United States Environmental Protection Agency

How To Comply With the Worker Protection Standard For Agricultural Pesticides

What Employers Need To Know

Revised September 2005
Reprinted June 2006

THE IMPORTANCE OF THIS MANUAL

Regulatory agencies will enforce the requirements of the federal Worker Protection Standard (Code of Federal Regulations, Title 40, Part 170) when you use a pesticide product with labeling that refers to the Worker Protection Standard. If you do not comply with the Worker Protection Standard requirements, you will be in violation of federal law, since it is illegal to use a pesticide product in a manner inconsistent with its labeling. This manual provides information to help you comply with the requirements of the federal Worker Protection Standard (WPS) for agricultural pesticides, 40 CFR part 170, as published in 1992 and as amended in 1995, 1996, and 2004. EPA may issue additional guidance about the Worker Protection Standard and the Worker Protection Standard may be amended in the future. Check with your state or tribal agency responsible for pesticides for further information and updates.

This 2005 updated *Worker Protection Standard for Agricultural Pesticides — How To Comply Manual*, EPA 735-B-05-002 supersedes the 1993 version, EPA 735-B-93-001. Changes to the Worker Protection Standard have made the 1993 version obsolete and its continued use may lead an employer to be out of compliance with this regulation.

Additional Worker Protection Requirements in Your Area

Some states, tribes, or local governments with jurisdiction over pesticide enforcement may have additional worker protection requirements beyond the requirements described in the federal manual. Check with these agencies to obtain the information you need to comply with all applicable state, tribal, or local requirements.

Reproduction of the Manual

This manual may be reproduced, but if this manual is altered it may no longer provide the information to help employers comply with the requirements of the federal Worker Protection Standard.

Material Appended to the Manual

States, tribes, or local governments with jurisdiction over pesticide enforcement may elect to append additional worker protection requirements to the federal manual. These additions may only be appended at the end of the federal manual, after the index. Any additional material should be clearly identified as state, tribal, or local requirements.

WHO NEEDS TO READ THIS MANUAL?

You probably need to comply with the WPS if you are a:

- **Manager or owner** of a farm, forest, nursery, or greenhouse, ***or***
- **Labor contractor** for a farm, forest, nursery, or greenhouse, ***or***
- **Custom (for-hire) pesticide applicator** or **independent crop consultant** hired by a farm, forest, nursery, or greenhouse operator.

Most WPS provisions are protections that you as an **employer** must provide to **your own employees** and, in some instances, to **yourself**. The WPS covers two types of employers, which it defines according to the type of work their employees do:

Worker employer — If you hire or contract for people to do agricultural worker tasks, or if you do them yourself, the WPS considers you a worker employer. In general, agricultural workers are persons who (1) do hand labor tasks, such as weeding, planting, cultivating, and harvesting, or (2) do other tasks involved in the production of agricultural plants, such as moving or operating irrigation equipment (see p. 10 for complete definition). Units 3 and 4 of this manual describe the WPS protections you must provide to the agricultural workers you employ.

Handler employer — If you hire people to do pesticide handling tasks, or if you do them yourself, the WPS considers you a handler employer. In general, pesticide handlers are persons who mix, load, apply, or do other tasks that bring them into direct contact with pesticides (see p. 10 for complete definition). You must provide WPS protections to all your pesticide handler employees, whether or not they are certified as applicators of restricted-use pesticides. Units 3 and 5 of this manual describe the WPS protections you must provide to the pesticide handlers you employ.

- *The same employee may be a worker at some times and a handler at other times, depending on the type of task being performed.*
- *You may be both a handler employer and a worker employer, depending on the tasks that you and your employees do.*
- *Both general-use pesticides and restricted-use pesticides are covered by the WPS.*

ABOUT THIS MANUAL

This "How To Comply" manual will:

- Help you determine whether you are covered by the WPS,
- Give you detailed information on how to comply with the WPS requirements, including exceptions, restrictions, exemptions, options, and examples, and
- Provide you with a "Quick Reference Guide" — a simplified route to compliance that focuses on **maximum** requirements.

Important definitions and other special explanations are enclosed in shaded boxes. Reading them will help you better understand the WPS requirements and how they apply to you.

LABELING OVERRIDES WPS

If the pesticide product labeling contains specific instructions or requirements that conflict with the requirements of the Worker Protection Standard, **follow the instructions or requirements on the labeling**. For example, some pesticide labeling may:

- Prohibit any early-entry activity, including short-term and emergency tasks.
- Allow an early-entry activity that the WPS does not allow.
- Require the use of personal protective equipment even if closed systems are used for mixing and loading.

EXCEPTIONS TO LABELING STATEMENTS

The WPS allows certain exceptions to three specific pesticide labeling requirements: **personal protective equipment (p. 62)**, **restricted-entry intervals (p. 36)**, and **double notification (p. 33)** (the requirement on some labeling for both oral warnings **and** posting treated areas). The WPS statements in the Agricultural Use Requirements box on the product labeling will tell you that the WPS contains these exceptions.

Entry during a restricted-entry interval is permitted only in a few strictly limited circumstances; see Early Entry, p. 47

For more information about the Worker Protection Standard, or if you have questions or concerns about pesticides, contact the agency responsible for regulating pesticides in your area or the EPA Regional Office nearest you.

EPA Headquarters
EPA Office of Pesticide Programs
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460
www.epa.gov/pesticides

EPA National Agriculture Compliance Assistance Center
901 North 5th Street
Kansas City, KS 66101
(888) 663-2155
www.epa.gov/agriculture

EPA Office of Compliance
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460
(202) 564-2280
www.epa.gov/compliance

EPA Regions
Region 1 (MA, CT, RI, NH, VT, ME)
U.S. Environmental Protection Agency, Region 1
Pesticides Program (CPT)
Office of Ecosystem Protection
1 Congress St., Suite 1100
Boston, MA 02114-2023
(888) 372-7341
www.epa.gov/NE/eco/pest/

Region 2 (NY, NJ, PR, VI)
U.S. Environmental Protection Agency, Region 2
Pesticide Team
MS-500
2890 Woodbridge Ave., Building #5
Edison, NJ 08837
(908) 321-6769
www.epa.gov/pesticides/local/region2/index.htm

Region 3 (PA, MD, VA, WV, DE)
U.S. Environmental Protection Agency, Region 3
Waste and Chemicals Management Division
Mail Code 3WC00
1650 Arch St.
Philadelphia, PA 19103-2029
(800) 438-2474
www.epa.gov/reg3wcmd/pesticides.htm

Region 4 (GA, NC, SC, AL, MS, KY, FL, TN)
U.S. Environmental Protection Agency, Region 4
Pesticides Section
Sam Nunn Atlanta Federal Center
61 Forsyth St, SW
Atlanta, GA 30303-3104
(404) 562-8968
www.epa.gov/pesticides/local/region4/index.htm

Region 5 (IL, MI, MN, IN, OH, WI)
U.S. Environmental Protection Agency, Region 5
Pesticide Program Section (DT-8J)
77 West Jackson Blvd.
Chicago, IL 60604
(312) 353-2192
www.epa.gov/reg5rcra/ptb/pest/

Region 6 (TX, OK, AR, LA, NM)
U.S. Environmental Protection Agency, Region 6
Pesticides Program
6PD-P
1445 Ross Ave., Suite 1200
Dallas, TX 75202-2733
(800) 887-6063
www.epa.gov/earth1r6/6pd/pd p/pest.htm

Region 7 (MO, KS, IA, NE)
U.S. Environmental Protection Agency, Region 7
Pesticide Branch (PEST)
501 N. 5th St.
Kansas City, KS 66101
(913) 551-7033
www.epa.gov/Region7/pesticides/index.htm

Region 8 (CO, MT, ND, SD, UT, WY)
U.S. Environmental Protection Agency, Region 8
Pesticide Program (8P-P3T)
999 18th St., Suite 300
Denver, CO 80202-2466
(800) 227-8917
www.epa.gov/Region8/toxics_pesticides/pests/pesthome.html

Region 9 (CA, NV, AZ, HI, GU)
U.S. Environmental Protection Agency, Region 9
Pesticides Section (CED-5)
75 Hawthorne St.
San Francisco, CA 94105
(415) 947-8704
www.epa.gov/pesticides/local/region9/index.htm

Region 10 (WA, OR, ID, AK)
U.S. Environmental Protection Agency, Region 10
Pesticides Unit (ECO-084)
1200 Sixth Ave.
Seattle, WA 98101-1128
(206) 553-1918
yosemite.epa.gov/R10/ECOCOMM.NSF/webpage/Pesticides

Helpful Web Sites

EPA Office of Pesticide Programs Worker Protection Standard page:
www.epa.gov/oppfead1/safety/workers/workers.htm

EPA Office of Pesticide Programs Agricultural Worker Protection Standard 40 CFR Parts 156 & 170 Interpretive Policy Questions and Answers
www.epa.gov/pesticides/safety/workers/wpsinterpolicy.htm

EPA Ag Center Worker Protection Standard page:
www.epa.gov/agriculture/twor.html

EPA Ag Center Worker Protection Standard publications page:
www.epa.gov/agriculture/awor.html

Directory of State Regulators
aapco.ceris.purdue.edu/htm/directories.htm

State Pesticide Educators Directory
www.ipmcenters.org/contacts/PSEPdirectory.cfm

September 2005

United States Environmental Protection Agency

How To Comply With the Worker Protection Standard For Agricultural Pesticides

What Employers Need To Know

- Farms
- Forests
- Nurseries
- Greenhouses

CONTENTS

Unit 1 — Quick Reference Guide 1
Unit 2 — An Introduction to the Worker Protection Standard 5
What Is The Worker Protection Standard? 7
Does the Worker Protection Standard Apply to You? 9
Who Does the WPS Protect? 10
Which Pesticide Uses Are Covered? 12
Which Pesticide Uses Are Not Covered? 13
Who Must Protect Workers and Handlers? 14
Unit 3 — What Employers Must Do for Both Workers and Handlers ... 17
Information at a Central Location 19
Pesticide Safety Training 21
Decontamination Supplies 24
Employer Information Exchange 26
Emergency Assistance 27
Unit 4 — Further Requirements for Employers of Workers 29
Part A – Protections for All Agricultural Workers 31
Notice About Applications 33
Restrictions During and After Applications 36
Part B – Special Application Restrictions in Nurseries and Greenhouses 39
Special Application Restrictions in Nurseries 41
Special Application Restrictions in Greenhouses 43
Part C – Early Entry 45
Early-Entry Work Situations 47
General Protections for Early-Entry Workers 52
Training and Instructions for Early-Entry Workers 53
Decontamination Supplies for Early-Entry Workers 54
Personal Protective Equipment for Early-Entry Workers 56
UNIT 5—Further Requirements for Employers of Handlers 57
Restrictions During Applications and Monitoring Handlers 59
Specific Instructions for Handlers 60

Equipment Safety 61
Personal Protective Equipment (PPE) 62
Exceptions to PPE Requirements 66
Unit 6 — Owner Exemptions and Crop Advisors 69
Agricultural Owner Exemptions 71
Protections for Crop Advisors 74
APPENDIX A — Criteria for WPS Materials 81
APPENDIX B — Sample Forms, Fact Sheets and Checklists 91
Appendix C — Quick Reference Guide to the Worker Protection Standard 117
Index 125

UNIT 1
QUICK REFERENCE GUIDE

This 2-page Quick Reference Guide to the Worker Protection Standard lists the *maximum* WPS requirements. Fulfilling these maximum requirements help you comply, but it may cause you to do more than is required in some situations. If you want to look at exceptions or want more information or examples for certain provisions, refer to the page numbers listed in the Quick Reference Guide.

The Guide in this unit is presented on 2 pages to allow you to view all the requirements together. For a large-print version of the same text, see Appendix C.

QUICK REFERENCE GUIDE TO THE WORKER PROTECTION STANDARD (WPS) INCLUDING ALL REVISIONS THROUGH 2004

The WPS is a federal regulation designed to protect **agricultural workers** (people involved in the production of agricultural plants) and **pesticide handlers** (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides) (see p. 10). The guide on these two pages presents the *maximum* WPS requirements. It does not include exceptions that may permit you to do less or options that may involve different requirements. Each section below lists pages in this manual where you can find out about exceptions and options. For more information about your responsibilities, read pp. 9-15. There are some exemptions for owners of agricultural establishments and members of their immediate family (pp. 71-73).

DUTIES FOR *ALL* EMPLOYERS

Anti-Retaliation ..... (p. 15)
Do not retaliate against a worker or handler who attempts to comply with the WPS

Information at a Central Location ..... (pp. 19-20)
1. In an easily seen central location on each agricultural establishment, display close together:
   - EPA WPS safety poster,
   - name, address, and telephone number of the nearest emergency medical facility,
   - these facts about each pesticide application [from before each application begins until 30 days after the restricted-entry interval (REI)]:
     - product name, EPA registration number, and active ingredient(s),
     - location and description of treated area,
     - time and date of application, and REI.

2. Tell workers and handlers where the information is posted, and allow them access.
3. Tell them if emergency facility information changes and update the posted information.
4. Keep the posted information legible.

Pesticide Safety Training ..... (pp. 21-23)
Unless they possess a valid EPA-approved training card, train **handlers and workers** before they begin work and at least once each 5 years:
- use written and/or audiovisual materials,
- use EPA WPS handler training materials for training handlers,
- use EPA WPS worker training materials for training workers,
- have a certified applicator conduct the training orally and/or audiovisually in a manner the employees can understand, using easily understood terms, and respond to questions.

Decontamination Supplies ..... (pp. 24-25)
1. Establish accessible decontamination supplies located together within 1/4 mile of all workers and handlers. Supply:
   - enough water for routine and emergency whole-body washing and for eyeflushing,
   - plenty of soap and single-use towels,
   - a clean coverall.

2. Provide water that is safe and cool enough for washing, for eyeflushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides.
3. Provide **handlers** the same supplies where personal protective equipment (PPE) is removed at the end of a task.
4. Provide the same supplies at each mixing and loading site.
5. Make at least 1 pint eyeflush water immediately accessible to each **handler**.
6. Do not put **worker** decontamination supplies in areas being treated or under an REI.
7. In areas being treated, put decontamination supplies for **handlers** in enclosed containers.

Employer Information Exchange ..... (p. 26)
1. Before any application, commercial handler employers must make sure the operator of the agricultural establishment where a pesticide will be applied is aware of:
   - location and description of area to be treated,
   - time and date of application,
   - product name, EPA registration number, active ingredient(s), and REI,
   - whether the product label requires both oral warnings and treated area posting,
   - all other safety requirements on labeling for workers or other people.

2. Operators of agricultural establishments must make sure any commercial pesticide establishment operator they hire is aware of:
   - specific location and description of all areas on the agricultural establishment where pesticides will be applied or where an REI will be in effect while the commercial handler is on the establishment,
   - restrictions on entering those areas.

Emergency Assistance ..... (p. 27)
When any handler or worker may have been poisoned or injured by pesticides:
1. Promptly make transportation available to an appropriate medical facility.
2. Promptly provide to the victim and to medical personnel:
   - product name, EPA registration number, and active ingredient(s),
   - all first aid and medical information from label,
   - description of how the pesticide was used,
   - information about victim's exposure.

ADDITIONAL DUTIES FOR WORKER EMPLOYERS

Restrictions During Applications (p. 36)
1. In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers.
2. Keep nursery workers at least 100 feet away from nursery areas being treated.
3. Allow only handlers to be in a greenhouse:
   - during a pesticide application,
   - until labeling-listed air concentration level is met or, if no such level, until after 2 hours of ventilation with fans.

(Also see nursery restrictions and greenhouse restrictions) (pp 41-42, 43-45)

Restricted-Entry Intervals (REIs) (p. 36)
During any REI, do not allow **workers** to enter a treated area and contact anything treated with the pesticide to which the REI applies.
(Also see early entry by workers) (pp. 36-37, 47-56)

Notice About Applications (p. 33)
1. Orally warn workers **and** post treated areas if the pesticide labeling requires.
2. Otherwise, **either** orally warn workers or post entrances to treated areas. Tell workers which method is in effect.
3. Post all greenhouse applications.

Posted Warning Signs (p. 33)
1. Post legible 14" x 16" WPS-design signs just before application; keep posted during REI; remove before workers enter and within 3 days after the end of the REI.
2. Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

Oral Warnings (p. 35)
1. Before each application, tell workers who are on the establishment (in a manner they can understand):
   - location and description of treated area,
   - REI, and not to enter during REI.
2. Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

ADDITIONAL DUTIES FOR HANDLER EMPLOYERS

Application Restrictions and Monitoring ..... (p. 59)
1. Do not allow handlers to apply a pesticide so that it contacts, directly or through drift, anyone other than trained and PPE-equipped handlers.
2. Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.
3. Make sure a trained handler equipped with labeling-specified PPE maintains constant voice or visual contact with any handler in a greenhouse who is doing fumigant-related tasks, such as application or air-level monitoring.

Specific Instructions for Handlers ..... (p. 60)
1. Before handlers do any handling task, inform them, in a manner they can understand, of all pesticide labeling instructions for safe use.
2. Keep pesticide labeling accessible to each handler during entire handling task.
3. Before handlers use any assigned handling equipment, tell them how to use it safely.
4. When commercial handlers will be on an agricultural establishment, inform them beforehand of:
   - areas on the establishment where pesticides will be applied or where an REI will be in effect,
   - restrictions on entering those areas.

(The agricultural establishment operator must give you these facts.)

Equipment Safety ..... (p. 61)
1. Inspect pesticide handling equipment before each use, and repair or replace as needed.
2. Allow only appropriately trained and equipped handlers to repair, clean, or adjust pesticide equipment that contains pesticides or residues.

Personal Protective Equipment (PPE)..... (pp. 62-65)
(See exceptions to PPE) (pp. 66-67)

Duties Related to PPE ..... (p. 62)
1. Provide handlers with the PPE the pesticide labeling requires for the task, and be sure it is:
   - clean and in operating condition,
   - worn and used correctly,
   - inspected before each day of use,
   - repaired or replaced as needed.
2. Be sure respirators fit correctly.
3. Take steps to avoid heat illness.
4. Provide handlers a pesticide-free area for:
   - storing personal clothing not in use,
   - putting on PPE at start of task,
   - taking off PPE at end of task.
5. Do not allow used PPE to be worn home or taken home.

Care of PPE ..... (p. 62)
1. Store and wash used PPE separately from other clothing and laundry.
2. If PPE will be reused, clean it before each day of reuse, according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no other instructions, wash in detergent and hot water.
3. Dry the clean PPE before storing, or hang to dry.
4. Store clean PPE away from other clothing and away from pesticide areas.

Replacing Respirator Purifying Elements ..... (p. 63)
1. Replace dust/mist filters:
   - when breathing becomes difficult,
   - when filter is damaged or torn,
   - when respirator label or pesticide label requires (whichever is shorter), ***or***
   - at the end of day's work period, in the absence of any other instructions or indications.
2. Replace vapor-removing cartridges/canisters:
   - when odor/taste/irritation is noticed,
   - when respirator label or pesticide label requires (whichever is shorter), ***or***
   - at the end of day's work period, in the absence of any other instructions or indications.

Disposal of PPE ..... (p. 63)
1. Discard coveralls and other absorbent materials that are heavily contaminated with undiluted pesticide having a "DANGER" or "WARNING" signal word.
2. Follow federal, state, and local laws when disposing of PPE that cannot be cleaned correctly.

Instructions for People Who Clean PPE ..... (p. 63)
Inform people who clean or launder PPE:
   - that PPE may be contaminated with pesticides,
   - of the potentially harmful effects of exposure to pesticides,
   - how to protect themselves when handling PPE,
   - how to clean PPE correctly.

UNIT 2

AN INTRODUCTION TO THE WORKER PROTECTION STANDARD

What Is the Worker Protection Standard? 7

Does the Worker Protection Standard Apply to You? 9

Who Does the WPS Protect? 10

Which Pesticide Uses Are Covered? 12

Which Pesticide Uses Are Not Covered? 13

Who Must Protect Workers and Handlers? 14

WHAT IS THE WORKER PROTECTION STANDARD?

The Worker Protection Standard (WPS) is a regulation issued by the U.S. Environmental Protection Agency. It covers pesticides that are used in the production of agricultural plants on farms, forests, nurseries, and greenhouses. The WPS requires you to take steps to reduce the risk of pesticide-related illness and injury if you (1) use such pesticides, or (2) employ workers or pesticide handlers who are exposed to such pesticides.

