



The Worker Protection Standard (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).



Figure 7. Disbursements of important information by the commercial handler about a particular pesticide is required to protect employees. Photograph by: Milt Putnam.

WPS has been in full implementation since 1995.

A complete reference for the WPS is provided by: How to comply with the worker protection standard for agricultural pesticides: what employers need to know <http://www.epa.gov/agriculture/epa-735-b-05-002.pdf>.

INTRODUCTION:

Employers of commercial pesticide handlers must make sure that their customer, the operator of the farm, forest, nursery, or greenhouse, knows certain information 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 concerning treated areas.

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
- 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.

INFORMATION FOR COMMERCIAL HANDLER EMPLOYERS:

Operators of agricultural establishments must inform hired commercial pesticide handler employers the location and description of areas that may be treated with a pesticide or be under a restricted-entry interval. Operators of commercial pesticide handling establishments must have this information to protect their employees. 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 a restricted-entry interval in effect. Or if commercial crop advisors are scheduled to scout in an area on a farm that remains under a restricted-entry interval, they need to be told what personal protective equipment they must wear while in that area.

Additional information

Fishel, F.M. 2006. Worker Protection Standard: Information at a Central Location. EDIS Extension Document PI-149.

Fishel, F.M. 2006. Worker Protection Standard: Notice about Applications. EDIS Extension Document PI-149.

How to Comply with the Worker Protection Standard for Agricultural Pesticides: What Employers Need to Know. United States Environmental Protection Agency. Revised 2005. <http://www.epa.gov/agriculture/epa-735-b-05-002.pdf>.

CHEMICAL CONTROL: Worker Protection Standard Notice about Applications



*Some pesticide labels require you to notify workers both orally **and** with signs posted at entrances to the treated area.*

NOTIFICATIONS ON FARMS, FORESTS AND NURSERIES:

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. The restricted-entry interval refers to the length of time that workers are not allowed to enter the treated areas in most cases. With the majority of pesticide products, employers have a choice of orally **or** posting treated areas with signs to warn workers. If labels don't specifically include language regarding warning workers by posting signs at treated areas, then an oral warning is all that is required. Some pesticide labels require you to notify workers both orally **and** with signs posted at entrances to the treated area. The warnings are in effect for those workers who are or will be within ¼ mile of the treated area. Notification requirements will be in the "Directions for Use" section of the pesticide labeling under the heading "Agricultural Use Requirements" (**Figure 8**): If both types of notification are required, the following statement will be provided: "Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas."

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 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 (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: apple, cotton, grapefruit, lemon, nectarines, oranges, tangelo, tangerine = 3 day REI; peaches = 4 day REI; grapes = 7 day REI; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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

NOTIFICATIONS IN GREENHOUSES:

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

EXCEPTIONS TO WORKER NOTIFICATION:

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 ¼ 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.
- 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.

Treated area posting is not required if:

No workers on your farm, forest, or nursery will be in the treated area, or walk within ¼ 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. The only workers for whom you need to post applied (or supervised the application of) the pesticide and are aware of all the information required to be given in the oral warning.

Figure 8. The "Agricultural Use Requirements" on the pesticide label states how to warn workers of pesticide applications. Excerpt from: Fred Fishel.

Sources for WPS Publications:

Dept. of Ag and Consumer Services
<http://www.doacs.state.fl.us/onestop/forms/13361.pdf>

U.S. Environmental Protection Agency
<http://www.epa.gov/agriculture/apes.html>
<http://nepis.epa.gov/pubtitleOPPTS.htm>



CHEMICAL CONTROL: Worker Protection Standard Notice About Applications

Table 4. Pesticide products requiring oral and posting warnings to workers.

