providing all WPS protections to his or her employees, including oral notification or posting, training, decontamination and emergency assistance. The commercial handler's employer must provide the agricultural employer with the following information:

- Location and description of area to be treated.
- Time and date of application.
- Product name, EPA registration number, active ingredients and REI.
- Whether both oral warnings and treated area posting are required on the product labeling.
- Entry restrictions and other safety requirements for treated areas.

Operators of agricultural establishments must make sure that the commercial pesticide applicator and his or her employer are aware of all areas on the establishment where pesticides will be applied and where an REI may be in effect while the commercial handler is on the establishment, and of any restrictions on entering those areas.

Emergency assistance. When there is any possibility that any handler or worker has been poisoned or injured by pesticides, an employer must promptly make transportation available to an appropriate medical facility. Additionally, upon request, the employer must provide to the victim and medical personnel the following information:

- The product name, EPA registration number and active ingredients.
- All first aid and medical information from the label.
- A description of how the pesticide was used.
- Information about the victim's exposure.

Worker employer's duties

Restrictions during application. In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers. Keep nursery workers at least 100 feet away from nursery areas being treated. Allow only handlers in greenhouses during pesticide application and until air concentration levels listed on the label are met or, if there is no such level, until the area has been fan-ventilated for at least two hours.

Restricted-entry intervals. As stated earlier, the REI is the time immediately after a pesticide application when entry into the treated area is limited. The interval is based on the most toxic active ingredient in the pesticide. The restricted-entry intervals should be listed on the label as follows:

	Signal word	Restricted-entry interval
Toxicity category I	Danger — Poison	48 hours
Toxicity category II	Warning	24 hours
Toxicity category III	Caution	12 hours

Other REIs may apply. Follow the REI on the label. During an REI, do not allow workers to enter a treated area or contact anything treated with the pesticide to which the REI applies.

Notice about applications. Employers must notify workers about pesticide applications on the establishment. In most cases, employers may choose between oral warnings or posted warning signs, but they must tell workers which warning method is in effect. For some pesticides, however, employers have to do both. Pesticides requiring both oral and posted warnings will state this on the label.

Posted warning signs must be:

- At least 14 x 16 inches in size.
- Posted 24 hours or less before application and during the REI, and removed before workers enter and within three days after the end of the REI.
- Posted so they can be seen at all normal entrances to treated areas, including entrances from labor camps.

Oral warnings must be delivered in a manner understood by workers, using an interpreter if necessary. Oral warnings must contain the following information:

- Location and description of the treated area.
- The length of the REI.
- Specific directions not to enter during the REI.

Handler employer's duties

Application restrictions and monitoring. Employers must not allow handlers to apply a pesticide so that it contacts anyone, directly or through drift, other than trained and properly equipped handlers. Employers also must make visual or voice contact at least every two hours with anyone handling pesticides labeled with a skull and crossbones (signal word: Danger — Poison). In addition, the employer must make sure that a trained handler equipped with label-specific personal protective equipment maintains constant visual or voice contact with any handler in a greenhouse who is performing fumigant-related tasks such as applications or air level monitoring.

Specific instructions for handlers. Employers must inform handlers of all pesticide labeling instructions for safe use before they perform any handling tasks. In addition, employers must keep pesticide labels accessible to each handler during the entire handling task and inform handlers of how to use any assigned handling equipment safely before they use it. When commercial handlers will be on an agricultural establishment, the employer must inform them beforehand of areas on the establishment where pesticides will be applied or where an REI will be in effect, and of any entry restrictions on these areas.

Equipment safety. Employers of handlers must make sure that equipment used for mixing, loading, transferring or applying pesticides is inspected and repaired or replaced as needed.

Only appropriately trained and equipped handlers may repair, clean or adjust pesticide handling equipment that contains pesticides or pesticide residues.

Personal protective equipment (PPE). Employers must provide handlers with the PPE required for the task by the pesticide labeling and be sure it is clean, in operating condition, worn and used correctly, inspected before each day of use, and repaired or replaced as needed. In addition, employers must ensure that respirators fit correctly, and they must take steps to prevent heat illness. Employers must provide handlers with a pesticide-free work area for storing personal clothing not in use, putting on PPE at the start of the task and taking off PPE at the end of each task. They must not allow any handler to wear or take home any PPE used for handling activities.

Cleaning PPE. The employer must make sure that:

- PPE is cleaned, inspected and repaired before each use.
- PPE is cleaned according to the manufacturer's instructions.
- PPE that is nonreusable or cannot be cleaned is disposed of properly.
- PPE is washed and stored separately from personal clothing.
- Clean PPE is dried appropriately.

Replacing respirator purifying elements. Dust/mist filters must be replaced when breathing becomes difficult, if the filter is damaged or torn, when respirator label or pesticide label requires it, or at the end of each day's work period in the absence of any other instructions or indications. Vapor-removing cartridges or canisters must be replaced when odor, taste or irritation is noticed, when respirator label or pesticide label requires it, or at the end of each day's work period in the absence of any other instructions or indications.

Disposal of PPE. Coveralls and other clothing that are heavily contaminated with an undiluted pesticide having a DANGER or WARNING signal word must be discarded. Federal, state and local laws must be adhered to when disposing of PPE that cannot be cleaned correctly.

Instructions for people who clean PPE. Employers must inform people who clean or launder PPE that it may be contaminated with pesticides. They must inform them of the potentially harmful effects of exposure to pesticides and show them how to protect themselves and how to clean PPE correctly.

Additional information

For more information about or assistance with Worker Protection Standard compliance, contact the Missouri Department of Agriculture, Bureau of Pesticide Control, P.O. Box 630, Jefferson City, MO 65201, or call (573) 751-2462; the University of Missouri, 205 Agricultural Engineering, Columbia, MO 65211, or call (573) 882-2731; or your local University Extension center.

To order, request G857, *Worker Protection: An Employer's Guide to Worker Protection Standard Compliance* (50 cents).



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