If you are an agricultural pesticide user and/or an employer of agricultural workers or pesticide handlers, the WPS requires you to provide to your employees and, in some cases, to yourself and to others:

- information about exposure to pesticides,
- protections against exposures to pesticides, and
- ways to mitigate exposures to pesticides.

INFORMATION

To ensure that employees will be informed about exposure to pesticides, the WPS requires:

- **Pesticide safety training** — for workers and handlers,
- **Pesticide safety poster** — to be displayed for workers and handlers,
- **Access to labeling information** — for pesticide handlers and early-entry workers, and
- **Access to specific information** — centrally located application information of pesticide treatments on the establishment.

PROTECTION

To ensure that employees will be protected from exposures to pesticides, the WPS requires employers to:

- **prohibit handlers from applying a pesticide in a way that will expose workers or other persons**,
- **exclude workers from areas being treated** with pesticides,
- **exclude workers from areas that remain under a restricted-entry interval (REI)**, with narrow exceptions.
- **protect early-entry workers** who are doing permitted tasks in treated areas during an REI, including special instructions and duties related to correct use of PPE,
- **notify workers** about treated areas so they can avoid inadvertent exposures, and
- **protect handlers during handling tasks**, including monitoring while handling highly toxic pesticides, and duties related to correct use of PPE.

MITIGATION

To mitigate pesticide exposures that employees receive, the WPS requires:

- **Decontamination supplies** — providing handlers and workers an ample supply of water, soap, and towels for routine washing and emergency decontamination,
- **Emergency assistance** — making transportation available to a medical care facility if an agricultural worker or handler may have been poisoned or injured by a pesticide, and providing information about the pesticide(s) to which the person may have been exposed.

These key terms have very specific meanings in the WPS. Note that these definitions may be different from definitions found in other state and federal laws and regulations.

Terms You Need to Know

These definitions will help you determine whether you are affected by the Worker Protection Standard.

Agricultural plants: Plants grown or maintained for commercial or research purposes. Examples: food, feed, and fiber plants, trees, turfgrass, flowers, shrubs, ornamentals, and seedlings.

Farms: Operations, other than nurseries or forests, that produce agricultural plants outdoors.

Forests: Operations that produce agricultural plants outdoors for wood fiber or timber products.

Greenhouses: Operations that produce 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, mushroom houses and caves, and rhubarb houses, as well as traditional greenhouses. Malls, atriums, conservatories, arboretums, and office buildings that grow or maintain plants primarily for decorative or environmental benefits are **not** included.

Nurseries: Operations that produce agricultural plants outdoors for:

- transplants to another location, or
- flower or fern cuttings.

Examples: flowering and foliage plants or trees; tree seedlings; live Christmas trees; vegetable, fruit, and ornamental transplants; and turfgrass produced for sod.

DOES THE WORKER PROTECTION STANDARD APPLY TO YOU?

You need the information in this manual if:

- **You own or manage a farm, forest, nursery, or greenhouse where pesticides are used in the production of agricultural plants**.

Even if you are the owner of the farm, forest, nursery, or greenhouse and you or members of your family do all the work there, you are a "WPS employer." You must comply with ***some*** of the requirements described in this manual, such as restricted-entry intervals and personal protective equipment, and ***all*** the specific requirements listed in the pesticide labeling. See Agricultural Owner Exemptions, pp. 71-73.

- **You hire or contract for the services of agricultural workers** to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This includes labor contractors and others who contract with growers to supply agricultural laborers.
- **You operate a business in which you (or people you employ) apply pesticides** that are used for the production of agricultural plants on any farm, forest, nursery, or greenhouse.

Commercial pesticide handlers and their employees are included with respect to such pesticides even if the pesticide handling task (mixing, loading, disposal, etc.) takes place somewhere other than the farm, forest, nursery, or greenhouse — at the commercial handling establishment or an airport hangar, for example.

- **You operate a business in which you (or people you employ) perform tasks as a crop advisor** on any farm, forest, nursery, or greenhouse.

"Crop advisor" means any person who is assessing pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. Examples include crop consultants and scouts. For a description of WPS provisions for crop advisors, see pp. 74-80.

If you are in any of these categories, you must comply with the Environmental Protection Agency's Worker Protection Standard (40 CFR, part 170) including all revisions through 2004.

WHO DOES THE WPS PROTECT?

The WPS requires employers to take steps to protect two types of agricultural employees: **workers** and **pesticide handlers**. The terms "worker" and "pesticide handler" are defined very specifically in the WPS, and employers of persons who meet these definitions must comply with the WPS. Depending on the tasks being performed, you may need to provide the same employee with worker protections on some occasions and pesticide handler protections on other occasions.

Owners of agricultural establishments and members of their immediate family are exempt from many WPS requirements. See Agricultural Owner Exemptions pp. 71-73.

Under the WPS, you may be both a worker and an employer of workers.

WORKERS

A worker is anyone who: (1) is employed (including self-employed) for any type of compensation and (2) is doing tasks, such as harvesting, weeding, or watering, relating to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This term does ***not*** include persons who are employed by a commercial establishment to perform tasks as crop advisors (see Protections for Crop Advisors, pp. 74-80).

Under the WPS, you may be both a handler and an employer of handlers.

PESTICIDE HANDLERS

A pesticide handler is anyone who: (1) is employed (including self-employed) for any type of compensation by an agricultural establishment or a commercial pesticide handling establishment that uses pesticides in the production of agricultural plants on a farm, forest, nursery, or greenhouse, and (2) is doing any of the following tasks:

- mixing, loading, transferring, or applying pesticides,
- handling opened containers of pesticides,
- acting as a flagger,
- cleaning, handling, adjusting, or repairing the parts of mixing, loading, or application equipment that may contain pesticide residues,
- assisting with the application of pesticides, including incorporating the pesticide into the soil after the application has occurred,
- entering a greenhouse or other enclosed area after application and before the inhalation exposure level listed on the product labeling has been reached or one of the WPS ventilation criteria have been met to:
  - operate ventilation equipment,
  - adjust or remove coverings, such as tarps, used in fumigation, or
  - check air concentration levels,
- entering a treated area outdoors after application of any soil fumigant to adjust or remove soil coverings, such as tarpaulins,
- performing tasks as a crop advisor:
  - during any pesticide application,
  - before any inhalation exposure level or ventilation criteria listed in the labeling has been reached or one of the WPS ventilation criteria has been met,
  - during any restricted-entry interval,
- disposing of pesticides or pesticide containers.

A person is ***not*** a handler if he or she only handles pesticide containers that have been emptied or cleaned according to instructions on pesticide product labeling or, if the labeling has no such instructions, have been triple-rinsed or cleaned by an equivalent method, such as pressure rinsing.

A person is ***not*** a handler if he or she (1) is ***only*** handling pesticide containers that are unopened ***and*** (2) is ***not***, at the same time, also doing any handling task (such as mixing or loading).

Handlers who are currently certified as applicators of restricted-use pesticides must be given all of the WPS handler protections, except that they need not receive WPS training.

Examples:

- You ***are*** a handler if you are loading unopened water-soluble packets into a mixing tank (because you are mixing and loading the pesticide).
- You are ***not*** a handler if you:
  - purchase pesticides and transport them unopened to an establishment.
  - carry unopened containers into a pesticide storage facility.
  - transport unopened containers to the site where they are to be mixed, loaded, or applied.

WHICH PESTICIDE USES ARE COVERED?

Most pesticide uses involved in the production of agricultural plants on a farm, forest, nursery, or greenhouse are covered by the WPS. This includes pesticides used on plants, and pesticides used on the soil or planting medium the plants are (or will be) grown in. Both general-use and restricted-use pesticides are covered by the WPS. You will know that the product is covered by the WPS if you see the following statement in the Directions for Use section of the pesticide labeling:

> **"AGRICULTURAL USE REQUIREMENTS**
> **Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, notification of workers, and restricted-entry intervals."**

If you are using a pesticide product with labeling that refers to the Worker Protection Standard, you must comply with the WPS. Otherwise, you will be in violation of federal law, since it is illegal to use a pesticide product in a manner inconsistent with its labeling.

WHICH PESTICIDE USES ARE NOT COVERED?

Some pesticide uses are not covered by the WPS, even when the "Agricultural Use Requirements" section is on the labeling. For example, if the pesticide labeling bears an "Agricultural Use Requirements" section, but the product also can be applied to rights-of-way, the rights-of-way use is not covered by the WPS. The WPS does ***not*** cover pesticides applied:

- on pastures or rangelands,
- for control of vertebrate pests such as rodents,
- as attractants or repellents in traps,
- on the portions of agricultural plants that have been harvested, such as in packing houses or on cut 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 in ornamental gardens, parks, golf courses, and public or private lawns and grounds and that are intended only for decorative or environmental benefit,
- in a manner not directly related to the production of agricultural plants, including, for example, control of vegetation along rights of way and in other noncrop areas and structural pest control, such as termite control and wood preservation,
- for research uses of unregistered pesticides.

*Pesticides used on sod farms **are** covered by the WPS.*

The WPS does not cover **workers** who are working in an area where a pesticide has been injected directly into the plants. However, people who **handle** pesticides that are to be applied by direct injection ***are*** covered by the WPS and must receive handler protections.

Direct injection does not include chemigation, soil incorporation, soil injection, hack and squirt, or frill and spray.

WHO MUST PROTECT WORKERS AND HANDLERS?

Employers are responsible for making sure that workers and handlers receive the protections required by the pesticide labeling and the WPS. The term "employer" has a special meaning in the WPS — you are an employer even though you are self-employed or use only members of your own family to do the work on your establishment.

The WPS has very specific definitions for two types of employers. WPS requirements apply only to employers who meet those definitions.

***Compensation** includes pay or wages, payment through services or goods, or barter of services or goods. If only one person receives payment for the joint work of several people, all are considered to be compensated, and are employees under the WPS. For example, under a piece-rate payment system for harvesting crops, even if payment is issued to the head of the family only, all of the family members who harvest crops are considered employees under the WPS.*

WPS EMPLOYER DEFINITIONS

Worker Employers:

Worker employers are people who:

- **employ or contract for the services of workers** (including themselves and members of their family) for any type of compensation to perform tasks related to the production of agricultural plants, or
- **own or operate** an agricultural establishment that uses such workers.

(See definition of "owner," p. 71.)

(See definition of "worker," p. 10.)

If you are a worker employer, you are responsible for providing your agricultural worker employees with the protections that the WPS requires for **workers**. (In the WPS itself, "worker employers" are called "agricultural employers.")

Handler Employers:

Handler employers are people who:

- **employ pesticide handlers** (including members of their family), for any type of compensation, or
- **are self-employed as pesticide handlers**.

(See definition of "pesticide handler," p. 10.)

If you are a handler employer, you are responsible for providing the pesticide handlers you employ with the protections that the WPS requires for **handlers**.

If You Employ Supervisors

You must:

- require them to make sure the workers and handlers they supervise comply with the WPS and receive its protections,
- give them enough information and directions about the WPS requirements to make sure that the workers and handlers they supervise receive the protections required by the WPS, and
- tell them who is responsible for all actions necessary for compliance with the WPS.

Even if you assign an employee to carry out the duties required by the WPS, **you are responsible** for making sure that all those duties are performed.

Retaliation Prohibited

You and your supervisors must not prevent or discourage any worker or handler from complying or attempting to comply with the WPS, and you must not fire or otherwise retaliate against any worker or handler who attempts to comply.

Penalties for Noncompliance

Agricultural and handler employers can be subject to civil and criminal penalties if found not complying with the federal Worker Protection Standard including all revisions through 2004. Failure to comply is a pesticide misuse violation — also known as use of a pesticide in a manner inconsistent with its labeling. Failure to comply with distinct acts of the WPS may result in independently assessable charges, even if the violative acts occurred during one pesticide application.

Currently, a federal civil penalty of up to $1,100 per violation may be assessed against private applicators (owners/operators of agricultural establishments) and other persons, and up to $6,500 per violation against commercial applicators (owners/operators of pesticide handling establishments) and other persons. Since Congress passed the Civil Monetary Penalty Inflation Adjustment Rule under the Debt Collection Improvement Act of 1996, civil penalties have been increased due to inflation and Congress' intent on creating a deterrence to noncompliance. The next civil penalty adjustment is expected to occur in 2009.

Criminal penalties can also be assessed if the WPS is knowingly violated. Federal fines include up to $1,000 per offense and 30 days in jail for private applicators, and up to $25,000 and 1 year in jail for commercial applicators.

Most states and tribes enforce under their own laws and regulations and have their own penalties, which may differ from federal penalties. Pesticide-related ordinances and associated penalties may also be imposed by local governments.

Labeling Overrides WPS

If the pesticide product labeling contains specific instructions or requirements that conflict with the requirements of the Worker Protection Standard, **follow the instructions or requirements on the labeling**. For example, some pesticide labeling may:

- prohibit any early-entry activity, including short-term and emergency tasks,
- allow an early-entry activity that the WPS does not allow,
- require the use of personal protective equipment even if closed systems are used for mixing and loading.

Exceptions to Labeling Statements

The WPS allows certain exceptions to three specific pesticide labeling requirements: **personal protective equipment (p. 62)**, **restricted-entry intervals (p. 36)**, and **double notification (p. 33)** (the requirement on some labeling for both oral warnings **and** posting treated areas). The WPS statements in the Agricultural Use Requirements box on the product labeling will tell you that the WPS contains these exceptions.

UNIT 3

WHAT EMPLOYERS MUST DO FOR BOTH WORKERS AND HANDLERS

Some WPS protections that employers must provide are nearly the same whether the employees are workers or handlers. This unit describes those requirements. Unit 4 describes additional requirements that employers must provide to their employees who are **workers**. Unit 5 describes additional requirements that employers must provide to their employees who are **handlers**. If you employ both workers and handlers, you will need to read all three of these units.

Information at a Central Location 19

Pesticide Safety Training 21

Decontamination Supplies 24

Employer Information Exchange 26

Emergency Assistance 27

INFORMATION AT A CENTRAL LOCATION

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must make sure that certain information, described below, is displayed at a central location whenever (1) any **worker** whom they employ is on their agricultural establishment, and (2) a pesticide is about to be applied or has been recently applied.

When agricultural establishments employ their own handlers, **handler employers** of such establishments must make sure that certain information, described below, is displayed at a central location whenever (1) any **handler** whom they employ is on their agricultural establishment, and (2) a pesticide has been recently applied. However, this information does not need to be displayed if only commercial (custom) pesticide handlers will be on the agricultural establishment.

***Commercial pesticide handler employers** do **not** need to display this information on the commercial pesticide handling establishment.*

SPECIFIC DUTIES

What Information Must Be Displayed?

The following three types of information must be displayed at a central location before a pesticide is applied:

1. **Pesticide-specific application information**, which must include: the location and description of the area to be treated, product name, EPA registration number, and active ingredient(s) of the pesticide, time and date the pesticide is scheduled to be applied, and restricted-entry interval for the pesticide.

2. **Emergency information**, which must include the name, telephone number and address of the nearest emergency medical facility.

3. **A pesticide safety poster**, which must be either the WPS safety poster developed by EPA or an equivalent poster that contains the concepts listed in Criteria for Pesticide Safety Poster, p. 83.

If the pesticide is not applied as scheduled, you must display the corrected time and date before the application takes place. If you are unable to make the correction before the application takes place, make it as soon as possible thereafter.

Where Must the Information Be Displayed?

Display the required information together in a central location on your agricultural establishment where it is readily accessible and can be easily seen and read by workers and handlers.

Exception

If the workplace is a forest, you may display the information **near** the forest. It must be in a location where workers and handlers can easily see and read it and where they are likely to gather or pass by. For example, you might display the information with the decontamination supplies or at an equipment storage site.

When Must the Information Be Displayed?

Display the information whenever **any worker or handler** you employ is on your agricultural establishment and, in the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. The information may be displayed continuously.

Earlier display: If you post WPS warning signs at treated areas, you must display pesticide-specific information at the central location no later than the time when the warning signs are posted.

Timing of Displaying Application Information

1. If workers or handlers are on your establishment at the start of an application, display the required pesticide-specific information **before the application takes place**.

2. If workers or handlers are ***not*** on your establishment at the start of an application, display pesticide-specific information **no later than the beginning of their first work period**.

3. Continue to display pesticide-specific information when workers or handlers are on your establishment **until:**

- at least 30 days after the restricted-entry interval expires, or
- at least 30 days after the end of the application, if there is no restricted-entry interval for the pesticide.

Other Responsibilities

1. Inform workers and handlers where the information is located.

2. Allow workers and handlers free, unhampered access to the information.

3. Be sure that the poster, emergency information, and application information remain legible during the time they are posted.

4. Promptly inform workers if there is any change in the information on emergency medical facilities and update the emergency information listed with the poster.

PESTICIDE SAFETY TRAINING

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Handler employers must make sure that **handlers** are trained, as described below, about general pesticide safety and about correct ways to handle pesticides.

Worker employers must make sure that **workers** have been trained, as described below, about general pesticide safety. This includes workers who enter treated areas on the farm, forest, nursery, or greenhouse during a restricted-entry interval to perform WPS-permitted tasks.

SPECIFIC DUTIES

Providing Basic Pesticide Safety Information to Untrained Workers

You must provide basic pesticide safety information to **untrained** workers before they enter treated areas on your establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. You must:

- provide the basic pesticide safety information in a manner that the untrained workers can understand, such as through written materials, oral communication, or other means,
- be able to verify that you provided the workers with the required basic pesticide safety information,
- provide the workers with at least the following information:
  - Pesticides may be on or in plants, soil, irrigation water, or drifting from nearby applications.
  - To prevent pesticides from entering your body:
    - Follow directions and/or signs about keeping out of treated or restricted areas,
    - Wash before eating, drinking, using chewing gum or tobacco, or using the toilet,
    - Wear work clothing that protects your body from pesticide residues,
    - Wash/shower with soap and water, shampoo hair, and put on clean clothes after work,
    - Wash work clothes separately from other clothes before wearing them again,
    - Wash immediately in the nearest clean water if pesticides are spilled or sprayed on your body and then —as soon as possible — shower, shampoo, and change into clean clothes.
    - You will receive more training within 5 days (or at least before your sixth day of work in pesticide-treated areas on this establishment).

Who Must Be Trained?

Each worker and handler must be trained. This requirement is met if the worker or handler:

1. has been trained within the last 5 years as a WPS handler or WPS worker, even if he or she has changed employers, *or*

2. is currently a certified applicator of restricted-use pesticides, *or*

3. is currently trained (as specified in EPA's certification and training regulations) as a handler who works under the supervision of a certified pesticide applicator.

Entry during a restricted-entry interval is permitted only in a few strictly limited circumstances. See Early Entry, p. 47.

How Soon Must They Be Trained?

1. **Handlers** must be trained before they do any handling task.

2. **Early-entry workers who will contact anything** that has been treated with the pesticide which caused the restricted-entry interval must be trained ***before*** they do any early-entry task on your establishment.

3. **Other agricultural workers, including early-entry workers who will *not* contact anything** that has been treated with the pesticide which caused the restricted-entry interval must be trained ***before*** they accumulate more than 5 separate days of entry into treated areas on your establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. These 5 days of entry need not be consecutive and are not limited to a growing season or calendar year.

   Note: You must provide **untrained** workers with basic pesticide safety information before they enter into treated areas on your establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect (see Providing Untrained Workers Basic Pesticide Safety Information, p. 21).

How Often Must Handlers and Workers Be Trained?

Handlers and workers must be trained at least once every 5 years, counting from the end of the month in which the previous training was completed.

Under the WPS, you may be both a handler and an employer of handlers.

Who Can Conduct Training?

1. The person who conducts **handler** training must:
   - currently be a certified applicator of restricted-use pesticides (in any category of certification),
     or
   - currently be designated as a trainer of certified pesticide applicators or pesticide handlers by a state, federal, or tribal agency having jurisdiction,
     or
   - have completed a pesticide safety train-the-trainer program approved by a state, federal, or tribal agency having jurisdiction.
2. The person who conducts **worker** training must:
   - currently be qualified to present handler training, as described immediately above,
     or
   - currently be trained as a WPS handler,
     or
   - have completed a pesticide safety train-the-trainer program approved by a state, federal, or tribal agency having jurisdiction.

How To Conduct Training

1. Anyone who conducts **worker** or **handler** training must:
   - use written and/or audiovisual materials,
   - present the training orally or audiovisually,
   - present the information in a manner that the trainees can understand, using a translator, if necessary,
   - respond to trainees' questions.
2. Anyone who conducts **worker** training must use non-technical terms.

Content of Training

The pesticide safety training materials for **workers and handlers** must be either:

- WPS training materials developed by EPA,
  or
- equivalent material that contains at least the concepts listed in Criteria for Worker and Handler Training, p. 87, 89.