Product name	Active ingredient	EPA registration number	Restricted entry interval
Banol	propamocarb hydrochloride	432-942	24 hrs
Captan 80W	captan	19713-405	24 - 96 hrs (see label) SI*
Captan 80WDG	captan	66222-58-19713	24 - 96 hrs (see label) SI*
Captan Pro 80WDG	captan	66330-29	24 - 96 hrs (see label) SI*
Comite	propargite	400-104	7 days - see label
Counter 15G	terbufos	241-238	48 hrs RUP** SI*
Counter 20CR	terbufos	241-314	48 hrs RUP** SI*
Curacron 8E	profenofos	100-669	48 hrs RUP**
Di-Syston 15%	disulfoton	264-723	48 hrs RUP** SI*
Di-Syston 8	disulfoton	264-734	48 hrs RUP** SI*
Finish 6	ethephon + cyclanilide	264-585	48 hrs
Finish 6 Pro	ethephon + cyclanilide	264-703	48 hrs
Furadan 4F	carbofuran	279-2876	48 hrs - 14 days (see label) RUP**
Guthion Solupak 50%	azinphos-methyl	264-733	Varies by crop (see label) RUP**
Methyl 4EC	methyl parathion	67760-43	96 hrs RUP**
Monitor 4	methamidophos	264-729	48 hrs RUP**
Nemacur 15% G	fenamiphos	264-726	48 hrs RUP** SI*
Nemacur 3	fenamiphos	264-731	48 hrs RUP** SI*
Prep	ethephon	264-418	48 hrs
Syllit 65W	dodine	264-508-34704	48 hrs
Syllit 65W	dodine	55260-5-34704	48 hrs
Syllit FL	dodine	55260-6	48 hrs
Telone C-17	dichloropropene + chloropicrin	62719-12	5 days RUP**
Telone C-35	dichloropropene + chloropicrin	62719-302	5 days RUP**
Telone EC	dichloropropene	62719-321	5 days RUP**
Telone II	dichloropropene	62719-32	5 days RUP**
Temik 15G CP	aldicarb	264-417	48 hrs RUP** SI*
Temik 15G Lock 'n' Load	aldicarb	264-330	48 hrs RUP** SI*
Temik 15G	aldicarb	264-330	48 hrs RUP** SI*
Terraclor 6.5% + Di-Syston 6.5%	PCNB + disulfoton	400-411	48 hrs RUP** SI*
Terraclor Super X with Di-Syston G	PCNB + disulfoton	400-408	48 hrs SI*
Terraclor Super X plus Di-Syston EC	PCNB + disulfoton	400-475	48 hrs RUP** SI*
Thimet 20-G	phorate	241-257-51036	48 hrs RUP** SI*
Thimet 20-G Lock 'n' Load	phorate	241-257-51036	48 hrs RUP** SI*

*SI: no restricted re-entry may apply when soil injected/incorporated or in some situations where the worker does not touch or disrupt the soil subsurface or anything that was treated (refer to individual product labels).

**RUP = Restricted use pesticide.

CHEMICAL CONTROL: Worker Protection Standard Notice about Applications



POSTED WARNING SIGNS:

Use WPS-design signs (**Figure 9**) when you post warnings at entrances to treated areas. If posting fumigant applications, use fumigant warning signs (**Figure 10**).

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
- 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.

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.

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.



Figure 9



Figure 10



Figure 9. WPS-design sign for posting pesticide application warnings to workers. Photograph by: UF/IFAS.

Figure 10. WPS-design sign for posting fumigant application warnings to workers. Photograph by: UF/IFAS.

Figure 11. The majority of pesticides regulated under the WPS require an oral warning to workers. Photograph by: UF/IFAS.

Oral warnings (**Figure 11**) must include:

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

Oral warnings must be communicated to workers in a manner they can understand. The timing of oral warnings should be such that:

- 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.

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ADDITIONAL INFORMATION:

How to comply with the worker protection standard for agricultural pesticides: what employers need to know. United States Environmental Protection Agency. Revised 2005: <http://www.epa.gov/agriculture/epa-735-b-05-002.pdf>.