Handlers who are currently certified as applicators of restricted-use pesticides must be given all of the WPS handler protections, except that they need not receive WPS training.

Verification of Training

If you make sure that a **handler** has an EPA-approved WPS handler training card or that a **worker** has an EPA-approved WPS worker or handler training card, the person does not have to be retrained ***unless*** you are aware, or have reason to know, that the card is invalid.

A WPS training card is invalid if you, the employer:

- are aware, or have reason to know, that the card was not issued according to the criteria in the WPS. For example, you know that the person who gave the training was ***not*** qualified to conduct WPS training, or that the content of the training did ***not*** meet the WPS criteria, or the trainee could ***not*** understand the training when it was given.
  or
- are aware, or have reason to know, that the card was not issued to the person who has the card.
  or
- know that the training for which the card was issued took place more than 5 years before the beginning of the current month (the card has expired).

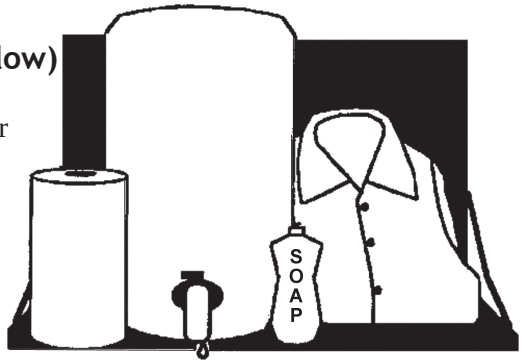
Avoiding Discrimination in Hiring

Even if you do not normally provide training in the particular language of a job applicant, or if a translator is not readily available, you are not exempted from your training responsibilities under the WPS.

Refusing to hire an applicant who cannot understand the language or languages in which you usually provide training may constitute discrimination on the basis of national origin. Such discrimination is actionable under Title VII of the Civil Rights Act of 1964 or the Immigration Reform and Control Act of 1986 (IRCA). If you want information about your responsibilities under Title VII of the Civil Rights Act of 1964, contact the U.S. Equal Employment Opportunity Commission. For details about IRCA anti-discrimination provisions, contact the Special Counsel for Immigration-Related Unfair Employment Practices, U.S. Department of Justice.

DECONTAMINATION SUPPLIES

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)



Handler employers must make sure that decontamination supplies (described below) for washing off pesticides and pesticide residues are provided to **handlers** while they are doing handling tasks.

Worker employers must make sure that decontamination supplies (described below) for washing off pesticide residues are provided to **workers** who are working in a pesticide-treated area and are doing tasks that involve contact with anything that has been treated with the pesticide, including soil, water, or surfaces of plants.

The WPS requires that decontamination supplies be provided regardless of the number of employees. There is **no** *exemption for employers with only a few employees.*

SPECIFIC DUTIES

When Must the Supplies Be Provided?

For **handlers**, for the duration of the handling task.

For **workers**, until 30 days after the end of any restricted-entry interval for that area. If there is no restricted-entry interval, until 30 days after the end of any application in that area.

Note: For ***early-entry workers who will contact*** *anything that has been treated with the pesticide, the decontamination supply requirements are different. See Decontamination Supplies for Early-Entry Workers, p. 54.*

Exception

When the only pesticides used in the treated area are products with a restricted-entry interval of 4 hours or less, the decontamination supplies must be provided until 7 days after the end of the restricted-entry interval. ***Note:*** When products have no restricted-entry interval listed on the label, the decontamination supplies must be provided until 30 days after the end of any application in that area.

For **early-entry workers who will contact** anything that has been treated with the pesticide, the decontamination supply requirements are different. See Decontamination Supplies for Early-Entry Workers, p. 54.

Supplies

Provide workers and handlers with:

1. **Water** — enough for:
   - routine washing, and
   - emergency eyeflushing.
     If the water is stored in a tank, the water ***must not*** *be used for mixing pesticides, unless the tank is equipped with correctly functioning anti-backsiphoning or check valves or other mechanisms (such as air gaps) that prevent pesticides from moving into the tank.*
2. **Soap and single use towels** — enough for workers' or handlers' needs.
3. **For handlers**, ***also*** provide:
   - **enough water for washing the entire body** in case of emergency, and
   - **clean change of clothes**, such as one-size-fits-all coveralls, to put on if the handlers' garments are contaminated and need to be removed right away.

Decontamination and emergency eyeflush water *must, at all times when it is available to workers or handlers, be of a quality and temperature that will not cause illness or injury when it contacts the skin or eyes or if it is swallowed.*

Recommendation: How Much Water Should Be Provided?
Obviously, running water meets the requirement. However, if it is not available, use the following guidelines.

- **Workers:** At least 1 gallon of water is recommended for each worker using the supplies. If you find that 1 gallon per worker is inadequate to last for the entire work period, provide more water or replenish the water as needed during the work period.
- **Handlers:** At least 3 gallons of water is recommended for each handler using the supplies. If you find that 3 gallons per handler is inadequate to last for the entire work period, provide more water or replenish the water as needed during the work period.

Location

1. All decontamination supplies for workers must be located together and all decontamination supplies for handlers must be located together. Decontamination supplies must be reasonably accessible to the workers and handlers. Handlers mixing pesticides must have decontamination supplies at the mixing area.

Exceptions:

- For a pilot who is applying pesticides aerially, the decontamination supplies must be at the aircraft's loading site or in the aircraft.
- For tasks performed more than 1/4 mile from the nearest point reachable by vehicles (cars, trucks, or tractors), the decontamination supplies may be at the access point. In this circumstance, clean water from springs, streams, lakes, or other sources may be used for decontamination if such water is more readily available than the water at the access point.

2. **Worker** decontamination supplies must ***not*** be in an area being treated with pesticides or in an area under a restricted-entry interval.

3. **Handler** decontamination supplies may be located in an area being treated with pesticides (or an area that has a restricted-entry interval in effect), **only if**:

- They are in the area where the handler is doing handling tasks,
  and
- The soap, single-use towels, and clean change of clothing are in closed containers,
  and
- The water is running tap water or is in a closed container.

Emergency Eyeflushing

Provide each **handler** with at least 1 pint of emergency eyeflush water when the pesticide labeling requires protective eyewear for the handling task being performed. The emergency eyeflush water must be **immediately accessible**. For example, it could be carried by the handler or be on a vehicle the handler is using. The water that is supplied for general decontamination may also be used as eyeflush water, if it is immediately accessible.

Decontamination After Handling Tasks

At the site where handlers remove their personal protective equipment (PPE), provide:

- soap,
- clean towels, and
- enough water to allow handlers to wash thoroughly after removing PPE.

EMPLOYER INFORMATION EXCHANGE

BASIC RESPONSIBILITIES (See Also Specific Duties Section Below)

Employers of commercial pesticide handlers must make sure that their customer — the operator of the farm, forest, nursery, or greenhouse — knows certain information, described below, about the pesticide before it is applied on the establishment.

Operators of farms, forests, nurseries, and greenhouses (agricultural employers) must make sure that, whenever a **commercial handler** will be doing pesticide handling tasks (including tasks as a crop advisor) on their establishment, the **commercial handler's employer knows specific information**, described below, concerning treated areas on the agricultural establishment.

If the pesticide is not applied as scheduled, you must display the corrected time and date before the application takes place. ***If you are unable to make the correction before the application takes place, make it as soon as possible thereafter.***

SPECIFIC DUTIES

Information for Establishment Operators

Commercial handler employers must inform their customer — the operator of the farm, forest, nursery, or greenhouse — about:

- the specific location and description of the area(s) on the agricultural establishment that are to be treated with a pesticide,
- time and date the pesticide is scheduled to be applied,
- product name, EPA registration number, and active ingredient(s),
- restricted-entry interval for the pesticide,
- whether the pesticide labeling requires both treated-area posting **and** oral notification, and
- any other specific requirements on the pesticide labeling concerning protection of workers and other persons during or after application.

Operators of agricultural establishments must have this information to protect their employees. See Information at a Central Location, pp. 19-20 and Notice about Applications, pp. 33-35.

Information for Commercial Handler Employers

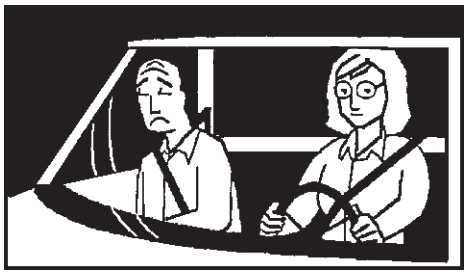
Operators of agricultural establishments must provide the following information to the commercial pesticide handler employer that they hire:

- Specific location and description of any areas on the agricultural establishment:
  - that may be treated with a pesticide or be under a restricted-entry interval while the commercial handler will be there, *and*
  - that the commercial handlers may be in (or walk within 1/4 mile of).
- Restrictions on entering those areas.

Operators of commercial pesticide handling establishments must have this information to protect their employees. See Specific Instructions for Handlers, p. 60.

EMERGENCY ASSISTANCE

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)



Worker employers must provide emergency assistance, described below, to anyone who is or has been employed as a **worker** on their farm, forest, nursery, or greenhouse if there is reason to believe that the worker has been poisoned or injured by a pesticide used on the agricultural establishment — for example, through application, spills, splashes, drift, or contact with pesticide residues.

Pesticide handler employers must provide emergency assistance, described below, to anyone who is or has been employed as a **handler** on their farm, forest, nursery, or greenhouse or on their commercial pesticide handling establishment, if there is reason to believe that the handler has been poisoned or injured by a pesticide as a result of that employment — for example, through application, spills, splashes, drift, handling tasks, or contact with pesticide residues.

SPECIFIC DUTIES

Emergency Transportation

1. Promptly make emergency transportation available to take the **worker** to an emergency medical facility able to provide treatment:
   - from the agricultural establishment, *or*
   - from a labor camp located on the establishment.
2. Promptly make emergency transportation available to take the **handler** to an emergency medical facility able to provide treatment:
   - from the agricultural establishment, *or*
   - from another handling site, such as a commercial handling establishment or an airport hangar.

Employers can "make transportation available" by:
- *taking the employee to the emergency medical facility,* or
- *calling an emergency vehicle, such as an ambulance,* or
- *making sure the employee has a ride to the medical facility with someone else.*

Emergency Information

Provide to the worker or handler or to treating medical personnel, promptly upon request, any obtainable information on:

- product name, EPA registration number, and active ingredients for any product(s) to which the person may have been exposed,
- antidote, first aid, statement of practical treatment and other medical or emergency information from the product labeling,
- description of the way the pesticide was being used, *and*
- circumstances of the worker's or handler's exposure to the pesticide.

UNIT 4
FURTHER REQUIREMENTS FOR EMPLOYERS OF WORKERS

Unit 3 described the WPS protections that employers must provide to both worker and handler employees. This unit describes the additional protections that employers are required to provide to their **worker** employees.

PART A – Protections for All Agricultural Workers 31

PART B - Special Application Restrictions in Nurseries and Greenhouses 39

PART C - Early Entry 45

PART A
PROTECTIONS FOR ALL AGRICULTURAL WORKERS

The requirements described in this part are **in addition** to the protections employers must provide to **both** workers and handlers (Unit 3).

Notice About Applications 33

Restrictions During and After Applications 36

NOTICE ABOUT APPLICATIONS

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Under most circumstances, **worker employers** must make sure that **workers** are notified about areas where pesticide applications are taking place or where restricted-entry intervals are in effect.

SPECIFIC DUTIES

Both Oral Warnings and Posted Signs

Some pesticide labels require you to notify workers ***both*** orally ***and*** with signs posted at entrances to the treated area. If both types of notification are required, the following statement will be in the "Directions for Use" section of the pesticide labeling under the heading "Agricultural Use Requirements":

> "**Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas**."

Notification on Farms, Forests, and Nurseries

Unless the pesticide labeling requires both types of notification, notify workers ***either*** orally ***or*** by the posting of warning signs at entrances to treated areas. You must inform workers which method of notification is being used.

Notification in Greenhouses

In greenhouses, **you must post all treated areas**, except as described below. If the pesticide labeling requires both types of notification, you must also notify workers orally.

Exceptions to Worker Notification

1. **Oral warnings** need ***not*** be given to:
   - **any** worker on your farm, forest, or nursery who will not be in the treated area, or walk within 1/4 mile of a treated area, during the pesticide application or while the restricted-entry interval is in effect,
   - **any** worker who will not be in your greenhouse during a pesticide application or while a restricted-entry interval is in effect there, ***or***
   - **any** worker who applied (or supervised the application of) the pesticide and is aware of all of the information required to be given in the oral warning.
2. **Treated area posting** is ***not*** required if:
   - **no** workers on your farm, forest, or nursery will be in the treated area, or walk within 1/4 mile of the treated area, during the pesticide application or while the restricted-entry interval is in effect,
   - **no** workers will be in the greenhouse during the pesticide application or while the restricted-entry interval is in effect there, ***or***
   - the **only** workers for whom you need to post applied (or supervised the application of) the pesticide and are aware of all of the information required to be given in the oral warning.

Signs meeting these requirements should be available commercially.

Posted Warning Signs

Use WPS-design signs when you post warnings at entrances to treated areas. For a detailed description, see Requirements for Warning Signs, p. 85.

1. **Location:**
   - **On farms, forests, and nurseries**, post the signs so they can be seen from all points where workers usually enter the treated area, including at least:
     – each access road,
     – each border with any labor camp adjacent to the treated area, and
     – each established walking route that enters the treated area.
     When there are no usual points of worker entry, post the signs in the corners of the treated area or in places where they will be most easily seen.
   - **In greenhouses**, post the signs so they can be seen from all points where workers usually enter the treated area, including doorways, aisles, and other walking routes. When there are no usual points of worker entry to the treated area, post the signs in the corners of the treated area or in places where they will be easily seen.
2. **Timing and Visibility of Warning Signs**:
   - Post signs 24 hours or less before the scheduled application of the pesticide.
   - Keep signs posted during application and throughout the restricted-entry interval (if any),
   - Remove the signs within 3 days after the end of the restricted-entry interval. If there is no restricted-entry interval for that application, remove the signs within 3 days after the end of the application.
   - Keep workers out during the entire time the signs are posted, (except for trained and equipped early-entry workers entering as permitted under WPS).
   - Keep signs visible and legible while they are posted.
3. **Posting Adjoining Areas**

When several adjoining areas are to be treated with pesticides on a rotating or sequential basis, you may post the entire area at the same time. Worker entry, except for early entry permitted by the WPS, is prohibited for the entire area while the signs are posted.

For a detailed description, see Requirements for Warning Signs, p. 85.

4. **Design and Size**
   - Each warning sign must look like this:

Exception:
As an option, you may use warning signs that replace the Spanish words with the same words in another language (other than English) that is read by the largest number of your workers who do not read English. The replacement sign must meet all other requirements for the WPS warning sign.

   - You may put **additional information** on the warning sign, such as the name of the pesticide or the date of application, if it does not lessen the impact of the sign or change the meaning of the required information. If you add the required information in other languages, the words must be translated correctly.

- The signs must be at least 14 inches by 16 inches, and the letters must be at least 1 inch high.

Exception:
On farms and forests, you may use smaller signs if the treated area is too small to accommodate 14- by 16-inch signs. For example, when a single plant needs to be posted, a smaller sign would be appropriate. In nurseries and greenhouses, you may, at any time, use a sign smaller than the standard size. Whenever a small sign is used, there are specific posting distances depending on the size of the lettering and symbol on the sign (see table below).

Signs with the words "DANGER" and "PELIGRO" in letters less than *7/16 inch in height* ***or*** *with any words in letters* less than *1/4 inch in height* ***or*** *with the circle graphic containing an upraised hand and a stern face* less than *1½ inches in diameter do not meet WPS sign requirements.*

Sign Size	Required Height in Inches			Maximum Distance Between Signs*
	Circle Graphic	Lettering for Words "DANGER" & "PELIGRO"	Lettering for Other Words	
7" x 8" (approx.)	3"	7/8"	1/2"	50 feet
4 1/2" x 5" (approx.)	1 1/2"	7/16"	1/4"	25 feet

* This distance requirement is for places where multiple signs are used to post a single treated area, such as a field or a greenhouse section. It does not apply where individual signs are used for separate small treatment areas (such as single potted plants in a greenhouse).

Oral Warnings to Workers

1. **Content**:

Oral warnings must include:

- the location and description of the treated area,
- the time during which entry is restricted, and
- instructions not to enter the treated area until the restricted-entry interval has expired.

2. **Communication**:

Provide oral warnings to workers in a manner that they can understand.

3. **Timing**:

- Workers who are on your establishment at the start of an application must be orally warned **before the application takes place**.
- Workers who are ***not*** on your establishment at the start of an application must be orally warned **at the beginning of their first work period** if (1) the application is still taking place or (2) the restricted-entry interval for the pesticide is in effect.

RESTRICTIONS DURING AND AFTER APPLICATIONS

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must take actions, described below, to protect **workers and other persons** during pesticide applications on agricultural establishments. **Worker employers** also must take actions, described below, to protect **workers** during restricted-entry intervals.

SPECIFIC DUTIES

During Applications

1. Keep everyone except appropriately trained and equipped handlers out of areas being treated with pesticides.

2. In nurseries and greenhouses, during some applications, also keep workers and other persons out of the area **immediately around** the area being treated. The size of this "keep-out zone" depends on the pesticide used and the application method. In some greenhouse situations, the greenhouse must be adequately ventilated before workers are allowed to enter (see Special Application Restrictions in Nurseries and Greenhouses, pp. 41 and 43).

Entering either enclosed or outdoor fumigated areas to ventilate, remove tarps or other coverings used in the fumigation, or to measure air concentration levels are ***handling tasks****, not early entry. Only appropriately trained and equipped handlers can do these tasks.*

During Restricted-Entry Intervals

In general, keep workers out of a treated area during the restricted-entry interval. This restriction has only two types of exceptions: (1) early entry **with no contact**, described below, and (2) early entry **with contact** for short-term, emergency, or specially excepted tasks (all described in Early Entry, p. 47). Note, however, that entry into treated areas during a restricted-entry interval is also allowed to perform handling (including crop advisor) tasks as long as the persons entering such areas are trained and equipped as pesticide handlers and receive all other applicable WPS handler protections.

RESTRICTED-ENTRY INTERVAL (REI)

The restricted-entry interval is the time immediately after a pesticide application when entry into the treated area is limited. Some pesticides have one REI, such as 12 hours, for all crops and uses. Other products have different REIs depending on the crop or method of application. When two (or more) pesticides are applied at the same time, and have different REIs, you must follow the longer interval.

Location of REIs on Labeling

The restricted-entry interval is listed on the pesticide labeling:

- 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.

Arid Area REIs

Some pesticide labeling require a different REI for arid areas. Labeling might say, for example, "72 hours in outdoor areas where average annual rainfall is less than 25 inches a year." You can get information on average annual rainfall for your area from any nearby weather bureau, such as one located at a local airport or one affiliated with the National Oceanographic and Atmospheric Administration.

NO-CONTACT EARLY ENTRY

If workers **will have no contact with anything that has been treated with the pesticide** to which the restricted-entry interval applies, you may permit them to enter pesticide-treated areas when the application is finished.

1. After any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, you may permit workers into a treated area during an REI if they will ***not*** **touch or be touched by** any pesticide residues, including:

- **on plants**, including both agricultural plants and weeds,
- **on or in soil** or planting medium,
- **in water**, such as irrigation water or water standing in drainage ditches or puddles,
- **in air**, if pesticide remains suspended after application, such as after fumigation or after a smoke, mist, fog, or aerosol application.

*Avoiding contact by using personal protective equipment does **not** qualify as no-contact early entry.*

No-contact early-entry workers do ***not*** have to be provided the special protections required in Early Entry, p. 47. However, they must be provided the following protections offered to other agricultural workers: information at a central location, pesticide safety training for workers, notification, restrictions during applications and during restricted-entry intervals, and emergency assistance. Decontamination supplies, however, need ***not*** be provided to no-contact early-entry workers.

2. The following are examples of situations where a worker would ***not*** be expected to contact pesticide residues in a treated area after sprays, dusts, and vapors have settled out of the air:

- The worker is wearing footwear and is walking in aisles or on roads, footpaths, or other pathways through the treated area where the plants or other treated surfaces cannot brush against the worker and cannot drop or drip pesticides onto the worker.
- The worker is in an open-cab vehicle in a treated area where the plants cannot brush against the worker and cannot drop or drip pesticide onto the worker.
- After a pesticide application that is incorporated or injected into the soil, the worker is doing tasks that do not involve touching or disrupting the soil subsurface.
- The worker is in an enclosed cab on a truck, tractor, or other vehicle.

PART B
SPECIAL APPLICATION RESTRICTIONS IN NURSERIES AND GREENHOUSES

The WPS requires additional restrictions during some pesticide applications in nurseries and greenhouses. This part describes those restrictions.

Special Application Restrictions in Nurseries 41

Special Application Restrictions in Greenhouses 43

SPECIAL APPLICATION RESTRICTIONS IN NURSERIES

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must make sure that, during certain nursery applications, **workers and other persons** do not enter treated areas on the nursery or, in some circumstances, do not enter areas that are near the treated area.

SPECIFIC DUTIES

Application Restrictions on Nurseries

During any application described in column A of Table I, do not allow or direct any person, other than an appropriately trained and equipped handler, to be in the areas on the nursery specified in column B. After the application is finished and during the restricted-entry interval:

- keep workers out of the treated area (the area to which the pesticide was directed),
- you may allow workers in the areas just outside the treated area that were off-limits during the application.

Table I Special Application Restrictions in Nurseries	
COLUMN A **While a Pesticide Is Being Applied:**	**COLUMN B** **Workers and Other Persons Are Prohibited in:**
1. (a) Applied: ■ Aerially, or ■ In an upward direction, or ■ Using a spray pressure greater than 150 pounds per square inch. ***or*** (b) Applied as a: ■ Fumigant, or ■ Smoke, or ■ Mist, or ■ Fog, or ■ Aerosol.	Pesticide-treated area plus 100 feet in all directions on the nursery.
2. (a) Applied downward using: ■ A height of greater than 12 inches from the planting medium; or ■ A fine spray; or ■ A spray pressure greater than 40 pounds per square inch and less than 150 pounds per square inch. ***or*** **(b)** Under circumstances other than (1)(a) or (1)(b) or (2)(a) above but for which the pesticide labeling requires the applicator to wear a respirator.	Pesticide-treated area plus 25 feet in all directions on the nursery.
3. In any other manner.	Pesticide-treated area.

SPECIAL APPLICATION RESTRICTIONS IN GREENHOUSES

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must make sure that **workers and other persons** do not enter specific areas within the greenhouse during — and, in some instances, after — certain greenhouse applications.

SPECIFIC DUTIES

Application Restrictions In Greenhouses

During any application described in column A of Table II, do not allow or dir person, other than an appropriately trained and equipped handler, to be in the specified in column B.

Ventilation Criteria for Greenhouses

1. After some types of pesticide applications listed in column A of Table II, you must make sure that adequate ventilation has occurred before you allow workers to enter the areas specified in column B. If column C indicates that ventilation restrictions apply, **make sure that one of the following ventilation criteria is met**:

- The concentration of the pesticide in the air is measured to be less than or equal to any inhalation exposure level required on the labeling.
- If no inhalation exposure level is listed on the labeling, keep workers out until after:
  - 10 air exchanges, or
  - 2 hours of ventilation using fans or other mechanical ventilating systems, or
  - 4 hours of ventilation using vents, windows or other passive ventilation, or
  - 11 hours with no ventilation followed by 1 hour of mechanical ventilation, or
  - 11 hours with no ventilation followed by 2 hours of passive ventilation, or
  - 24 hours with no ventilation.

2. **After ventilation criteria are met** and until the restricted entry interval expires:

- do not allow workers into the treated area (see Column D on Table II),
- you may allow workers to enter the areas just outside the treated area that were off-limits during the application.

Table II Special Application Restrictions in Greenhouses			
COLUMN A **When a Pesticide Is Applied:**	**COLUMN B** **Workers and Other Persons Are Prohibited in:**	**COLUMN C** **Until:**	**COLUMN D** **After the Expiration of Time in Column C Until the Restricted-Entry Interval Expires, the Entry-Restricted Area Is:**
1. As a fumigant.	Entire greenhouse plus any adjacent structure that cannot be sealed off from the treated area.	The ventilation criteria on the previous page are met.	No entry restrictions after criteria in column C are met.
2. As a ■ Smoke, or ■ Mist, or ■ Fog, or ■ Aerosol.	Entire enclosed area.	The ventilation criteria on the previous page are met.	Entire enclosed area is the treated area.
3. Under circumstances (other than in 1 or 2) for which the pesticide labeling requires the applicator to wear a respirator.	Entire enclosed area.	The ventilation criteria on the previous page are met.	Pesticide-treated area.
4. Other than in 1, 2, or 3, but: ■ From a height of greater than 12 in. from the planting medium, or ■ As a fine spray, or ■ Using a spray pressure greater than 40 pounds per square inch.	Pesticide-treated area plus 25 feet in all directions within the entire enclosed area.	Application is complete.	Pesticide-treated area.
5. In any other manner.	Pesticide-treated area.	Application is complete.	Pesticide-treated area.

PART C
EARLY ENTRY

The WPS allows entry into a treated area that remains under a restricted-entry interval only in a few narrow work situations. When early entry is permitted under the WPS, special protections must be given to the early-entry workers. This subsection describes those work situations and protections.

Early-Entry Work Situations 47

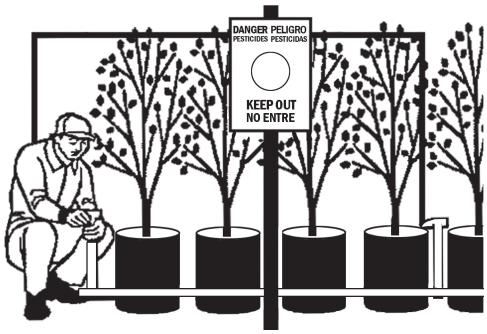
General Protections for Early-Entry Workers 52

Training and Instructions for Early-Entry Workers 53

Decontamination Supplies for Early-Entry Workers 54

Personal Protective Equipment for Early-Entry Workers 56

EARLY-ENTRY WORK SITUATIONS



BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must not allow their **workers** to enter treated areas where they will contact treated surfaces, except in a few very limited work situations.

Worker employers must provide special protections to any of their **workers** who do early-entry tasks involving contact with anything that has been treated with a pesticide, including soil, water, air, and surfaces of plants.

SPECIFIC DUTIES

Early entry involving contact with treated surfaces is permitted in only four work situations:

- **short-term tasks** that last less than 1 hour and do not involve hand labor,
- **limited-contact tasks** that could not have been foreseen, cannot be delayed, and do not involve hand labor,
- **emergency tasks** that take place because of an agricultural emergency, and
- **specific tasks** approved by EPA through a formal exception process.

Employers should make every effort to schedule pesticide applications and worker tasks in a way that will avoid the necessity of early entry of workers into treated areas.

Short-term Tasks With No Hand Labor

Workers may enter treated areas before the restricted-entry interval is over to do short-term jobs that do not involve hand labor, if provided with the protections and PPE required for early entry. Each worker must:

- Wait at least 4 hours after the pesticide application is completed before entering the treated area, ***and***
- Wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, ***and***
- Spend no more than 1 hour in a 24-hour period on short-term early-entry tasks.

For additional protections that must be provided to workers who do short-term early-entry tasks, see pages 52-56.

Hand Labor

Any agricultural activity performed by hand, or with hand tools, that might cause a worker to have substantial contact with surfaces (such as plants, plant parts, or soil) that may contain pesticide residues.

Examples of hand labor tasks include: harvesting, detasseling, thinning, weeding, topping, planting, girdling, caning, sucker removal, pruning, disbudding, roguing, and packing produce into containers in the field.

Limited-Contact Tasks

Tasks where early-entry workers' only contact with treated surfaces — including soil, water, surfaces of plants, crops, and irrigation equipment — is minimal and is limited to their feet, lower legs, hands, and forearms. Hand labor tasks are not limited-contact tasks.

Examples of limited-contact tasks include operating, moving, or repairing irrigation or watering equipment; operating or repairing weather monitoring and frost protection equipment; repairing greenhouse heating, air conditioning, and ventilation equipment; repairing non-application field equipment; maintaining and moving beehives.

Only appropriately trained and equipped pesticide handlers may operate, move, or repair the parts of chemigation equipment that may contain pesticide residues. Chemigation equipment is equipment used to apply pesticides with irrigation water.

For additional protections that must be provided to workers who do limited-contact early-entry tasks, see pages 52-56.

Limited-Contact Tasks That Could Not Have Been Foreseen, Cannot Be Delayed, and Involve No Hand Labor

__Could not have been foreseen__ means that when you made the pesticide application, you could not have anticipated the circumstances that led to the need to perform limited-contact tasks. For example, you do not qualify if you knew that you would need to enter the treated area to perform routine watering during the restricted-entry interval.

Early-entry workers may enter treated areas to do limited-contact tasks before the restricted-entry interval is over, provided **all the following conditions are met**:

- the early-entry tasks do **not** involve hand labor (see definition in the shaded box on p. 47), ***and***
- the early-entry tasks will not cause workers to have more than minimal contact with treated surfaces, ***and***
- contact with treated surfaces will be limited to the workers' feet, lower legs, hands, and forearms, ***and***
- the need for the early-entry could not have been foreseen, ***and***
- if the early-entry tasks are delayed, the delay would cause significant economic loss, and there are no alternative practices that would prevent the loss, ***and***
- the pesticide product's Agricultural Use Requirement box does **not** contain the following "double notification" statement: "Notify workers of the application by warning them orally and by posting warning signs at entrances to treated area," ***and***
- the pesticide product does **not** contain a restriction prohibiting any person, other than an appropriately trained and equipped handler, from entering during the restricted-entry interval.

You must provide each limited-contact early-entry worker with:

- either the personal protective equipment required on the pesticide labeling for early entry into treated areas *or* a standard set of PPE consisting of coveralls, chemical-resistant gloves, chemical-resistant footwear, and protective eyewear (and make sure the worker wears socks) ***and***

Note: You may eliminate the protective eyewear from the standard set of PPE in any treated area where the pesticide label does not require it for early entry.

- all the protections required for early-entry workers (see p. 56), ***and***
- oral or written notification, in a language that the workers can understand, that:
  - the establishment is relying on this exception to allow workers to enter treated areas to complete limited-contact tasks,
  - no entry is allowed for the first 4 hours after an application, and until applicable ventilation criteria have been met, and until any label-specified inhalation exposure level has been reached,
  - the time the worker spends in any treated area where a restricted-entry interval is in effect cannot exceed 8 hours in any 24-hour period.

You must make sure that each limited-contact early-entry worker:

- waits at least 4 hours after the pesticide application is completed before entering the treated area, ***and***
- waits at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, ***and***
- spends no more than 8 hours in a 24-hour period on limited-contact early-entry tasks.

Tasks During An Agricultural Emergency

Early-entry workers may enter treated areas before the restricted-entry interval is over to do tasks that are necessary because of an agricultural emergency, if provided with the protections and PPE required for early entry. Each worker must:

- do only those tasks relating to mitigating the emergency, ***and***
- wait at least 4 hours after the pesticide application is completed before entering the treated area, ***and***
- wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met.

For additional protections that must be provided to early-entry workers, see pp. 52-56.

1. Declaring a Potential Agricultural Emergency

A state, tribal, or federal agency having jurisdiction must declare that circumstances exist, have occurred, or are forecast that might cause an agricultural emergency where your establishment is located. Such circumstances may include, for example, flooding, hail, high winds, hurricane, tornado, freeze, or frost.

2. Agricultural Emergency on Your Establishment

Once such an agency has declared that circumstances might cause (or might already have caused) an agricultural emergency in your area, you must decide if an agricultural emergency actually exists for any treated areas on your establishment that remain under a restricted-entry interval. **All of the following conditions must be met** before you may let workers go into a treated area where a restricted-entry interval is in effect:

- You could not have anticipated the circumstances that led to the emergency when you made the pesticide application. For example, you do not qualify if weather forecasts **before** the application warned you that the emergency was imminent.
- You had no control over the circumstances that led to the emergency. For example, you do not qualify if you forgot to heat your greenhouse or over-watered with an irrigation system.
- Early entry is the only practice that will prevent or reduce a substantial economic loss involving the crop in that treated area. For example, you do not qualify if you have access to mechanical harvesting equipment that could harvest your crop in lieu of hand-harvesting.
- If early entry does not occur, the loss of profit will be greater than the loss that would be expected on the basis of experience and the variation in crop yields in previous years. The contribution of mismanagement cannot be considered in determining the loss.

EPA-Approved Exceptions

EPA has established a formal regulatory process for considering additional exceptions to the restrictions on entering treated areas during an REI. If any such exceptions are approved, EPA will publish them in the Federal Register and intends to inform state and tribal pesticide agencies, the Cooperative Extension Service, affected commodity, industry, and worker associations, and other interested parties. Check with them or the EPA office in your region for an updated list of approved exceptions and for information about the requirements and limitations of those exceptions.

Summary of Early Entry Requirements

WPS Provision or Requirement	Type of Early Entry			
	No Contact (see p. 37)	**Short-Term (see p. 47)**	**Limited Contact (see p. 48)**	**Agricultural Emergency (see p. 49)**
Entry during application (entry by workers during application is never acceptable)	no entry	no entry	no entry	no entry
Entry before inhalation exposure level or ventilation criteria have been met	no entry	no entry	no entry	no entry
Entry during first 4 hours after application is complete	entry permitted	no entry	no entry	no entry
Need for early entry could have been anticipated	entry permitted	entry permitted	no entry	no entry
Need for early entry could ***not*** have been anticipated	entry permitted	entry permitted	entry permitted (if other triggers are met, see p. 48)	entry permitted (if other triggers are met, see p. 49)
Entry is ***not*** an economic necessity	entry permitted	entry permitted	no entry	no entry
Entry is an economic necessity	entry permitted	entry permitted	entry permitted (if other triggers are met, see p. 48)	entry permitted (if other triggers are met, see p. 49)
Hours of entry permitted per day	no limit	1 hour	8 hours	no limit
Hand labor tasks permitted?	yes	no	no	yes
Pesticide safety training (worker) provided?	yes	yes (no 5-day grace period)	yes (no 5-day grace period)	yes (no 5-day grace period)
Information at central location provided?	yes	yes	yes	yes
Emergency assistance provided?	yes	yes	yes	yes
Notice about applications provided?	yes	yes	yes	yes
Restrictions during applications in effect?	yes	yes	yes	yes
Instructions related to personal protective equipment provided?	no	yes	yes	yes

Summary of Early Entry Requirements (Cont.)				
	Type of Early Entry			
WPS Provision or Requirement	**No Contact (see p. 37)**	**Short-Term (see p. 47)**	**Limited Contact (see p. 48)**	**Agricultural Emergency (see p. 49)**
Labeling information and instructions provided?	no	yes	yes	yes
Early entry decontamination supplies provided?	no	yes	yes	yes
Personal protective equipment provided, cleaned, and maintained?	no	yes	yes	yes

GENERAL PROTECTIONS FOR EARLY-ENTRY WORKERS

BASIC RESPONSIBILITIES (See Also Specific Duties Section Below)

Worker employers must provide several types of protections, described below, to their **early-entry workers** who contact anything that has been treated with a pesticide, including soil, water, air, and surfaces of plants.

SPECIFIC DUTIES

Protections Required By the Pesticide Labeling

Provide any protections required by the pesticide labeling for early-entry tasks.

Required Protections That Are the Same As For Other Workers

Provide protections that are required for all agricultural workers:

- Information at a central location (p. 19),
- Emergency assistance (p. 27),
- Restrictions during applications (p. 36), and
- Notice about applications (p. 33).

These requirements are described in detail in the next several pages.

Special Protections For Early-entry Workers

A few WPS requirements for early-entry workers differ from those for other agricultural workers. Provide special protections to early-entry workers in the following areas:

- Training and instructions,
- Decontamination supplies, and
- Personal protective equipment.

TRAINING AND INSTRUCTIONS FOR EARLY-ENTRY WORKERS

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must make sure that each of their **early-entry workers** is currently trained as a WPS worker and, in addition, receives specific information and instructions, described below.

SPECIFIC DUTIES

Training

Make sure that each early-entry worker is currently trained as a WPS worker (see requirements on p. 21) ***before*** entering a treated area on the agricultural establishment during a restricted-entry interval.

The 5-day grace period for training that applies to other agricultural workers does not apply to early-entry workers.

Instructions Related to Personal Protective Equipment (PPE)

Instruct early-entry workers, in a manner they can understand:

- how to put on, use, and take off early-entry PPE correctly,
- about the importance of washing thoroughly after removing PPE, and
- how to prevent, recognize, and give correct first aid for heat illness (too much heat stress). For more information on heat stress, see chart in Appendix B, p 115.

For definitions of PPE, see page 64.

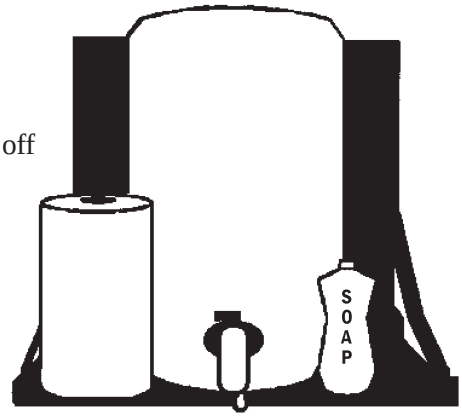
Labeling Information and Instructions

Inform early-entry workers, in a manner they can understand, about the safety information and instructions on the labeling of the pesticide(s) to which the REI applies, including:

- human hazard statements and precautions,
- first aid,
- signs and symptoms of poisoning,
- PPE required for early entry, and
- any other precautions or instructions related to safe use or early entry.

Option: You may allow workers who will do early-entry tasks to read the labeling themselves, if they are able to read and understand it.

DECONTAMINATION SUPPLIES FOR EARLY-ENTRY WORKERS



BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must provide their **early-entry workers** with decontamination supplies for washing off pesticides and pesticide residues.

SPECIFIC DUTIES

Supplies

Provide early-entry workers with:

1. **Water** — enough for:
   - routine washing, and
   - emergency eyeflushing.

   If the water is stored in a tank, the water ***must not*** be used for mixing pesticides, unless the tank is equipped with correctly functioning antibacksiphoning or check valves or other mechanisms (such as air gaps) that prevent pesticides from moving into the tank.
2. **Soap and single use towels** — enough for the needs of early-entry workers.

Decontamination and emergency eyeflush water *must, at all times when it is available to early-entry workers, be of a quality and temperature that will not cause illness or injury when it contacts the skin or eyes or if it is swallowed.*

Recommendation: How Much Water Should Be Provided?

Obviously, running water meets the requirement. However, if it is not available, use the following guidelines.

- **Early-Entry Workers:** At least 1 gallon of water is recommended for each early-entry worker using the supplies. If you find that 1 gallon per early-entry worker is inadequate to last for the entire work period, provide more water or replenish the water as needed during the work period.

Location

Make sure:

1. The decontamination supplies are ***not*** in an area being treated with pesticides.

2. The decontamination supplies are ***not*** in an area under a restricted-entry interval, ***unless*** that location is necessary for the supplies to be reasonably accessible to early-entry workers.

3. The decontamination supplies are reasonably accessible to and not more than 1/4 mile from early-entry workers.

Exception

For tasks performed more than 1/4 mile from the nearest point reachable by vehicle (car, truck, or tractor), the decontamination supplies may be at the access point. In this circumstance, clean water from springs, streams, lakes, or other sources may be used for decontamination if such water is more readily available than the water at the access point.

Emergency Eyeflushing

Provide each early-entry worker with at least 1 pint of emergency eyeflush water when the pesticide labeling requires protective eyewear for early entry. The emergency eyeflush water must be **immediately accessible**. For example, it could be carried by the handler or be on a vehicle the early-entry worker is using. The water that is supplied for general decontamination may also be used as eyeflush water, if it is immediately accessible.

Decontamination at the End of Exposure Period

At the site where early-entry workers take off their PPE, provide :

- soap,
- clean towels, and
- enough water to allow early-entry workers to wash thoroughly after removing their PPE.

PERSONAL PROTECTIVE EQUIPMENT FOR EARLY-ENTRY WORKERS

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Worker employers must provide their **early-entry workers** with the early-entry PPE required by the pesticide labeling, make sure they wear the PPE, and make sure they use the PPE correctly.

SPECIFIC DUTIES

PPE for early-entry activities is listed on the pesticide label in the "Directions for Use" section under the heading "Agricultural Use Requirements."

Duties Related to Personal Protective Equipment

1. Provide the appropriate PPE in clean and operating condition to each early-entry worker.

2. Make sure early-entry workers wear PPE correctly for its intended purpose and use it according to the manufacturer's instructions.

3. Inspect all PPE before each day of use for leaks, holes, tears, or worn places. Repair or discard any damaged equipment.

4. Provide early-entry workers clean places away from pesticide storage and pesticide use areas to:

   - store personal clothing not in use,
   - put on PPE at the start of any exposure period, and
   - take off PPE at the end of any exposure period.

See PPE definitions, p. 64.

5. Take necessary steps to prevent heat illness (too much heat stress) while PPE is being worn.

6. Do not allow early-entry workers to wear home or take home PPE contaminated with pesticides.

Cleaning and Maintaining PPE

For an example of what to tell people who clean PPE, see pp. 95-96.

1. Keep pesticide-contaminated PPE separate from other clothing or laundry, and wash it separately.

2. If PPE will be reused, clean it before each day of reuse according to the instructions from the PPE manufacturer, unless the pesticide labeling specifies different requirements. If there are no such instructions or requirements, wash the PPE thoroughly in detergent and hot water.

3. Thoroughly dry the clean PPE before it is stored, or put it in a well-ventilated place to dry.

4. Store clean PPE separately from personal clothing and away from pesticide-contaminated areas.

Disposal of PPE

Comply with any applicable federal, state, tribal, and local regulations when you dispose of PPE that cannot be cleaned correctly.

Instructions for Persons Who Clean PPE

Inform anyone who cleans or launders PPE:

- that PPE may be contaminated with pesticides,
- of the potentially harmful effects of pesticides,
- how to protect themselves when handling contaminated PPE, and
- how to clean PPE correctly.

For more information about laundering pesticide-contaminated clothing, please visit the Worker Protection Standard topic page on the Ag Center's Web site at: http://www.epa.gov/agriculture/twor.html

UNIT 5

FURTHER REQUIREMENTS FOR EMPLOYERS OF HANDLERS

Unit 3 described the WPS protections that employers must provide to both worker and handler employees. This unit describes the **additional** WPS protections that employers are required to provide only to their handler employees.

Restrictions During Applications and Monitoring Handlers 59

Specific Instructions for Handlers 60

Equipment Safety 61

Personal Protective Equipment 62

Exceptions to PPE Requirements 66

RESTRICTIONS DURING APPLICATIONS AND MONITORING HANDLERS

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Handler employers must make sure that:

- pesticides do not touch **people**, other than appropriately trained and equipped handlers, during pesticide applications, and
- **pesticide handlers** are monitored, as described below, when handling certain types of pesticides.

Pesticide handlers must make sure that pesticides do not touch **people**, other than appropriately trained and equipped handlers, during pesticide applications.

SPECIFIC DUTIES

Restrictions During Applications

Both handler employers and pesticide handlers must make sure that each pesticide is applied so that it does not contact, either directly or through drift, anyone except appropriately trained and equipped handlers.

Monitoring Handlers

1. Pesticides with skull and crossbones

At least once every 2 hours, someone must check on — by sight or by voice communication — any handler who is handling a pesticide that has a skull and crossbones symbol on its label. (For monitoring the handling of fumigants in greenhouses, see immediately below.)

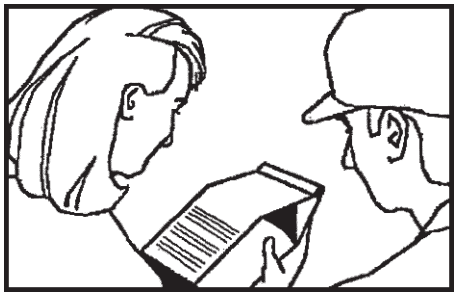
2. Fumigants handled in greenhouses

Someone must maintain constant visual or voice contact with any handler who is applying or otherwise handling a fumigant in a greenhouse. This includes handlers who enter the greenhouse during fumigation to operate ventilation systems, adjust tarps or other coverings used in the fumigation, or check air concentration levels. The person monitoring the fumigant handler must:

- be trained as a pesticide handler, and
- have immediate access to the PPE that the fumigant labeling requires for applicators.

Fumigant
Any pesticide product that is a vapor or gas, or forms a vapor or gas on application, and whose method of pesticidal action is through the gaseous state.

SPECIFIC INSTRUCTIONS FOR HANDLERS



BASIC RESPONSIBILITIES (See Also Specific Duties Section Below)

Handler employers must make sure that, before **handlers** do any handling task, the handlers:

- are given information from the pesticide labeling and have access to the labeling itself, and
- are instructed in the safe operation of the equipment they will be using.

Commercial (custom) handler employers must make sure that, whenever one of their handlers will be doing pesticide handling tasks (including tasks as a crop advisor) on an agricultural establishment, he or she is aware of specific information, described below, concerning pesticide-treated areas on the agricultural establishment.

Option: You may allow handlers to read the labeling themselves, if they are able to read and understand it.

SPECIFIC DUTIES

Labeling Access and Information

1. Inform handlers, in a manner they can understand, about all labeling requirements related to safe use of the pesticide, including at least:
   - the signal word,
   - human hazard statements and precautions,
   - personal protective equipment requirements,
   - first aid instructions,
   - environmental precautions, and
   - any additional precautions about the handling task to be performed.
2. Provide handlers access to the pesticide labeling information during handling tasks.

Safe Operation of Equipment

Make sure that handlers know how to safely and correctly use all equipment they are assigned to use for handling pesticides, including, if applicable, how to avoid drift and how to use chemigation equipment safely.

Instructions for Commercial Pesticide Handlers

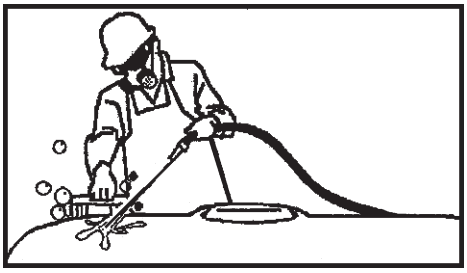
Operators of agricultural establishments are required to make sure that commercial handler employers have this information (p. 26).

Commercial (custom) pesticide handler employers must make sure that their handler employees are informed about:

1. Specific location and description of any areas on the agricultural establishment:
   - that may be treated with a pesticide or be under a restricted-entry interval while the commercial handler will be there, ***and***
   - that the commercial handler may be in (or walk within 1/4 mile of).
2. Restrictions on entering those areas.

For example, if custom applicators are scheduled to use ground equipment to apply a pesticide on a farm, they need to be informed of any nearby areas on the farm that they should stay out of because the area has an REI in effect. Or if commercial crop advisors are scheduled to scout in an area on a farm that remains under an REI, they need to be told what personal protective equipment they must wear while in that area.

EQUIPMENT SAFETY



BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

Handler employers must make sure that equipment used for mixing, loading, transferring, or applying pesticides (pesticide handling equipment) is inspected and repaired and that **persons repairing, cleaning, or adjusting** such equipment are protected or informed, as described below.

SPECIFIC DUTIES

Equipment Inspection

Inspect pesticide handling equipment before each day of use for leaks, clogging, and worn or damaged parts. Repair or replace any damaged equipment.

Protections for Persons Maintaining Equipment

Remove pesticide residues from pesticide handling equipment before anyone other than an appropriately trained and equipped handler is allowed to repair, clean, or adjust it.

Exception

If it is not feasible to remove pesticide residues from pesticide handling equipment, and the people who will be repairing, cleaning, or adjusting the equipment are not your employees (and, therefore, are not handlers for whom you are responsible under the WPS), you must inform them:

- that the equipment may be contaminated with pesticides,
- of the potentially harmful effects of exposure to pesticides, and
- how to correctly handle such equipment.

For an example of what information to give those who clean and maintain equipment for you, see page 97.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

BASIC RESPONSIBILITIES
(See Also Specific Duties Section Below)

In the pesticide labeling, PPE for handling activities is listed in the "Hazards to Humans" section.

Handler employers must make sure that **pesticide handlers**:

- are provided with the PPE the pesticide labeling requires for the task,
- wear the PPE for the entire handling task, and
- use the PPE correctly.

Each pesticide handler is responsible for wearing the required personal protective equipment during the entire handling task.

SPECIFIC DUTIES

Duties Related to Personal Protective Equipment

PPE is coveralls, respirators, protective eyewear, and chemical-resistant suits, gloves, footwear, aprons and headgear. See definitions, p. 64. A chemical-resistance chart is provided in Appendix B, p. 113.

Employers must:

1. Provide handlers with the appropriate PPE in clean and operating condition.

2. Make sure the handlers wear the PPE correctly and use it according to the manufacturer's instructions. If a handler wears a respirator, make sure that it fits the wearer correctly.

3. Inspect all PPE before each day of use for leaks, holes, tears, or worn places, and repair or discard any damaged equipment.

4. Provide handlers with clean places away from pesticide storage and pesticide use areas to:

- store personal clothing not in use,
- put on PPE at the start of any exposure period,
- take off PPE at the end of any exposure period.

5. Take any necessary steps to prevent heat illness (too much heat stress) while PPE is being worn.

6. Do not allow any handler to wear home or take home PPE contaminated with pesticides.

Exceptions to PPE: Handler employers may allow handlers to omit some of the PPE listed on the pesticide labeling for a handling activity if the handlers are using a closed system or are working in a cockpit or in an enclosed cab. See pages 66-67.

Cleaning and Maintaining PPE

Employers must do the following:

1. Keep pesticide-contaminated PPE away from other clothing or laundry, and wash it separately.

2. If PPE will be reused, clean it before each day of reuse according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no such instructions or requirements, wash PPE thoroughly in detergent and hot water.

3. Thoroughly dry the clean PPE before it is stored, or put it in a well-ventilated place to dry.

4. Store clean PPE separately from personal clothing and away from pesticide-contaminated areas.

Replacing Respirator Filters, Cartridges, or Canisters

Employers must:

1. Replace dust/mist respirator filters:
   - when breathing resistance becomes excessive,
   - if the filter is damaged or torn,
   - whenever the respirator manufacturer or pesticide labeling says to replace them (if the instructions differ, change the filter at the shorter interval),
   - at the end of each day's work period, if no other instructions or indications of service life are available.
2. Replace gas- and vapor-removing respirator cartridges or canisters:
   - at the first indication of odor, taste, or irritation,
   - when the respirator manufacturer or pesticide labeling says to replace them (if instructions differ, change the cartridge or canisters at the shorter interval),
   - at the end of each day's work period, if no other instruction or indications of service life are available.

Disposal of PPE

Employers must:

1. Discard coveralls or other absorbent materials that have been drenched or heavily contaminated with an undiluted pesticide that has the signal word "DANGER" or "WARNING" on the labeling. They must not be reused.

2. Comply with any applicable Federal, State, Tribal, and local regulations when disposing of PPE that cannot be cleaned correctly.

Instructions for Persons Who Clean PPE

Employers must inform people who clean or launder PPE:

- that the PPE may be contaminated with pesticides,
- of the potentially harmful effects of exposure to pesticides,
- how to protect themselves when handling contaminated PPE, and
- how to clean PPE correctly.

For more information about laundering pesticide-contaminated clothing, please visit the Worker Protection Standard topic page on the Ag Center's Web site at: http://www.epa.gov/agriculture/twor.html

For an example of what to tell people who clean PPE, see page 95.

Personal Protective Equipment (PPE) Definitions

Personal protective equipment:
Apparel and devices worn to protect the body from contact with pesticides or pesticide residues, including: coveralls, chemical-resistant suits, gloves, footwear, aprons, and headgear, protective eyewear, and respirators. *While the following attire is not defined as PPE, the labeling may require pesticide handlers or early-entry workers to wear it for some tasks: long- and short-sleeved shirts, long and short pants, shoes and socks, other items of regular work clothing. If such non-PPE attire is required, the employer must make sure that it is worn.*

Chemical-resistant:
Allows no measurable amount of the pesticide being used to move through the material during use.

Waterproof:
Allows no measurable movement of water (or water-based solutions) through the material during use.

Chemical-resistant footwear:
Chemical-resistant shoes; chemical-resistant boots; or chemical-resistant shoe coverings worn over shoes or boots. *Substitution:* Leather boots may be worn in rough terrain, if chemical-resistant footwear with sufficient durability and a tread appropriate for wear in such terrain is not obtainable.

Protective eyewear:
Goggles, a face shield, or safety glasses with front, brow, and temple protection. *Substitution:* A full-face respirator may be worn instead of protective eyewear.

Chemical-resistant suit:
A loose-fitting, one- or two-piece, chemical-resistant garment that covers, at a minimum, the entire body except head, hands, and feet.

Coverall:
A loose-fitting one- or two-piece garment that covers, at a minimum, the entire body except head, hands, and feet. Coveralls are made of fabric such as cotton or a cotton-polyester blend, and are not chemical-resistant. The pesticide labeling may specify that the coveralls be worn over a layer of clothing. *Substitution:* A chemical-resistant suit may be worn instead of coveralls and any required inner layer of clothing.

Chemical-resistant apron:
An apron that is made of chemical-resistant material and that covers the front of the body from mid-chest to the knees. *Substitution:* If a chemical-resistant suit is worn, no apron is required.

Respirator:
A device that protects the respiratory system. It must be the type listed on the pesticide label (or one that is more protective) and must be appropriate for the pesticide product being used and for the activity being performed. *Substitutions:* A respirator with a canister approved for pesticides or with an organic-vapor cartridge equipped with a pesticide prefilter may be worn instead of a dust/mist filtering respirator.

Personal Protective Equipment (PPE) Definitions (continued)

Chemical-resistant headgear:

A chemical-resistant hood or a chemical-resistant hat with a wide brim.

Gloves:

Hand-coverings that are the type listed on the pesticide label.

- Gloves made of leather, cotton, or other absorbent materials **must not be worn** for handling or early-entry activities unless these materials are listed on the pesticide labeling as acceptable for such use.
- Chemical-resistant gloves with non-separable absorbent lining materials **must not be worn** for handling or early-entry activities. A chemical-resistance chart is provided in Appendix B, p. 113.
- *Substitution:* Leather gloves may be worn over chemical-resistant liners, if chemical-resistant gloves with sufficient durability and suppleness are not obtainable. However, after leather gloves have been worn for protection from pesticide exposure, they may only be worn with chemical-resistant liners and may not be worn for any other use.

Separable glove liners:

Separable glove liners are separate glove-like hand coverings, made of lightweight material, with or without fingers.

- Work gloves made from lightweight cotton or poly-type material are considered to be glove liners, if worn beneath chemical-resistant gloves.
- Unless the pesticide product labeling specifically prohibits their use, separable glove liners may be worn beneath chemical-resistant gloves, *provided* the liners do not extend outside the chemical-resistant gloves that are worn over them.
- Once used for handling or early-entry activities, separable glove liners **must be discarded immediately** after a total of 10 hours of use **or** within 24 hours of first use, whichever occurs first. The liners **must be replaced immediately** if they come into direct contact with pesticides. Pesticide-contaminated liners must be disposed of in accordance with any federal, state, or local regulations.

EXCEPTIONS TO PPE REQUIREMENTS

BASIC RESPONSIBILITIES (See Also Specific Duties Section Below)

Handler employers may allow **handlers** to omit some of the PPE listed on the pesticide labeling for a handling task if the handlers are:

- using a closed system, or
- in an enclosed cab, or
- in a cockpit.

SPECIFIC DUTIES

These exceptions to PPE are allowed unless expressly prohibited by product labeling.

Closed Systems

Closed systems are systems designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people while it is being handled. Such systems must function properly and be used and maintained in accordance with the manufacturer's written operating instructions.

1. When using a closed system to mix or load pesticides with the signal word "DANGER" or "WARNING," handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants,
- shoes and socks,
- a chemical-resistant apron, and
- protective gloves specified on the pesticide labeling for mixing, loading, and other handling tasks.

Even when reduced PPE is permitted to be worn during a task, handlers must be provided all PPE required by the pesticide labeling for that task and have it immediately available for use in an emergency.

2. When using a closed system to mix or load pesticides with the signal word "CAUTION," handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants, and
- shoes and socks.

3. When using a closed system to do handling tasks other than mixing and loading with ***any*** pesticide, handlers need not wear all of the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants, and
- shoes and socks.

Such closed systems might include closed application systems designed to incorporate pesticides into soil, but only if the system does not allow any pesticide contact with the air throughout the entire application process.

4. When using a closed system that operates under pressure, handlers may wear the reduced PPE specified above, but must **add** protective eyewear.

Enclosed Cabs

Enclosed cabs must have a nonporous barrier that totally surrounds the occupants and prevents contact with pesticides outside of the cab.

Enclosed cabs that provide respiratory protection must have a properly functioning ventilation system that is used and maintained according to the manufacturer's written operating instructions. The cab must be declared in writing by the manufacturer or by a

governmental agency to provide at least as much respiratory protection as the type of respirator listed on the pesticide labeling.

Examples:
Some enclosed-cab systems provide respiratory protection equivalent to a dust/mist filtering respirator and could, therefore, be used as a substitute when that type of respirator is specified on the product labeling. Other enclosed-cab systems are equipped to remove organic vapors as well as dusts and mists and could be used as a substitute when either the dust/mist filtering respirator or an organic-vapor-removing respirator is specified on the product labeling.

1. **Enclosed cabs that do not provide respiratory protection** — In an enclosed cab that does not provide respiratory protection, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants,
- shoes and socks, and
- any respirator required for the handling task.

2. **Enclosed cabs that provide respiratory protection** — In an enclosed cab that provides respiratory protection equal to the labeling-required respirator, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants, and
- shoes and socks.

3. **In any enclosed cab where reduced PPE is worn** — Handlers must:

- keep immediately available all PPE listed on the labeling for the type of task being performed,
- store the PPE in a chemical resistant container (such as a plastic bag),
- wear the PPE if it is necessary to leave the cab and contact pesticide-treated surfaces in the treated area, and
- take off PPE that was worn in the treated area before reentering the cab in order to prevent contamination of the inside of the cab.

Note: If the PPE that was worn in the treated area needs to be stored inside the enclosed cab, it must be stored in such a way that will prevent contaminating the inside of the cab. One way to achieve this would be to store the contaminated PPE in a chemical-resistant container, such as a plastic bag.

Cockpits

1. **Gloves when entering or leaving an aircraft** — Handlers have the option of whether to wear chemical-resistant gloves when entering or leaving an aircraft used to apply pesticides, *unless* the pesticide product labeling requires chemical-resistant gloves to be worn for these activities. If gloves are worn for such a use, then if they are brought inside the cockpit, handlers must store the used gloves in a enclosed container, such as a plastic bag, to prevent contamination of the inside of the cockpit.

2. **Open cockpits** — In an open cockpit, handlers must wear any gloves, respirator, and body protection listed on the pesticide labeling for application tasks. However, they may wear:

- shoes and socks instead of chemical-resistant footwear,
- a helmet instead of a chemical-resistant hat or hood, and
- a visor instead of protective eyewear.

3. **Enclosed cockpits** — In an enclosed cockpit, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- long-sleeved shirt and long pants, and
- shoes and socks.

UNIT 6

OWNER EXEMPTIONS AND CROP ADVISORS

The WPS exempts owners of agricultural establishments from many WPS requirements, and it contains specific protections for crop advisors. This unit describes these owner exemptions and crop advisor provisions.

Agricultural Owner Exemptions 71

Protections for Crop Advisors 74

AGRICULTURAL OWNER EXEMPTIONS

Owners of agricultural establishments and members of their immediate family are exempt from many WPS requirements. However, EPA encourages owners to provide themselves and their families with all WPS protections.

Owner: Any person who has a present possessory interest (fee, leasehold, rental, or other) in an agricultural establishment covered by the WPS. A person who has both leased such agricultural establishment to another person and granted that same person the right and full authority to manage and govern the use of such agricultural establishment is ***not*** an owner under the WPS.

Examples:
You do not qualify for the agricultural owner exemptions if:

1. you have rented out or leased out your farm, forest, nursery, or greenhouse to another person ***and*** you have no part in the management or profit/loss from it. The person to whom you have rented or leased your property is the "owner" for the purposes of the WPS.

2. you are hired to operate a farm, forest, nursery, or greenhouse, but the person who owns the property makes some of the decisions as to the management of it or shares in the profit/loss from it.

Immediate family includes only spouse, children, stepchildren, foster children, parents, stepparents, foster parents, brothers, and sisters.

The WPS does ***not*** allow any exemptions for owners of commercial pesticide handling establishments or for persons who operate or manage, but do not own, an agricultural establishment.

Agricultural owners must provide all protections required by the WPS to persons who are *not* members of their immediate family. These persons include:

- workers or handlers who are their employees, and
- persons who clean PPE or repair, clean, or maintain contaminated pesticide handling equipment.

REQUIREMENTS AGRICULTURAL OWNERS MUST COMPLY WITH

The following requirements and provisions ***do*** apply to owners of agricultural establishments and to members of their immediate family:

1. Employer information exchange. (p. 26)
2. Restrictions during handling tasks:
   - Use the personal protective equipment and other work attire listed on the pesticide labeling for the task being performed. (pp. 64-65)
   - Exceptions to personal protective equipment. (pp. 66-67)
3. Restrictions during applications:
   - Make sure that each pesticide is applied so that it does not contact, either directly or through drift, anyone (including you and members of your immediate family), except appropriately trained and equipped handlers. (p. 59)
   - Make sure that you, your family members, and all other persons, except correctly trained and equipped handlers, are kept out of areas being treated with pesticides. (pp. 36-37)
   - Make sure that you, your family members, and all other persons, except correctly trained and equipped handlers, are kept out of areas immediately around the area being treated during certain pesticide applications in nurseries and greenhouses. (p. 39-44)
4. Restrictions during restricted-entry intervals: (p. 36-37)
   - When two (or more) pesticides are applied at the same time, and have different REIs, make sure that you and your family members follow the longer restricted-entry interval. (p. 36)
   - No-contact early entry. (p. 37)
   - Short-term, limited-contact, agricultural emergency, or specially excepted early entry (see explanation below). (p. 47)

If agricultural owners or members of their immediate family enter a treated area and contact treated surfaces during a restricted-entry interval, they must:

- Wait at least 4 hours after the pesticide application is completed before entering the treated area, ***and***
- Wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, ***and***
- Obey the time limitation of 1 hour in 24 hours, if short-term (non-hand-labor) early-entry tasks are being performed or 8 hours in 24 hours, if limited-contact early-entry tasks are being performed, ***and***
- Wear the personal protective equipment specified on the pesticide labeling for early-entry tasks, ***and***
- Follow any other restrictions specified in any special exception under which the early entry takes place, ***and***
- Follow any other restrictions specified in the pesticide labeling for early entry.

EXEMPTIONS FOR AGRICULTURAL OWNERS

Agricultural owners are ***not*** required to provide themselves or members of their immediate family with the following protections of the WPS:

1. Information at a central location (p. 19)
2. Pesticide safety training (pp. 21-23)
3. Decontamination supplies (pp. 24-25)
4. Emergency assistance (p. 27)
5. Notice about applications (pp. 33-35)
6. Monitoring handlers (p. 59)
7. Specific handling instructions (p. 60)
8. Equipment safety (p. 61)
9. All the specific duties related to the care of PPE and management of its use. (p. 62-63)
10. The following duties related to early entry: (p. 53-56)
    - Training and instructions,
    - Decontamination supplies,
    - Specific duties related to the care of PPE and management of its use.

PROTECTIONS FOR CROP ADVISORS

BASIC RESPONSIBILITIES

The WPS requires employers to provide certain protections to their employees who are working as crop advisors.

Crop advisor

Any person who is assessing pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. The term does ***not*** include any person who is performing hand labor tasks, such as weeding, planting, cultivating, or harvesting. Examples of crop advisors are crop consultants, scouts, and integrated pest management monitors.

Independent or commercial crop advisor

Any person who is working as a crop advisor and is employed (including self-employed) by anyone other than the agricultural establishment on which the work is being done. Such a person may be either certified/licensed or uncertified/unlicensed.

Noncommercial crop advisor

Any person who is working as a crop advisor and is employed directly by the agricultural establishment on which the work is being done. Such a person may be either certified/licensed or uncertified/unlicensed.

Certified or licensed crop advisor

Any person who is certified or licensed as a crop advisor by a program acknowledged, in writing, as appropriate by EPA or a state or tribal lead agency for pesticide enforcement. The certification or licensing program must require pesticide safety training that includes at least all the information specified for WPS pesticide handler training (see p. 21).

Direct supervision

A person is considered to be under a certified/licensed crop advisor's direct supervision (and therefore eligible for crop advisor exceptions) only when the crop advisor has informed the person about all of the following:

- the appropriate personal protective equipment,
- the appropriate decontamination supplies,
- how to conduct the crop advising tasks safely,
- the pesticide products and active ingredient(s) applied,
- the method of application,
- the time of application,
- the restricted-entry interval,
- which crop advisor tasks to undertake, and
- how to contact the certified/licensed crop advisor.

Direct supervision does not require that the crop advisor be physically present at all times, but the crop advisor must be readily accessible to the employees at all times.

DUTIES FOR UNCERTIFIED/UNLICENSED CROP ADVISORS

Exemption

Certified/licensed crop advisors and persons performing crop advising tasks under their direct supervision are exempt from certain WPS duties and requirements when specific conditions are met. See Certified/Licensed Crop Advisor Exemption on p. 77.

Required Protections During or Soon After a Pesticide Application

1. Same Protections as Pesticide Handlers

Employers must provide their crop advisors with the WPS protections required for **pesticide handlers *if*** the crop advisor enters an area on an agricultural establishment:

- while a pesticide is being applied,
- before any inhalation exposure level listed in the pesticide labeling has been reached or before one of the ventilation criteria in the WPS or in the pesticide labeling has been reached,
- while a restricted-entry interval is in effect.

2. No Time Limits

Crop advisors may enter an area during a pesticide application or during a restricted-entry interval as long as they are trained as pesticide handlers, are given other pesticide-handler protections (listed below), and are wearing the appropriate personal protective equipment. The restrictions on entry, such as waiting for 4 hours after application is completed or limiting the time spent in the entry-restricted area to 1 hour or any other period, ***do not apply*** to crop advisors.

3. Required Protections

- Information at a central location (p. 19)

  Exception

  Employers of independent (commercial) crop advisors do ***not*** have to provide their crop advisors with information at a central location.

- Pesticide safety training for handlers (p. 21)
- Decontamination supplies (p. 24)
- Emergency assistance (p. 27)
- Monitoring handlers (p. 59)

  Note: After the application is complete, crop advisors entering a treated area during a restricted-entry interval need not be monitored.

- Special instructions for handlers (p. 60)
- Duties related to PPE (p. 62)

4. Personal Protective Equipment During REIs

Early-Entry PPE for Early Entry "With Contact": Crop advisors who enter a treated area during a restricted-entry interval, and whose crop advisor activities involve contact with anything that has been treated with a pesticide, including soil, water, and surfaces of plants, may wear the PPE listed on the pesticide labeling **for early-entry tasks** (instead of the PPE listed for handling tasks), if:

- Application has been completed for at least 4 hours, and
- Any inhalation exposure level listed in the labeling has been reached or any ventilation requirements established by the WPS or pesticide labeling have been met.

Crop advisors may enter treated areas during an application or during a restricted-entry interval if they receive handler-type protections.

See p. 74 for definition of certified/licensed crop advisor.

No PPE for "No Contact" Early Entry: Crop advisors who enter a treated area during a restricted-entry interval and whose crop advisor activities do ***not*** involve contact with anything that has been treated with the pesticide to which the restricted-entry interval applies are not required to wear personal protective equipment.

Required Protections After the REI

1. Independent (Commercial) Crop Advisors

When independent (commercial) crop advisors enter any area on an agricultural establishment where no application is underway and no restricted-entry interval is in effect, their employers need ***not*** provide them with any WPS protections.

2. Noncommercial Crop Advisors

When noncommercial crop advisors (employees of the farm, forest, nursery, or greenhouse) enter any area on the agricultural establishment where no application is underway and no restricted-entry interval is in effect, their employer must provide them with the WPS protections required for **agricultural workers**. For specific information about each of these protections, see the pages referenced below. The protections include:

- Information at a central location (p. 19)
  - certain information (pesticide safety poster, application information, location of emergency facility) must be displayed at a central location whenever (1) the crop advisor is on the agricultural establishment, and (2) a pesticide has recently been applied.
- Pesticide safety training for workers (p. 21)
  - crop advisors must be trained about general pesticide safety before they accumulate 5 days of entry into treated areas on the establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect.
- Decontamination supplies (p. 24)
  - decontamination supplies for washing off pesticide residues must be provided to any crop advisor who is working an area where a pesticide has recently been applied and who is doing tasks that involve contact with anything that has been treated with the pesticide, including soil, water, or surfaces of plants.
- Emergency assistance (p. 27)
  - Emergency assistance must be provided to the crop advisor if there is reason to believe that the employee has been poisoned or injured by a pesticide used on the agricultural establishment — for example, through application, spills, splashes, drift, or contact with pesticide residues.
- Notice about applications (p. 33)
  - with a few exceptions, the crop advisor must be notified about areas on the agricultural establishment where pesticide applications are taking place or where restricted-entry intervals are in effect.
- Restrictions during and after applications (p. 36)
  - the crop advisor must be protected during pesticide applications and during restricted-entry intervals on the agricultural establishment.

DUTIES FOR CERTIFIED/LICENSED CROP ADVISORS: CROP ADVISOR EXEMPTION

Certified/licensed crop advisors and persons performing crop advising tasks under their direct supervision are exempt from certain WPS duties and requirements, provided the certified/licensed crop advisors:

- do not enter, or allow persons under their supervision to enter, treated areas until after application is completed, and
- perform, and make sure that persons under their supervision perform, crop advisor tasks only, including assessing pest numbers or damage, checking pesticide distribution, or determining the status, condition, or requirements of agricultural plants, and
- specifically determine the appropriate personal protective equipment, and the appropriate decontamination supplies and how to conduct the crop advising tasks safely, and
- inform each person under their direct supervision – in a language that the person can understand — about the appropriate personal protective equipment, the appropriate decontamination supplies, and how to conduct the crop advising tasks safely, and
- using an established practice of communication, inform each person under their direct supervision about ***all*** the following:
  - the pesticide product(s) and active ingredient(s) applied,
  - the method of application,
  - the time of application,
  - the restricted entry interval,
  - which crop advisor tasks to undertake,
  - how to contact the certified/licensed crop advisor.

Requirements for Entry During an Application

The certified/licensed crop advisor exemption does not apply when crop advisors or persons under their direct supervision enter an area before application is completed.

Required Protections for Entry During an REI

When crop advisors enter into treated areas while a restricted-entry interval is in effect, they are defined in the WPS as pesticide handlers. When all the conditions of the certified/licensed crop advisor exemption are met, **certified/licensed crop advisors and persons under their direct supervision are exempt from the following WPS handler requirements**:

- Decontamination supplies (p. 24)
- Emergency assistance (p. 27)
- Special instructions for handlers (p. 60)
  Note: Despite this exemption, the WPS does require that any agricultural establishment owner or operator who hires a commercial crop advisor must inform the employer of that advisor about the specific location and description of any areas on the agricultural establishment (1) that may be treated with a pesticide or be under a restricted-entry interval while the commercial crop advisor will be there, ***and*** (2) that the commercial crop advisor may be in (or walk within 1/4 mile of). The operator must also provide information about restrictions on entering those areas.
- Duties related to PPE (p. 62)

For specific information about each of these protections, see the pages referenced.

However, while a restricted-entry interval is in effect, **employers must provide the following WPS protections to certified/licensed crop advisors and persons under such crop advisors' direct supervision**:

- Information at a central location (p. 19)
  - certain information (pesticide safety poster, application information, location of emergency facility) must be displayed at a central location whenever (1) the crop advisor is on the agricultural establishment, and (2) a pesticide has recently been applied.

  Exception
  The requirement above applies only to noncommercial certified/licensed crop advisors (employees of the establishment where they are working). Employers who hire independent (commercial) crop advisors do ***not*** have to provide those crop advisors with information at a central location.

- Pesticide handler training (p. 21)

  Exception
  As a requirement of any approved certification or licensing program, certified/licensed crop advisors have received pesticide safety training equivalent to WPS pesticide handler training. Employers do not need to retrain either commercial or noncommercial certified/licensed crop advisors. However, WPS pesticide handler training IS required for any unlicensed/uncertified crop advisors working under the direct supervision of certified/licensed crop advisors, and they must be retrained at least once every 5 years.

REQUIRED PROTECTIONS AFTER THE REI

1. Independent (Commercial) Crop Advisors

When certified/licensed independent (commercial) crop advisors enter any area on an agricultural establishment where no application is underway and no restricted-entry interval is in effect, their employers need ***not*** provide them with any WPS protections.

2. Noncommercial Crop Advisors

When noncommercial crop advisors (employees of the farm, forest, nursery, or greenhouse) enter any area on the agricultural establishment where no application is underway and no restricted-entry interval is in effect, they are defined in the WPS as agricultural workers. When all the conditions of the certified/licensed crop advisor exemption are met, certified/licensed crop advisors or persons under their direct supervision are exempt from the following WPS agricultural worker requirements:

- Decontamination supplies (p. 24)
- Emergency assistance (p. 27)

However, agricultural employers must provide the following WPS protections to their employees who are certified/licensed crop advisors, or who are persons under such crop advisors' direct supervision, when the employees enter treated areas on the agricultural establishment where no application is underway and when no restricted-entry interval is in effect:

- Information at a central location (p. 19)
  - certain information (pesticide safety poster, application information, location of emergency facility) must be displayed at a central location whenever (1) the crop advisor is on the agricultural establishment, and (2) a pesticide has recently been applied.

- Pesticide safety training and safety information for workers (p. 21)

  Exception

  As a requirement of any approved certification or licensing program, certified/licensed crop advisors have received pesticide safety training equivalent to WPS pesticide handler training. They need not be retrained. However, uncertified/unlicensed crop advisors working under the direct supervision of a certified/licensed crop advisor must receive pesticide safety training and safety information for workers and must be retrained within 5 years.

- Notice about applications. (p. 33)
  - with a few exceptions, the crop advisor must be notified about areas on the agricultural establishment where pesticide applications are taking place or where restricted-entry intervals are in effect.
- Restrictions during and after applications (p. 36)
  - the crop advisor must be protected during pesticide applications and during restricted-entry intervals on the agricultural establishment.

Summary of WPS Requirements for Employers of Crop Advisors

WPS Provision	Uncertified and Unlicensed Crop Advisor						Certified or Licensed Crop Advisor					
	Noncommercial (Employed Directly by Ag Establishment)			Independent (Commercial)			Noncommercial (Employed Directly by Ag Establishment)			Independent (Commercial)		
	During Application	During REI	After REI Expires	During Application	During REI	After REI Expires	During Application	During REI	After REI Expires	During Application	During REI	After REI Expires
Information at a Central Location	YES	YES	YES	NO	NO	NO	Not applicable	YES	YES	Not applicable	NO	NO
Pesticide Safety Training & Information	YES (handler)	YES (handler)	YES (worker)	YES (handler)	YES (handler)	NO	Not applicable	YES (handler)	YES (worker)	Not applicable	YES (handler)	NO
Decontamination Supplies	YES (handler)	YES (handler)	YES (worker)	YES (handler)	YES (handler)	NO	Not applicable	NO	NO	Not applicable	NO	NO
Emergency Assistance	YES (handler)	YES (handler)	YES (worker)	YES (handler)	YES (handler)	NO	Not applicable	NO	NO	Not applicable	NO	NO
Monitoring Handlers	YES	NO	NO	YES	NO	NO	Not applicable	NO	NO	Not applicable	NO	NO
Special Instructions for Handlers	YES	YES	NO	YES	YES	NO	Not applicable	NO	NO	Not applicable	NO	NO
Duties Related to PPE	YES	YES	NO	YES	YES	NO	Not applicable	NO	NO	Not applicable	NO	NO
Notice About Applications	NO	NO	YES	NO	NO	NO	Not applicable	NO	YES	Not applicable	NO	NO
Restrictions During and After Applications	NO	NO	YES	NO	NO	NO	Not applicable	NO	YES	Not applicable	NO	NO

APPENDIX A
CRITERIA FOR WPS MATERIALS

The WPS contains specific criteria for the design of the sign required for treated-area posting and for the content of the safety poster, worker training materials, and handler training materials. This appendix lists those criteria.

EPA has developed a safety poster, warning sign, and worker and handler training programs to meet the requirements of the WPS. You may use these materials, or you may use alternative materials that meet the criteria as listed in this appendix.

Criteria for Pesticide Safety Poster 83

Requirements for Warning Signs 85

Criteria for Worker Training..... 87

Criteria for Handler Training 89

CRITERIA FOR PESTICIDE SAFETY POSTER

Each WPS safety poster must convey to workers and handlers:

1. That there are federal rules to protect them, including a requirement for safety training.

2. How to help keep pesticides from getting on or into their bodies. The poster must include the following instructions:

- Avoid getting on your skin or into your body any pesticides that may be on plants and soil, in irrigation water, or drifting from nearby applications.
- Wash before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Wear work clothing that protects your body from pesticide residues, such as long-sleeved shirts, long pants, shoes, socks, and hats or scarves.
- Wash or shower with soap and water, shampoo your hair, and put on clean clothes after work.
- Wash work clothes separately from other clothes before wearing them again.
- Wash immediately in the nearest clean water if pesticides are spilled or sprayed on your body. As soon as possible, shower, shampoo, and change into clean clothes.
- Follow directions about keeping out of treated or restricted areas.

REQUIREMENTS FOR WARNING SIGNS

1. **Required Words:**
   - The words "DANGER — PELIGRO" and "PESTICIDES — PESTICIDAS" must be located at the top of the sign and "KEEP OUT—NO ENTRE" at the bottom.

     Exception
     As an option, you may use warning signs that replace the Spanish words with the same words in another language (other than English) that is read by the largest number of your workers who do not read English. The replacement sign must meet all of the other requirements for the WPS warning sign.
   - The words must be clearly legible.
2. **Required Design**:
   - A circle containing an upraised hand on the left and a stern face on the right must be near the center of the sign.
   - The background outside the circle must contrast with the inside of the circle.
   - The hand and a large portion of the face must contrast with the inside of the circle.
   - The remainder of the inside of the circle must be red.
   - The length of the hand must be at least twice the height of the smallest letters.
   - The length of the face must be only slightly smaller than the hand.
3. **Additional Information:**

You may put additional information on the warning sign, such as the name of the pesticide and the date of application, if it does not detract from the appearance of the sign or change the meaning of the required information.

4. **Size:**

The signs must be at least 14 inches by 16 inches, and the letters must be at least 1 inch high.

Exception
On farms and in forests, you may use smaller signs if the treated area is too small to accommodate 14- by 16-inch signs. For example, when a single plant needs to be posted, a smaller sign would be appropriate. In nurseries and greenhouses, you may use a sign smaller than the standard size. Whenever a small sign is used, there are specific posting distances depending on the size of the lettering and symbol on the sign (see table on the next page).

Signs with the words "DANGER" and "PELIGRO" in letters less than *7/16 inch in height* ***or*** *with any words in letters* less than *1/4 inch in height* ***or*** *with the circle graphic containing an upraised hand and a stern face* less than *1½ inches in diameter do not meet WPS sign requirements.*

Sign Size	Required Height in Inches			Maximum Distance Between Signs*
	Circle Graphic	Lettering for Words "DANGER" & "PELIGRO"	Lettering for Other Words	
7" x 8" (approx.)	3"	7/8"	1/2"	50 feet
4 1/2" x 5" (approx.)	1 1/2"	7/16"	1/4"	25 feet

* This distance requirement is for places where multiple signs are used to post a single treated area, such as a nursery or a greenhouse section. It does not apply where individual signs are used for separate small treatment areas (such as single potted plants in a greenhouse).

CRITERIA FOR WORKER TRAINING

1. WPS training for workers must include at least the following information:
   - Where and in what form pesticides may be encountered during work activities.
   - Hazards of pesticides resulting from toxicity and exposure, including acute effects, chronic effects, delayed effects, and sensitization.
   - Routes through which pesticides can enter the body.
   - Signs and symptoms of common types of pesticide poisoning.
   - Emergency first aid for pesticide injuries or poisonings.
   - How to obtain emergency medical care.
   - Routine and emergency decontamination procedures, including emergency eyeflushing techniques.
   - Hazards from chemigation and drift.
   - Hazards from pesticide residues on clothing.
   - Warnings about taking pesticides or pesticide containers home.
   - An explanation of the WPS requirements designed to protect workers, including application and entry restrictions, design of the warning sign, posting of warning signs, oral warnings, availability of specific information about applications, and protection against retaliatory acts.
2. WPS worker training materials must use terms that the worker can understand.

CRITERIA FOR HANDLER TRAINING

WPS training for handlers must include at least the following information:

- Format and meaning of information on pesticide labels and in labeling, including safety information such as precautionary statements about human health hazards.
- Hazards of pesticides resulting from toxicity and exposure, including acute effects, chronic effects, delayed effects, and sensitization.
- Routes through which pesticides can enter the body.
- Signs and symptoms of common types of pesticide poisoning.
- Emergency first aid for pesticide injuries or poisonings.
- How to obtain emergency medical care.
- Routine and emergency decontamination procedures, including emergency eyeflushing techniques.
- Need for and appropriate use of personal protective equipment.
- Prevention, recognition, and first aid treatment of heat-related illness.
- Safety requirements for handling, transporting, storing, and disposing of pesticides, including general procedures for spill cleanup.
- Environmental concerns such as drift, runoff, and wildlife hazards.
- Warnings about taking pesticides or pesticide containers home.
- An explanation of WPS requirements that handler employers must follow for the protection of handlers and others, including the prohibition against applying pesticides in a manner that will cause contact with workers or other persons, the requirement to use personal protective equipment, the provisions for training and decontamination, and the protection against retaliatory acts.

APPENDIX B
SAMPLE FORMS, FACT SHEETS, AND CHECKLISTS

Appendix B includes a sample Pesticide Application Information form with space for the pesticide application information the WPS requires to be listed at a central location on each agricultural establishment. The WPS does not specify a format for presenting the information — you may copy this form or design another that meets your needs.

Appendix B also includes several fact sheets to help you comply with sections of the WPS that require you to provide information to others. Although the WPS does not require you to provide this information in written form, you may find that using photocopies of these fact sheets is a convenient way to make sure you convey the necessary information.

Finally, Appendix B includes some checklists and charts you can use as reminders of your WPS duties.

Pesticide Application Information 93

Fact Sheets:

- **Information About Cleaning PPE** 95
- **Working Safely With Pesticide Equipment** 97
- **Agricultural Owners and Operators: Information to Be Provided to Employers of Custom Applicators and Independent Crop Advisors** 99
- **Custom Applicators: Information to Be Provided to Agricultural Establishment Owners and Operators** 101

Checklists:

- **WPS Requirements for Agricultural Workers** 103
- **WPS Requirements for Pesticide Handlers** 105
- **WPS Requirements for Commercial Handlers** 107
- **WPS Exemptions for Agricultural Owners** 109
- **WPS Requirement To Provide Basic Pesticide Safety Information To Untrained Workers** 111

Charts:

- **EPA Chemical Resistance Category Chart** 113
- **Heat Stress: Preventable Measures, Illnesses, and First Aid Treatments** 115

PESTICIDE APPLICATION INFORMATION

AGRICULTURAL ESTABLISHMENT OWNERS AND OPERATORS:

The use of this form is optional, but if the information about an application is entered, it will help you comply with the federal Worker Protection Standard including all revisions through 2004 for information that must be displayed at a central place to inform workers and handlers about specific pesticide applications. For complete information, see p. 19 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."

	Application #1	Application #2
Area Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time		
Restricted-Entry Interval		
Do Not Enter Until: Month/Day/Time		

Similar data is required by the Federal Recordkeeping Requirements for Certified Applicators of Federally Restricted Use Pesticides (RUP). For more information on the RUP recordkeeping requirements, contact Agricultural Marketing Service, USDA, 8609 Sudley Road, Suite 203, Manassas, VA 20110, (703) 330-7826. Please consult the "USDA Recordkeeping Manual" at the following Web site for a complete list of all USDA record keeping requirements: http://www.ams.usda.gov/science/prb/Prbforms.htm

Some states, tribes, or local governments with jurisdiction over pesticide enforcement may have additional worker protection requirements beyond these requirements. Check with these agencies to obtain the information you need to comply with all applicable state, tribal, or local requirements.

Note to Employers:
This 2-page fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean PPE for you. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to pass along the necessary information.

INFORMATION ABOUT CLEANING PPE

PROTECT YOURSELF FROM PESTICIDES

☐ 1. The clothing and protective equipment items you will be cleaning may have pesticides on them.

☐ 2. Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the clothing and equipment.

☐ 3. If pesticides get on you, they can hurt you. They can:

- cause skin rashes or burns,
- go through your skin and into your body and make you ill,
- burn your eyes,
- make you ill if you breathe them or get them in your mouth.

☐ 4. To avoid harm from the pesticide, you should:

- Pour the clothes from their container into the washer without touching them.
- Handle only the inner surfaces, such as the inside of boots, aprons, or coveralls.
- Do not breathe the steam from the washer and dryer.

☐ 5. Pesticides should not be allowed to stay on your hands:

- When you wash clothing or equipment by hand, use plenty of water and rinse your hands often.
- Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Wash your hands as soon as you finish handling the clothing or equipment.

☐ 6. You should not allow clothing and equipment with pesticides on them to be washed with regular laundry. The pesticides can rub off on other items.

RECOMMENDED METHODS FOR CLEANING PPE

Cleaning Eyewear and Respirators

Hand-wash reusable respirator facepieces, goggles, face shields, and shielded safety glasses, following manufacturer's instructions. In general, use mild detergent and warm water to wash the items thoroughly. Rinse well. Wipe dry, or hang in a clean area to air dry.

Cleaning Other PPE

☐ 1. Follow the manufacturer's cleaning instructions. If the instructions say only to wash the item, or if there are no cleaning instructions, follow the procedure below.

☐ 2. Recommended procedure for washing most PPE:

a. **Rinse** in a washing machine or by hand.
b. **Wash in a washing machine**, using a heavy-duty detergent and hot water for the wash cycle.
c. **Wash only a few items at a time** to allow plenty of agitation and water for dilution. Use the highest water-level setting.
d. **Rinse twice** using two rinse cycles and warm water.
e. **Use two entire machine cycles** to wash items that are moderately to heavily contaminated.
f. **Run the washer through at least one more entire cycle** without clothing, using detergent and hot water, to clean the machine.

☐ 3. Some plastic or rubber items that are not flat, such as gloves, footwear, and coveralls, must be washed twice — once to clean the outside and a second time after turning the item inside out.

☐ 4. Some items, such as heavy-duty boots and rigid hats or helmets, should be washed by hand using hot water and heavy-duty detergent.

☐ 5. **Hang the items to dry**, if possible. Let them hang for at least 24 hours in an area with plenty of fresh air — preferably outdoors. Do not hang items in enclosed living areas.

☐ 6. You may **use a clothes dryer** for fabric items if it is not possible to hang them to dry. But after repeated use, the dryer may become contaminated with pesticides.

Note to Employers:
This fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean or maintain you pesticide equipment. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to pass along the necessary information.

WORKING SAFELY WITH PESTICIDE EQUIPMENT

☐ 1. The equipment you will be cleaning, adjusting, or repairing may have pesticides on it. Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the equipment.

☐ 2. If pesticides get on you, they can hurt you. They can:

- cause skin rashes or burns,
- go through your skin and into your body and make you ill,
- burn your eyes,
- make you ill if you get them in your mouth.

☐ 3. You should wear work clothing that protects your body from pesticide residues, such as long-sleeved shirts, long pants, shoes, and socks. If possible, avoid touching the parts of the equipment where the pesticide is most likely to be. Or, if practical for the job that you will be doing, consider wearing rubber or plastic gloves and an apron.

☐ 4. You should not let pesticides stay on your hands:

- Wash your hands as soon as you finish handling the equipment.
- Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Wash or shower with soap and water, shampoo your hair, and put on clean clothes after work.
- Wash work clothes that may have pesticides on them separately from other clothes before wearing them again.

AGRICULTURAL ESTABLISHMENT OWNERS & OPERATORS

Agricultural Establishment Owners and Operators:

The use of this form is optional, but ***if you hire custom applicators or independent crop advisors , you must provide this information to the employers of those persons.*** *This information is necessary to assure that custom applicators and independent crop advisors are protected according to the federal Worker Protection Standard including all revisions through 2004. For complete information, see p. 26 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."*

INFORMATION TO BE PROVIDED TO EMPLOYERS OF CUSTOM APPLICATORS AND INDEPENDENT CROP ADVISORS

The following information refers to areas that your employees may need to enter, or come with in 1/4 mile of on foot, while working on this agricultural establishment.

	Application #1	Application #2
Areas to be Treated or Under Restricted Entry Intervals: Location & Description		
Entry Restricted Until: Month/Day/Time		
PPE Required for Handlers*		
Early-Entry PPE Required for Workers*		

**The only early entry allowed is that which is permitted by the federal Worker Protection Standard including all revisions through 2004.*

CUSTOM APPLICATORS

Custom (for hire) Applicators:

The use of this form is optional, but ***you must provide this information to the agricultural owners and operators who hire you to apply pesticides.*** *This information is necessary to assure that the grower's employees are protected according to the federal Worker Protection Standard including all revisions through 2004. For complete information, see p. 26 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."*

INFORMATION TO BE PROVIDED TO AGRICULTURAL ESTABLISHMENT OWNERS AND OPERATORS

	Application #1	Application #2
Area to be Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time*		
Entry Restricted Until: Month/Day/Time		
Are Both Treated Area Posting and Oral Notifications Required?		
Other Label Requirements to Protect Workers, Handlers, and Others		
PPE Required for Handlers**		
Early-Entry PPE Required for Workers**		
Other		

**If the pesticide is not applied as scheduled, the customer must be notified of the corrected time and date before the application takes place. If you are unable to make the correction before the application takes place, make it as soon as possible thereafter.*

***The only early entry allowed is that permitted by the federal Worker Protection Standard including all revisions through 2004.*

CHECKLIST: WPS REQUIREMENTS FOR AGRICULTURAL WORKERS

Have you given your agricultural workers the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your worker employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides — How To Comply."

- ☐ 1. Information at a central location (WPS safety poster, application information, location of emergency medical facility) ..... H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for workers ..... H-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, etc.) ..... H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information) ..... H-T-C p. 27
- ☐ 5. Restrictions during applications (do not allow workers in area) ..... H-T-C pp. 36-37
- ☐ 6. Special application restrictions in nurseries ..... H-T-C pp. 41-42
- ☐ 7. Special application restrictions in greenhouses ..... H-T-C pp. 43-44
- ☐ 8. Restrictions during restricted-entry intervals (and limitations on early entry) ..... H-T-C pp. 36-37 and 47-56
- ☐ 9. Notice about applications (oral warnings and treated area posting) ..... H-T-C pp. 33-35

CHECKLIST: WPS REQUIREMENTS FOR PESTICIDE HANDLERS

Have you given your pesticide handlers the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides — How To Comply."

- ☐ 1. Information at a central location (WPS safety poster, application information, location of emergency medical facility) ..... H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for handlers ..... H-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, change of clothing, etc.) ..... H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information) ..... H-T-C p. 27
- ☐ 5. Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) ..... H-T-C p. 59
- ☐ 6. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) ..... H-T-C p. 59
- ☐ 7. Specific instructions for handlers (pesticide label information and how to use application equipment) ..... H-T-C p. 60
- ☐ 8. Equipment safety (inspection and maintenance of application equipment) ..... H-T-C p. 61
- ☐ 9. Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) ..... H-T-C pp. 62-63
- ☐ 10. Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) ..... H-T-C pp. 66-67

CHECKLIST: WPS REQUIREMENTS FOR COMMERCIAL HANDLERS

Have you given the handler employees of your commercial pesticide handling establishment the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides — How To Comply."

- ☐ 1. Pesticide safety training for handlers ..... H-T-C pp. 21-23
- ☐ 2. Decontamination supplies (water, soap, towels, change of clothing, etc) ..... H-T-C pp. 24-25
- ☐ 3. Emergency assistance (transportation and information) ..... H-T-C pp. 27
- ☐ 4. Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) ..... H-T-C p. 59
- ☐ 5. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) ..... H-T-C p. 59
- ☐ 6. Specific instructions for handlers (pesticide label information and how to use application equipment) ..... H-T-C p. 60
- ☐ 7. Equipment safety (inspection and maintenance of application equipment) ..... H-T-C p. 61
- ☐ 8. Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) ..... H-T-C pp. 62-63
- ☐ 9. Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) ..... H-T-C pp. 66-67

CHECKLIST: WPS EXEMPTIONS FOR AGRICULTURAL OWNERS

Although agricultural owners are encouraged to give WPS protections to themselves and their families,* the WPS does not ***require*** them to provide themselves or members of their immediate family with the following:

- ☐ 1. Information at a central location (WPS safety poster, application information, and location of emergency medical facility) ..... H-T-C pp. 19-20
- ☐ 2. Pesticide safety training for workers or handlers ..... H-T-C pp. 21-23
- ☐ 3. Decontamination supplies (water, soap, towels, change of clothing, etc.) ..... H-T-C pp. 24-25
- ☐ 4. Emergency assistance (transportation and information) ..... H-T-C p. 27
- ☐ 5. Notice about applications (oral warnings and treated area posting) . H-T-C p. 33-35
- ☐ 6. Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) ..... H-T-C p. 59
- ☐ 7. Specific handling instructions (pesticide label information and how to use application equipment)..... H-T-C p. 60
- ☐ 8. Equipment safety (inspection and maintenance of application equipment)..... H-T-C p. 61
- ☐ 9. All the specific duties related to the care of PPE and management of its use (provide, clean, maintain PPE and prevent heat illness) .. H-T-C pp. 62-63
- ☐ 10. The following duties related to early entry: ..... H-T-C pp. 53-56
  - Training and instructions
  - Decontamination supplies
  - Specific duties related to the care of PPE and management of its use.

* *Remember that you must provide all protections required by the WPS to persons who are* ***not*** *members of your immediate family.*

CHECKLIST: WPS REQUIREMENT TO PROVIDE BASIC PESTICIDE SAFETY INFORMATION TO UNTRAINED WORKERS

You must provide basic pesticide safety information to **untrained** workers before they enter treated areas on your establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. For a complete explanation, refer to "The Worker Protection Standard for Agricultural Pesticides — How To Comply."

The following is a list of things that you must provide:

☐ 1. Basic pesticide safety information in a manner that the untrained workers can understand, such as through written materials, oral communication, or other means.

☐ 2. Verification that you provided the workers with the required basic pesticide safety information.

☐ 3. At least the following information:

- Pesticides may be on or in plants, soil, irrigation water, or drifting from nearby applications.
- To prevent pesticides from entering your body:
  - Follow directions and/or signs about keeping out of treated or restricted areas,
  - Wash before eating, drinking, using chewing gum or tobacco, or using the toilet,
  - Wear work clothing that protects your body from pesticide residues,
  - Wash/shower with soap and water, shampoo hair, and put on clean clothes after work,
  - Wash work clothes separately from other clothes before wearing them again,
  - Wash immediately in the nearest clean water if pesticides are spilled or sprayed on your body and then — as soon as possible — shower, shampoo, and change into clean clothes.
- You will receive more training within 5 days (or at least before your sixth day of work in pesticide-treated areas on this establishment).

EPA CHEMICAL RESISTANCE CATEGORY CHART

This chart is to be used when PPE section on the pesticide label lists a chemical resistance category. The Worker Protection Standard requires that labels of pesticides used on farms, and in forests, nurseries and greenhouses list the type of personal protective equipment (PPE) that must be worn with each product. Labels will refer to chemical resistance categories (A-H) for PPE. Items in these categories are made of materials that the pesticide cannot pass through during the times indicated below the chart. Choose the category of resistance which best matches the handling task duration. The categories are based on the solvents used in the pesticides, ***not*** the pesticides themselves. Therefore, there will be instances where the same pesticide with two different formulations (wettable powder-WP and emulsifiable concentrate-EC, for example) will require PPE from two different chemical resistance categories.

Selection Category Listed on Pesticide Label	**Types of Personal Protective Material**							
	Barrier Laminate	**Butyl Rubber ≥ 14 mils**	**Nitrile Rubber ≥ mils**	**Neoprene Rubber ≥ 14 mils**	**Natural Rubber ≥14 mils**	**Poly-ethelene**	**Polyvinyl Chloride (PVC) ≥14 mils**	**Viton ≥14 mils**
A (a dry and water-based formulation)	high	high	high	high	high	high	high	high
B	high	high	slight	slight	none	slight	slight	slight
C	high	high	high	high	moderate	moderate	high	high
D	high	high	moderate	moderate	none	none	none	slight
E	high	slight	high	high	slight	none	moderate	high
F	high	high	high	moderate	slight	none	slight	high
G	high	slight	slight	slight	none	none	none	high
H	high	slight	slight	slight	none	none	none	high

HIGH: Highly chemical-resistant. Clean or replace PPE at end of each day's work period. Rinse off pesticides at rest breaks.

MODERATE: Moderately chemical-resistant. Clean or replace PPE within an hour or two of contact.

SLIGHT: Slightly chemical-resistant. Clean or replace PPE within ten minutes of contact.

NONE: No chemical-resistance. Do not wear this type of material as PPE when contact is possible.

HEAT STRESS: PREVENTABLE MEASURES, ILLNESSES, AND FIRST AID TREATMENTS

WAYS TO CONTROL HEAT STRESS IN AGRICULTURAL ENVIRONMENTS

Taken from EPA's "Controlling Heat Stress in Agriculture" (EPA 750-F-95-001)

Key Elements

- Drinking enough water to replace body fluid lost through sweating.
- Gradually adjusting to working in the heat.
- Taking periodic breaks in a shaded or air conditioned area whenever possible.
- Monitoring by supervisors of environmental conditions and workers.

Basic Steps

- Training in how to control heat stress and to recognize, prevent, and treat heat illnesses.
- Accounting for the weather, workload, protective gear to be worn, and condition of the workers.
- Determining minimum amounts of water workers should drink.
- Adjusting work practices for the conditions of each day.
- Giving first aid when workers become ill.

HEAT ILLNESSES AND FIRST AID MEASURES

Chart taken from EPA's "A Guide to Heat Stress in Agriculture" (EPA 750-B-92-001)

Illness	Signs and Symptoms	Cause and Problem	Treatment
Early heat illness	■ Mild dizziness, fatigue, or irritability; decreased concentration; impaired judgement	■ Reduced flow of blood to the brain ■ May lead to heat exhaustion or heat stroke	■ Loosen or remove clothing ■ Rest in shade 30 minutes or more ■ Drink water
Heat rash "prickly heat"	■ Tiny, blister-like red spots on the skin; pricking sensations ■ Commonly found on clothed areas of the body	■ Sweat glands become plugged and inflamed from unrelieved exposure of skin to heat, humidity, and sweat	■ Clean skin, apply mild drying lotion or cornstarch ■ Wear loose clothing ■ Preventable by regular bathing and drying the skin and by periodic relief from humid conditions of work ■ See physician if rash persists
Heat cramps	■ Painful spasms of leg, arm, or abdominal muscles ■ Heavy sweating, thirst ■ Occurs during or after hard work	■ Loss of body salt in sweat ■ May be totally disabling	■ Loosen clothing ■ Drink *lightly* salted beverages ■ Massage ■ Rest

HEAT ILLNESS AND FIRST AID MEASURES (cont.)

Illness	Signs and Symptoms	Cause and Problem	Treatment
Heat exhaustion	■ Fatigue, headache, dizziness, muscle weakness, loss of coordination, fainting, collapse ■ Profuse sweating; pale, moist, cool skin; excessive thirst, dry mouth; dark yellow urine ■ Fast pulse, if conscious ■ Low or normal oral temperature, rectal temperature usually 99.5–101.3 degrees F ■ May also have heat cramps, nausea, urge to defecate, rapid breathing, chills, tingling of the hands or feet, confusion, giddiness, slurred speech, irritability	■ Dehydration, lack of acclimatization; reduction of blood in circulation; strain on circulatory system, reduced flow of blood to the brain ■ Worker may resist treatment ■ May lead to heat stroke	■ Removal to cooler, shaded area as quickly as possible ■ Rest lying down ■ If conscious, have worker drink as much water as possible ■ ***Do not give salt*** ■ If unconscious or if heat stroke is also suspected, treat for heat stroke until proven otherwise ■ Loosen or remove clothing ■ Splash cold water on body ■ Massage legs and arms ■ If worker collapsed, get evaluation by physician, nurse, or EMT before worker leaves for the day; shower in cold water; rest for balance of day and overnight
Heat stroke ***Immediate Treatment Required***	***Life-threatening medical emergency*** ■ Often occurs suddenly ■ Headache, dizziness, confusion, irrational behavior, coma ■ Sweating may slow down or stop ■ Fast pulse, if conscious ■ Rapid breathing ■ Rectal temperature 104 degrees F and over ■ May also have convulsions, nausea, incoherent speech, very aggressive behavior	■ Sustained exertion in heat, lack of acclimatization, dehydration, individual risk factors; reduced flow of blood to the brain and other vital organs, body's temperature-regulating system fails, body can not cool itself ■ Risk of damage to vital organs, including the heart, brain, central nervous system, liver, and kidney ■ Worker may resist treatment ■ ***Brain damage and death can result even with prompt treatment***	■ Move to a shaded area ■ Remove outer clothing/shoes ■ Immediately wrap in wet sheet, pour water on and fan vigorously, avoid over-cooling ■ Treat shock if present, once temperature is lowered ■ If worker vomits, make sure all vomit is cleared from mouth and nose to prevent choking on vomit ■ Transport to nearest medical treatment facility at once ■ While awaiting or during transport, elevate legs, continue pouring on water and fanning ■ If conscious, have worker drink as much water as possible ■ ***Do not give salt***

APPENDIX C

QUICK REFERENCE GUIDE TO THE WORKER PROTECTION STANDARD

Including All Revisions Through 2004

(Large Print Version)

QUICK REFERENCE GUIDE TO THE WORKER PROTECTION STANDARD (WPS) Including All Revisions Through 2004

The WPS is a federal regulation designed to protect **agricultural workers** (people involved in the production of agricultural plants) and **pesticide handlers** (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides) (see p. 10). The guide on these two pages presents the *maximum* WPS requirements. It does not include exceptions that may permit you to do less or options that may involve different requirements. Each section below lists pages in this manual where you can find out about exceptions and options. For more information about your responsibilities, read pp. 9-15. There are some exemptions for owners of agricultural establishments and members of their immediate family (pp. 71-73).

TOPICS

DUTIES FOR *ALL* EMPLOYERS

- Anti-Retaliation
- Information at a Central Location
- Pesticide Safety Training
- Decontamination Supplies
- Employer Information Exchange
- Emergency Assistance

ADDITIONAL DUTIES FOR WORKER EMPLOYERS

- Restrictions During Applications
- Restricted-Entry Intervals (REIs)
- Notice About Applications
  - Posted Warning Signs
  - Oral Warnings

ADDITIONAL DUTIES FOR HANDLER EMPLOYERS

- Application Restrictions and Monitoring
- Specific Instructions for Handlers
- Equipment Safety
- Personal Protective Equipment (PPE)
  - Duties Related to PPE
  - Care of PPE
  - Replacing Respirator Purifying Elements
  - Disposal of PPE
  - Instructions for People Who Clean PPE

DUTIES FOR *ALL* EMPLOYERS

ANTI-RETALIATION ..... (p. 15)

Do not retaliate against a worker or handler who attempts to comply with the WPS

INFORMATION AT A CENTRAL LOCATION ..... (p. 19-20)

1. In an easily seen central location on each agricultural establishment, display close together:

- EPA WPS safety poster,
- name, address, and telephone number of the nearest emergency medical facility,
- these facts about each pesticide application [from before each application begins until 30 days after the restricted-entry interval (REI)]:
  - product name, EPA registration number, and active ingredient(s),
  - location and description of treated area,
  - time and date of application, and REI.

2. Tell workers and handlers where the information is posted, and allow them access.

3. Tell them if emergency facility information changes and update the posted information.

4. Keep the posted information legible.

PESTICIDE SAFETY TRAINING ..... (pp. 21-23)

Unless they possess a valid EPA-approved training card, train **handlers and workers** before they begin work and at least once each 5 years:

- use written and/or audiovisual materials,
- use EPA WPS handler training materials for training handlers,
- use EPA WPS worker training materials for training workers,
- have a certified applicator conduct the training orally and/or audiovisually in a manner the employees can understand, using easily understood terms, and respond to questions.

DECONTAMINATION SUPPLIES ..... (pp. 24-25)

1. Establish accessible decontamination supplies located together within 1/4 mile of all workers and handlers. Supply:

- enough water for routine and emergency whole-body washing and for eyeflushing,
- plenty of soap and single-use towels,
- a clean coverall.

2. Provide water that is safe and cool enough for washing, for eyeflushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides.

3. Provide **handlers** the same supplies where personal protective equipment (PPE) is removed at the end of a task.

4. Provide the same supplies at each mixing and loading site.

5. Make at least 1 pint of eyeflush water immediately accessible to each **handler**.

6. Do not put **worker** decontamination supplies in areas being treated or under an REI.

7. In areas being treated, put decontamination supplies for **handlers** in enclosed containers.

EMPLOYER INFORMATION EXCHANGE ..... (p. 26)

1. Before any application, commercial handler employers must make sure the operator of the agricultural establishment where a pesticide will be applied is aware of:

- location and description of area to be treated,
- time and date of application,
- product name, EPA registration number, active ingredient(s), and REI,
- whether the product label requires both oral warnings and treated area posting,
- all other safety requirements on labeling for workers or other people.

2. Operators of agricultural establishments must make sure any commercial pesticide establishment operator they hire is aware of:

- specific location and description of all areas on the agricultural establishment where pesticides will be applied or where an REI will be in effect while the commercial handler is on the establishment,
- restrictions on entering those areas.

EMERGENCY ASSISTANCE ..... (p. 27)

When any handler or worker may have been poisoned or injured by pesticides:

1. Promptly make transportation available to an appropriate medical facility.
2. Promptly provide to the victim and to medical personnel:

- product name, EPA registration number, and active ingredient(s),
- all first aid and medical information from label,
- description of how the pesticide was used,
- information about victim's exposure.

ADDITIONAL DUTIES FOR WORKER EMPLOYERS

RESTRICTIONS DURING APPLICATIONS ..... (p. 36)

1. In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers.

2. Keep nursery workers at least 100 feet away from nursery areas being treated.

3. Allow only handlers to be in a greenhouse:

   - during a pesticide application,
   - until labeling-listed air concentration level is met or, if no such level, until after 2 hours of ventilation with fans.

(Also see nursery restrictions and greenhouse restrictions) (pp 41-42, 43-45)

RESTRICTED-ENTRY INTERVALS (REIs)..... (p. 36)

During any REI, do not allow **workers** to enter a treated area and contact anything treated with the pesticide to which the REI applies.

(Also see early entry by workers) (p. 36-37, 47-56)

NOTICE ABOUT APPLICATIONS ..... (p. 33)

1. Orally warn workers **and** post treated areas if the pesticide labeling requires.

2. Otherwise, **either** orally warn workers **or** post entrances to treated areas. Tell workers which method is in effect.

3. Post all greenhouse applications.

Posted Warning Signs ..... (p. 33)

1. Post legible 14" X 16" WPS-design signs just before application; keep posted during REI; remove before workers enter and within 3 days after the end of the REI.

2. Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

Oral Warnings..... (p. 35)

1. Before each application, tell workers who are on the establishment (in a manner they can understand):

   - location and description of treated area,
   - REI, and not to enter during REI.

2. Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

ADDITIONAL DUTIES FOR HANDLER EMPLOYERS

APPLICATION RESTRICTIONS AND MONITORING ..... (p. 59)

1. Do not allow handlers to apply a pesticide so that it contacts, directly or through drift, anyone other than trained and PPE-equipped handlers.

2. Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.

3. Make sure a trained handler equipped with labeling-specified PPE maintains constant voice or visual contact with any handler in a greenhouse who is doing fumigant-related tasks, such as application or air-level monitoring.

SPECIFIC INSTRUCTIONS FOR HANDLERS ..... (p. 60)

1. Before handlers do any handling task, inform them, in a manner they can understand, of all pesticide labeling instructions for safe use.

2. Keep pesticide labeling accessible to each handler during entire handling task.

3. Before handlers use any assigned handling equipment, tell them how to use it safely.

4. When commercial handlers will be on an agricultural establishment, inform them beforehand of:

- areas on the establishment where pesticides will be applied or where an REI will be in effect,
- restrictions on entering those areas.

(The agricultural establishment operator must give you these facts.)

EQUIPMENT SAFETY ..... (p. 61)

1. Inspect pesticide handling equipment before each use, and repair or replace as needed.

2. Allow only appropriately trained and equipped handlers to repair, clean, or adjust pesticide equipment that contains pesticides or residues.

PERSONAL PROTECTIVE EQUIPMENT (PPE) ..... (pp. 62-65)

(See exceptions to PPE) (pp. 66-67)

Duties Related to PPE ..... (p. 62)

1. Provide handlers with the PPE the pesticide labeling requires for the task, and be sure it is:

- clean and in operating condition,
- worn and used correctly,
- inspected before each day of use,
- repaired or replaced as needed.

2. Be sure respirators fit correctly.

3. Take steps to avoid heat illness.

4. Provide handlers a pesticide-free area for:

- storing personal clothing not in use,
- putting on PPE at start of task,
- taking off PPE at end of task.

5. Do not allow used PPE to be worn home or taken home.

Care of PPE ..... (p. 62)

1. Store and wash used PPE separately from other clothing and laundry.

2. If PPE will be reused, clean it before each day of reuse, according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no other instructions, wash in detergent and hot water.

3. Dry the clean PPE before storing, or hang to dry.

4. Store clean PPE away from other clothing and away from pesticide areas.

Replacing Respirator Purifying Elements ..... (p. 63)

1. Replace dust/mist filters:
   - when breathing becomes difficult,
   - when filter is damaged or torn,
   - when respirator label or pesticide label requires (whichever is shorter), ***or***
   - at the end of day's work period, in the absence of any other instructions or indications.
2. Replace vapor-removing cartridges/canisters:
   - when odor/taste/irritation is noticed,
   - when respirator label or pesticide label requires (whichever is shorter), ***or***
   - at the end of day's work period, in the absence of any other instructions or indications.

Disposal of PPE ..... (p. 63)

1. Discard coveralls and other absorbent materials that are heavily contaminated with undiluted pesticide having a "DANGER" or "WARNING" signal word.

2. Follow federal, state, and local laws when disposing of PPE that cannot be cleaned correctly.

Instructions for People Who Clean PPE ..... (p. 63)

Inform people who clean or launder PPE:

- that PPE may be contaminated with pesticides,
- of the potentially harmful effects of exposure to pesticides,
- how to protect themselves when handling PPE,
- how to clean PPE correctly.

INDEX

A

agricultural emergency 47, 49, 72
agricultural employer 14, 26, 78
agricultural owner 9, 10, 69, 71-73, 91, 101, 109 *See also employer*
agricultural plants ii, 3, 7-9, 10, 12, 13, 14, 37, 53 74, 77, 119
agricultural worker ii, 3, 7, 9, 12, 14, 22, 31, 37, 52, 53, 76, 78, 91, 103, 119
  requirements checklist 29
air exchanges 43
anti-retaliation 3, 119, 120
  See also retaliation
apparel 64
application information 7, 19, 20, 76, 78, 91, 93, 103
application restrictions 4, 29, 36, 39, 41, 42, 43, 44, 103, 119, 123
applicator 3, 11, 15, 21, 22, 23, 42, 44, 59, 60, 91, 93, 99, 103, 120
arid areas 36

B

boots 95. *See also footwear*

C

central location 3, 17, 19, 20, 26, 37, 52, 73, 75, 78, 80, 91, 103, 105, 109, 119, 120.
certified applicator 3, 21, 22, 93, 120
certified crop advisor 78
charts 91
checklists, *See also forms*
  requirements for pesticide handlers 91
  exemptions for agricultural workers
  WPS requirements for agricultural workers 103
  WPS requirements for pesticide handlers 105
  WPS requirements for commercial handlers 107
  WPS exemptions for agricultural owners 109
  WPS requirement to provide basic pesticide safety information to untrained workers 111
chemical-resistant 48, 62, 64, 65, 66, 67
chemigation 13, 47, 60, 87
closed system 15, 62, 66, 105, 107
clothing. *See also personal protective equipment*
cockpits 67, 105, 107
commercial crop advisor 60, 74, 76, 77, 78
commercial pesticide handler 9, 19, 26
  requirements checklist 60. *See also pesticide handler*
commercial pesticide handling establishment 10, 19, 27, 71, 107
coveralls 4, 24, 48, 62, 63, 64, 95, 96, 124
crop advisor 9, 10, 26, 36, 60, 69, 74-80, 91, 99
crop consultant 9, 74
custom applicator 60, 91, 99, 101

D

decontamination 12, 19, 17, 24, 25, 37, 45, 52, 54, 55, 73, 75, 76, 77, 78, 80, 103, 105, 107, 109, 119, 120, 121
  for workers 3
  water quantity 7
direct supervision 74, 75, 77, 78, 79
discrimination 23
displaying application information 20
disposal 4, 63, 119, 124
  of personal protective equipment 9
double notification 15, 48
drift 4, 21, 27, 59, 60, 72, 76, 83, 87, 89, 105, 107, 111, 123

E

early entry 22, 34, 36, 37, 45, 47-49, 50, 51, 53, 55, 65, 72, 73, 75, 76, 99, 101, 103, 109, 122
  with no contact 4, 29
emergency 3, 7, 17, 19, 25, 27, 49, 50-52, 55, 73, 75-8, 80, 87, 89, 103, 105, 107, 109, 119, 121
emergency assistance 3, 7, 12, 27, 37, 50, 52, 73, 75, 76, 77, 78, 103, 105, 107, 109, 119, 121
emergency information 19, 20, 27
emergency medical facility 3, 19, 27, 103, 105, 109, 120
employers 3, 4, 10, 17, 26, 27, 47, 62 63, 75, 78, 80, 91, 95, 97, 99, 119, 120, 122, 123
  information exchange 14
enclosed cabs 66, 67, 105, 107
equipment 3, 4, 9, 10, 12, 15, 19, 25, 36, 47, 53, 57, 60-62, 64, 65, 73, 75, 77, 89, 91, 95, 97, 105, 107, 109, 119, 123
  instructions for nonemployees 45
eyeflush water 3, 24, 25, 54, 55, 120
eyewear 25, 48, 55, 62, 64, 66, 67, 96

F

face shield 64, 96
farms 7, 8, 12, 13, 26, 33, 34, 35, 85, 113
flagger 10
footwear 37, 48, 62, 64, 67, 96
forests 7, 8, 12, 26, 33, 34, 35, 85, 113
  specific provisions for 8

forms 59, 93 *See also checklists*
forms, factsheets, and checklists 91
application information 93
fact sheets:
information about cleaning PPE 95
working safely with pesticide equipment 97
agricultural owners and operators information to be provided to employers of custom applicators and independent crop advisors 99
custom applicators information to be provided to agricultural establishment owners and operators 101
checklists:
WPS requirements for agricultural workers 103
WPS requirements for pesticide handlers 105
WPS requirements for commercial handlers 107
WPS exemptions for Agricultural owners 109
WPS requirement to provide basic pesticide safety information to untrained workers 111
charts:
EPA chemical resistance category chart 113
heat stress — preventable measures, illnesses, and first aid treatments 115
information for employers of custom applicators 91
fumigant 4, 10, 42, 44, 59, 60, 105, 107, 109, 123

G

gloves 48, 62, 64-67, 96, 97
goggles 64, 96
greenhouses 7, 8, 12, 13, 26, 29, 33, 36, 39, 43, 44, 59, 72, 85, 103, 105, 107, 109, 113

H

hand labor 47, 48, 50, 74
handler 3, 4, 5, 10, 11, 14, 17, 21, 23, 24, 25, 26, 57, 59, 60, 61, 62, 66, 67, 75, 80, 81, 89, 91, 99, 101, 105, 119, 123
See also pesticide handler
handler employee 4, 29, 57, 60, 105, 107, 123
handler employer 14, 21, 24, 26, 27, 59, 60-62, 66, 89, 119, 121
headgear 62, 64, 65
heat illness 4, 53, 62, 105, 107, 109, 115, 116, 123
heat stress 53, 62, 91

I

immediate family 3, 10, 71-73, 109, 119
independent crop advisor 91, 99
information exchange 3, 26, 72, 119, 121
integrated pest management monitor 74
irrigation 21, 37, 47, 49, 83, 111

L

labeling 3, 4, 7, 10-15, 25-27, 33, 36, 37, 42, 43, 44, 47-49, 51 52, 53, 55, 59, 60, 63-67, 72, 75, 76, 89, 121-124
exceptions to 9
labor contractor 9
language 23, 34, 50, 48, 77, 85
licensed crop advisor 74-80

M

medical care 87, 89
transportation to. *See also emergency medical facility*
monitoring 4, 7, 47, 59, 73, 74, 75, 80, 105, 107, 109, 115

N

no-contact early entry. *36, 72*
See also early entry
noncommercial crop advisor 74, 76, 78
notification 12, 15, 26, 33, 37, 48, 101
treated-area posting 33
nurseries 7, 8, 12, 26, 29, 33, 34, 36, 39, 41, 42, 72, 85, 103, 113
specific provisions for 8

O

oral warnings 3, 4, 15, 33, 35, 87, 103, 109, 119, 121, 122
owner 3, 9, 10, 14, 15, 69, 71-73, 91, 93, 99, 101, 109, 119
See also employer
owner exemption 9, 10, 69, 71

P

penalties 15
personal protective equipment (PPE) 3, 4, 7, 9, 12, 15, 25, 36, 47, 48, 49, 53, 55, 59, 62, 63, 64, 65, 66, 67, 71, 73, 75, 76, 77, 80, 81, 91, 95, 96, 99, 101, 105, 107, 109, 113, 119, 120, 123, 124
types of 4, 45
See also personal protective equipment
pesticide application information. 93
See also application information

pesticide handler training 59, 60, 75, 78, 91, 105
See also commercial pesticide handler 3, 7, 9, 10, 14, 19, 22, 26, 36, 47, 59, 60, 62, 64, 74, 75, 77-79, 105, 119
pesticide handler employer 19, 26, 27, 60
pesticide uses 5, 12, 13
poster 3, 7, 19, 20, 76, 78, 81, 83, 103, 105, 109, 120 *See also sign*
protective eyewear 25, 48, 55, 62, 64, 66, 67 *See also personal protective equipment*

Q

quick reference guide 3, 117, 119
large print version 117

R

REI 3, 4, 7, 37, 49, 53, 60, 72, 75, 76, 77, 78, 80, 119, 120, 121, 122, 123. *See also restricted entry interval*
respirator 4, 42, 44, 62, 64, 66, 67, 96, 119, 123, 124
maintenance of 63
restricted-entry interval (REI) 3, 4, 7, 9, 10, 12, 15, 19, 20, 21, 22, 24, 25, 26, 33, 34, 36, 37, 41, 45, 47, 48, 49, 53, 54, 60, 72, 74, 75, 76, 77, 78, 79, 103, 111, 119, 120, 122
restrictions during applications. *See also application restrictions*
retaliation 15, 119
prohibition against 3

S

safety glasses 96. *See also eyewear, protection*
safety poster 3, 7, 19, 76, 78, 81, 83, 103, 105, 109, 120
scout 60, 74. *See also crop advisor*
separable glove liners 65
sign size 35, 87
skull and crossbones 4, 59, 105, 107, 109, 123
sod farms 13
supervisors 14, 15, 115

T

training 3, 7, 11, 12, 21, 22, 23, 37, 50 53, 73, 74, 75, 76, 78, 79, 81, 83, 87, 89, 103, 105, 107, 109, 111, 115, 119, 120
verification of 3
translator 22, 23
treated area 3, 4, 7, 10, 15, 20, 21, 24, 26, 33, 34, 35, 36, 37, 41, 42, 43, 44 45, 47, 49, 53, 60, 67, 72, 75, 76, 77, 78, 85, 86, 101, 103, 109, 111, 120, 121, 122
treated area posting 3, 103, 109, 121 *See also notification*

U

uncertified crop advisor 78
unlicensed crop advisor 75, 79, 80

V

ventilation criteria 10, 37, 43, 44, 47, 48, 49, 50, 72, 75

W

warning signs 4, 20, 33, 34, 48, 81, 85, 87 119, 122
criteria for 34
worker 1, 4, 5, 7, 8, 10, 12, 14, 15, 19, 21, 22, 23, 24, 25, 27, 29, 33, 34, 35, 36, 41, 42, 43, 44, 45, 47, 52, 54, 63, 81, 91, 93, 99, 101, 103, 105, 107, 111, 113, 116, 117, 119, 122
worker employer 4, 14, 19, 21, 24, 27, 33, 36, 41, 43, 47, 52, 53, 54119, 122
Worker Protection Standard (WPS) 1, 3, 5, 7, 8, 9, 12, 15, 63, 93, 99, 101, 103, 105, 107, 111, 113, 117, 119

U.S. Environmental Protection Agency
Office of Prevention, Pesticides, and Toxic Substances (MC 7506C)
1200 Pennsylvania Avenue, NWWashington, D.C. 20460

EPA/735-B-05-002
September 2005
Reprinted June 2006

www.epa.gov/agriculture